Women's Botanical Illustration in Canada: Its Gendered, Colonial and Garden Histories (1830-1930)

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ABSTRACT

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This thesis studies botanical illustration by Canadian women between 1830 and 1930 from three aspects: the gendered history of botany from its beginnings as a general practice that later turned into a systematized science, botany's colonial agency in Canada, and the influence that garden design had on botanical illustration. A botanical illustration is, on the surface, an intense scientific flower study complete with anatomical details intent on documenting the plant's stages of growth. It is a portrait that was thought to be an appropriate teaching tool. Executed with proper artistic and observational aptitude, the botanical illustration is a striking piece of artwork. However, the nature of art is often too fluid and subjective for the fixity of science. My intention is to discuss nineteenth-century botanical illustration by Canadian women in terms of it being a cultural product that both fed female amateur floriculture and horticulture in England and Canada and that offered possibilities to cultivate professional identity more usually reserved for men. Women's authority to present the new masculine science of botany was at issue as women were caught in a complex social and scientific network that, on the one hand, encouraged them to teach botany and to produce botanical art while, on the other, restricted them from participating in higher scientific circles necessary for their advancement. As a result, their botanical production was a multivalent reflection of botanical education, of personal relationships with nature, and of colonial circumstances and expectations.

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Dr. Brian Foss, my thesis supervisor, thank you for guiding me through this complex material with expertise and patience. I admire your vast historical knowledge, clarity of mind and gentle sense of humor. I'm grateful to my readers Dr. Kristina Huneault and Dr. Catherine MacKenzie for your great suggestions. Also, I'd like to especially acknowledge my friends and colleagues Pat Quill and Susan Hart for agreeing to read and discuss my chapters with great generosity of spirit.

I dedicate this thesis to my dear husband and friend Rick, whose endless support and kindness made this work possible. You are the truest of all blessings. I also dedicate my thesis to my precious friend Madeleine Gomes-Synnott whose excitement for me and for my work kept me focused. Your memory lives on, always in my heart. God speed.

Finally, what would this acknowledgment be without a mention of my cat Fido, who spent hundreds of delicious hours in my lap as I researched and wrote. He's very much a part of this effort.

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Introduction

Martin Kemp states, "No modern science has more visual history than botany, and no scientific illustrations have been more widely admired for what we may call aesthetic reasons."[1] Kemp signals an important tension between the competing knowledge systems of science and art, two disciplines each with a singular emphasis: empirical study, or aesthetic concerns. This thesis explores botanical illustration by Canadian women artists between the years 1830 and 1930. In England and North America, this hundred-year span is particularly interesting for its dramatic social transformations concerning women's role in botanical practice, their access (or lack thereof) to political and educational systems and the plethora of public discussions concerning evolutionary theory and the presence of God in natural areas and in garden landscape. I have structured my investigation along three main axes: 1) the historical background of botanical illustration within Britain and North America and the forces that separated the field into amateur groups (female culture) and professional groups (male science); 2) the ways in which a variety of Canadian women's botanical production served as a colonial agent for settling the new land and; 3) how garden design was a vehicle of expression for Canadian women botanical illustrators as they envisioned the Canadian landscape. Their botanical illustrations were reflections of a developing national character.

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[1] Martin Kemp, " 'Implanted in our Natures': Humans, plants, and the Stories of Art," *Visions of Empire: Voyages, Botany, and Representations of Nature*, ed. David Philip Miller and Peter Hanns Reill (Cambridge, England: Cambridge University Press, 1996) 197.

My research strategy was to consult scholarship by historians of the nineteenth and twentieth centuries that includes the British and North American cultural relationship with nature, science and God; the history of botany and art; the history of garden practices; garden style and its artistic representations; various garden movements in Britain and North America; first-hand, experiential accounts by settlers and colonists; women in science and in universities; the historical relationship of education and school gardens; and national botanical projects and the development of scientific structures in Canada. These socio-cultural analyses repeatedly address, from different vantage points, the categorical separation and prioritization of professional botanists over amateurs. Illustration was a touchstone for these two opposing sides—a front line of sorts that could express scientific concerns as well as reveal contradictions and exclusions of women, their education and achievements. Yet, while the small population of professional botanists wanted to marginalize amateurs, this thesis will demonstrate how nineteenth-century amateur botanical production in Canada affected the relationship that Canadians had with the landscape, and aided its colonial process and settlement.

Illustration was contentious for professional botanists who were concerned with the lack of production standards, because it often pretended to be a scientific study of the plant, while in fact many illustrations were cultural documents that appealed more to the consuming public, a public that did not necessarily care about the artist's limited botanic and artistic education or about the application of outdated taxonomic systems. From a professional point of view, amateur botanical production undermined the sophistication of botanical science. With this conflict in

mind, I will investigate the visual markers inherent in botanical illustration that demonstrated it was a scientific and/or a cultural document.

Part of the difficulty was defining the botanical illustration: something that served science as a plant portrait done in ink or watercolor against a plain white or cream-colored background, the plant isolated from its original habitat. Maria Newberry House defined in 1979 the primary purpose of a botanical illustration:

> [It is a] record of particular characteristics of an individual plant so that it may be identified to species. A meaningful illustration should show the structure of a plant and communicate its manner of growth by capturing in composition, the organic relationship between stem and bud, leaf and petal, stalk and root. The artists should strive for freshness in presentation, honesty in interpretation and sensitivity of observation.[2]

Most scientists of the nineteenth century would have accepted her definition save for the last line, because "fresh," "honest" and "sensitive" interpretations were where scientific and artistic agendas conflicted. The dynamics of amateur and professional created ironic circumstances for the illustration; it was a vehicle that contained immense scientific potential, but was plagued by consumerism and by the sentimental female brush. Professional botanists often preferred illustrations prepared in a documentary style. Art has serviced botanical interests throughout the centuries; however, in the mid-nineteenth century, most botanical art production ceased to satisfy new scientific expectations. While women were the primary creators and consumers of illustration, their lack of authority reduced their contributions to those of the amateur field botanist and recreational illustrator.

Chapter 1 addresses the contentious emergence of the illustration in two ways: as a tool for disseminating and teaching botanical knowledge, and as an art

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[2] Maria Newberry House, *Plantae Occidentalis: 200 years of Botanical Art in British Columbia* (Vancouver: Botanical Garden, University of British Columbia, 1979) 1.

form that was voraciously consumed by women of the emerging middle class. This chapter traces botanical history back to when it was a practice but not a science—a practice that did not discriminate knowledge by gender, economic class or professional/amateur status. I introduce key botanical figures who had the greatest impact on the formation of amateur and professional categories: Carolus Linnaeus (1707-1778), John Lindley (1799-1865), Herbert Spencer (1820-1903) and Charles Darwin (1809-1882). I also include a discussion of John Ruskin (1819-1900), who managed to revive for artists the spiritual components denied them by the empirical demands of new botany. The combined influences of these men significantly changed the prevailing attitudes towards botany, the natural landscape, horticulture and botanical art.

Three sources particularly inform Chapter 1: Carl Berger's *Science, God and Nature* in Victorian Canada (1983), Barbara Novak's, *Nature and Culture: American Landscape and Painting* (1980) and Keith Thomas *Man and The Natural World* (1983). Each situates the weighty debates of the time—divine creation, Darwinian evolution and protection against industrial development—within a triad of botanical reference points: nature, religion and science/industry. Ann B. Shtier, in her book *Cultivating Women, Cultivating Science* (1996), Margaret Rossiter's *Women Scientists in America: Struggles and Strategies to 1940* (1982) and Elizabeth B. Keeney's *The Botanizers: Amateur Scientists in Nineteenth Century America* (1992) were essential to my understanding of amateur/professional/gender splitting of botanical practitioners. Anne Secord's article "Botany on a Plate: Pleasure and Power of Pictures in Promoting Early Nineteenth-Century Scientific Knowledge" (2002) is excellent for its discussion of how the visual arts, in this case botanical

illustration, taught its viewers how to look at botanical subjects and the natural world. John Ruskin's *The True and the Beautiful in Nature, Art, Morals, and Religion* (1887) is insightful on the aesthetic influences of the nineteenth century, and Roger Stein's book *John Ruskin and Aesthetic Thought in America, 1840-1900* (1967) looks at Ruskin in terms of reception, criticism, art history, and morality in America.[3] Lastly, Gill Saunders's book *Picturing Plants: An Analytical History of Botanical Illustration* (1985) is the quintessential reference for clearly delineating the differences in botanical illustration between scientific and cultural domains.[4]

Chapter 2 focuses on the impact of cultural botanical contributions by amateur women botanists, especially concerning how their production served as cultural reinforcement in England's colonial territories. Botany was, at its heart, a

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[3] For primary sources in Chapter 3, see the following: Anne Linden Helmreich, "Contested Grounds: Garden Painting and the Invention of National Identity in England, 1880-1914," diss., Northwestern University, 1994; Anne Helmreich, *The English Garden and National Identity: The Competing Styles of Garden Design, 1870-1914* (Cambridge: Cambridge University Press, 2002); William Robinson, *The Wild Garden: or the Naturalization and Natural Grouping of Hardy Exotic Plants with a Chapter on the Garden of British Wild Flowers, 1870* (London: Century Publishing, 1983); William Robinson, *The English Flower Garden and Home Grounds: Design and Arrangement Shown by Existing Examples of Gardens in Great Britain and Ireland by a Description of the Plants, Shrubs and Trees for the Open-air Garden and their Culture*, 10th ed. (London: J. Murray, 1906); John Ruskin, *The True and the Beautiful in Nature, Art, Morals, and Religion* (New York: J. Wiley, 1887); Roger Stein, *John Ruskin and Aesthetic Thought in America, 1840-1900* (Cambridge, Mass.: Harvard University Press, 1967).

[4] For primary sources in Chapter 1, see the following: Carl Berger, *Science, God, and Nature in Victorian Canada* (Toronto: University of Toronto Press, 1983); Barbara Novak, *Nature and Culture: American Landscape and Painting, 1825-1875* (New York: Oxford University Press, 1980); Keith Thomas, *Man and the Natural World* (New York: Pantheon Books, 1983); Ann B. Shteir, *Cultivating Women, Cultivating Science* (Baltimore: The Johns Hopkins University Press, 1996); Margaret W. Rossiter, *Women Scientists in America: Struggles and Strategies to 1940* (Baltimore: Johns Hopkins University Press, 1982); Elizabeth B. Keeney, *The Botanizers: Amateur Scientists in Nineteenth-Century America* (Chapel Hill: The University of North Carolina Press, 1992). Also, Anne Secord, "Botany on a Plate: Pleasure and the Power of Pictures in Promoting Early Nineteenth-Century Scientific Knowledge," *Isis*, 93 (2002): 28-57. Also, Gill Saunders, *Picturing Plants: An Analytical History of Botanical Illustration* (Berkeley: University of California Press in association with The Victoria and Albert Museum, London, 1985).

practice that women learned as a matter of both sustenance and refinement; it was a discipline anchored in the cultural domain. British-style botany and horticulture were nineteenth-century industries with enormous commercial and cultural potential in the North America, but they also satisfied many nutritional, medicinal and emotional needs for those colonial British women who were often the wives of military officers living far from home. This chapter studies the botanical production of colonial women such as Elizabeth Simcoe (1762-1850), Lady Christian Dalhousie (before 1790-1839), Millicent Mary Chaplin (1790-1858), Fanny Amelia Bayfield (1813/14-1891), and Catharine Parr Traill (1802-1899) who drew, painted and wrote their British visions of England's landscape onto Canada's land. *En masse*, they were considered amateur botanists in spite of their public and private botanical activities: journal-writing, illustrating, writing floral poesy and engaging in botanical philanthropy (in the case of Lady Dalhousie). The most common horticultural flowers would have been familiar to these women: the rose, the tulip, and the iris were symbolic of abstract ideas that were significant and influential factors in the settlement of the British colony of Canada. These flowers were also popular with the British writer J.C. Loudon (1783-1843), who promoted the construction and maintenance of traditional, formalized, bedded-out, parterre estate gardens. He proposed that the English estate garden should be a showcase for botanical knowledge and a demonstration of control of the landscape—a metaphor, I suggest, for the process of colonizing territories. Typical of Loudon's garden layout was the McCord family estate garden, known as Temple Grove, in Montreal. I examine Temple Grove and the illustration of the matriarch, Anne Ross McCord (1807-1870) for the ways in which it satisfied the criteria of a British

estate garden and as an exemplary educational tool that promoted British values in the Canadian colony. This chapter also examines the garden's capacity for teaching colonial values with school garden projects and nature study programs, started in the United States after programs in Europe.

The colonial theme of Chapter 2 was supported in large part by primary resource materials by J.C. Loudon, Catharine Parr Traill, Elizabeth Simcoe and Liberty Hyde Bailey (1856-1954), and by the archives of the McCord Museum of Canadian History Archives. Mary Louise Pratt's book *Imperial Eyes: Travel Writing and Transculturation* (1992) offered grounding research in the way specialized botanical production was a linguistic tool in the colonial process and how "natural history conceived of the world as a chaos out of which the scientist produced an order."[5] (30). This line of thinking informs this chapter in terms of how colonial amateur and professional botanists systematized the New World. Edwinna Von Baeyer's book entitled *Garden Voices: Two Centuries of Canadian Garden Writing* (1995) is a compilation of excerpts from primary publications, archival letters and journal entries concerning gardening, nature, religion and science. A.J. Lustig's article "Cultivating Knowledge in Nineteenth-Century English Gardens" (2000) supplied additional colonial context concerning the politics of gardening and the aesthetic and social agendas of horticultural and floricultural societies within the new botanical framework discussed in Chapter 1. Early colonial context in relation to Canadian landscape and botanical production came from Jim Burant's *Drawing on the Land: The New World Travel Diaries and Watercolors of Millicent Mary Chaplin* and the McCord Museum of Canadian History's publication entitled *The*

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[5] Mary Louise Pratt, *Imperial Eyes: Travel Writing and Transculturation,* Second Edition, 1992 (New York: Routledge, 2008) 30.

McCord Family: A Passionate Vision. Another of Von Baeyer's books, *Rhetoric and Roses: A History of Canadian Gardening 1900-1930* provided background for Canadian horticultural trade and Canadian garden history. Publications such as E. Buckner Hollingsworth's *Flower Chronicles* (2004), and Wilfrid Blunt's *Tulipomania* (1950) supplied information on the history and symbolism of the most common garden cultivars: roses, tulips and irises.[6]

The third chapter addresses Canadian garden style and its artistic representations by women. I will examine a number of important influences on the Canadian garden and its art: William Robinson (1838-1935), the primary proponent of the wild garden style, known today as Britain's national garden style; Transcendentalism; and the processes of industrialization and colonialization. I have chosen Canadian artists whose work reflects these nineteenth century influences, thus I include Anne Ross McCord (1807-1870) and Maria Morris Miller as representatives of early nineteenth-century artists, and Mary Ella Dignam (1860-1938) and Mary Hiester Reid (1854-1921), as representative of the latter half of the same century. Their works pay homage to the garden design of England. This chapter focuses less on gardening as a colonial agent (as discussed

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[6] For primary sources in Chapter 2, see the following: Mary Louise Pratt, *Imperial Eyes: Travel Writing and Transculturation,* Second Edition, 1992 (New York: Routledge, 2008); Edwinna Von Baeyer. *Garden Voices: Two Centuries of Canadian Garden Writing* (Toronto: Random House of Canada, 1995); A.J. Lustig, "Cultivating Knowledge in Nineteenth-Century English Gardens," *Science in Context* 13(2000) 155-181; Jim Burant, *Drawing on the Land: The New World Travel Diaries and Watercolours of Millicent Mary Chaplin, 1838-1842* (Manotick, Ontario: Penembra Press, 2004); McCord Museum of Canadian History, *La Famille McCord: Une vision passionnée: The McCord Family: A Passionate Vision* (Montreal: McCord Museum of Canadian History, 1992); Edwinna Von Baeyer, *Rhetoric and Roses: A History of Canadian Gardening 1900-1930* (Markham, Ontario: Fitzhenry & Whiteside, 1984); Buckner Hollingsworth, *Flower Chronicles* (Chicago; London: University of Chicago Press, 2004); Wilfrid Blunt, *Tulipomania* (Harmondsworth, England: Penguin Books, 1950).

in Chapter 2). Here I demonstrate the ways in which Canada adapted British wild garden design as a reflection of the emerging political, economic and social vision of the national landscape.

The grounding literature for Chapter 3 is Anne Helmreich's PhD dissertation, "Contested Grounds: Garden Painting and the Invention of National Identity in England, 1880-1914" (1994) and her follow-up publication, *The English Garden and National Identity* (2002). These writings formulate several necessary links between garden design, national identity and garden art in England. In addition, William Robinson's books *The Wild Garden: or the Naturalization and Natural Grouping of Hardy Exotic Plants* (1870), and *The English Flower Garden and Home Grounds* (1883) are primary source materials that were essential to understanding the political and spiritual rationale behind the broad acceptance of the wild garden.

Especially important in this thesis is the perspective that women's botanical illustration is a consequence of women integrated into the botanical network rather than a consequence of their limitations and exclusions.[7] I will prove that social limitations existed. However, this research has taught me that women's botanical production is rich in social and cultural connections, and thus I do not entirely subscribe to the single view that the nineteenth-century female image was a know-nothing, go-nowhere property, circumscribed by cultural restrictions. Instead, I find that botanical illustration by women artists embodies deep historical context and reflects their knowledge, intelligence, ambition, and skill. Field

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[7] For a more thorough discussion of inclusion and exclusion, see Anne Secord, "Botany on a Plate: Pleasure and the Power of Pictures in Promoting Early Nineteenth-Century Scientific Knowledge," *Isis*, 93 (2002): 28-57.

botanists or botanical artists, whether amateur or professional, cannot contribute to this artistic genre in cultural or social isolation. A woman botanical artist must be educated and connected to the broader botanical network and to regional male professionals. She must be current on provincial plant life and be able to collect plants or know of field botanists who will retrieve specimens for her. When studying the illustration, I question whether the artist prefers to paint cultivated plants. Has she portrayed plant life in relation to or in isolation of from plant life? Has she left the plant's imperfections or has she corrected the insect and drought damage for the plant portrait? All of these decisions demonstrate the artist's integrated perspective concerning the relationship the emerging botanical science, and changing perspectives toward the wild landscape and/or constructed gardens.

Lastly, this thesis is timely because it examines the relationship between science and art—a relationship that has increasingly become an important aspect of art historical research, especially in the field of medicine and human anatomy. While this work does not include medicinal plants as part of its scope, medical illustration is a field of study that is also as deeply complicated by gender, education and the categorization of science. This thesis will discuss the complicated relationship with the science of botany and the artistic botanical illustration in Canada and how it developed amidst rapidly changing gender roles, education, and institutionalization of botany.

Chapter 1
The Reformation of Professional Botanical Identity

For her *Indian Hemp—Milk Weed* (1840) (Figure 1), Canadian botanical illustrator Maria Morris Miller (1813-1875) chose a plant that is not typically a garden plant, as it tends to be weedy. It grows along the edges of wetlands and in roadside ditches from California to eastern Canada. There is much about this illustration that is of scientific interest. Miller shows us the distinct differences in color and shading of the top and underside of the leaf. She details the structure of veins that deliver water and soil nutrients. She shows us new leaf growth together with mature leaves. The stem accurately bears the weight and volume of the plant's natural pose. Miller portrays the reproductive anatomy at its various stages of flower and berry, but the flowers and berries do not distract from the plant overall, even though she magnifies its details into a larger than life portrait that effectively forces the viewer to notice aesthetic qualities. In so doing, Miller elevates the ordinary and otherwise invisible ditch plant into existence within its regional landscape garden. The plant may not have ranked high within botanists' hierarchal structure, but this illustration teaches that all habitats rank equally and have aesthetic value.

At approximately the same time as Miller produced this illustration, Joseph Hooker (1817-1911), the important British botanist and botanical traveler and one of Charles Darwin's closest friends, worked with a large government grant to produce and

publish *Flora Antarctica* (1844).[1] Hooker complained that watercolor illustration was ostly and time-consuming, increased the cost of his project, and limited sales.[2] He preferred to use pen and ink line drawing to support textual description, an approach that he believed elucidated the written details of the plant specimen and better outlined its essential anatomical structure and form. However, Hooker was aware of the tremendous appeal of full-color illustration. He wrote in a letter to colleague William Wilson (1799-1871), a cryptogamic botanist[3], of his concession "that it was 'by the [colored] plates' that botanical works sold—and sold, moreover, 'almost entirely [to] private gentlemen & no Botanists at all.'"[4] Wilson in turn suggested that "colored figures often do harm instead of good & are more likely to make 'knowers of species' than sound botanists."[5] Such discourse promoted a hierarchy of botanical knowledge and demonstrated the tone of superiority that professional botanists had towards their amateur counterparts. This thinking was typical of the professional botanical community in England and North America in the nineteenth century.

This chapter focuses on the background issues of botanical artists such as Maria Morris Miller and other women interested in the natural sciences in Canada between the years 1830-1930. For this, I look at those aspects of society in Britain and North America

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[1] Jim Endersby, "Hooker, Sir Joseph Dalton," *Oxford Dictionary of National Biography: In Association with the British Academy: From the Earliest Times to the Year 2000*, ed. H.C.G Mathew and Brian Harrison. vol. 27 (Oxford; New York, Oxford University Press, 2004) 963.

[2] Anne Secord, "Botany on a Plate: Pleasure and the Power of Pictures in Promoting Early Nineteenth-Century Scientific Knowledge," *Isis*, 93 (2002): 34-35.

[3] A cryptogamic botanist is someone who studies "a plant with no true flowers or seeds, such as a fern, moss, liverwort, lichen, alga, or fungus." See "Cryptogamic." *Concise Oxford English Dictionary: Thumb Index Edition*, 10th ed., Revised, 2002.

[4] Anne Secord, "Botany on a Plate: Pleasure and the Power of Pictures in Promoting Early Nineteenth-Century Scientific Knowledge," *Isis*, 93 (2002): 33-34.

[5] Ibid., 35.

that hoped to marginalize women practitioners in general, and female botanists in particular, into amateur categories. This shift encouraged them to produce botanical illustration that tended to be aimed at a popular rather than a scientific audience. Essential to this discussion is the process that divided botany into amateur (female) and professional (male) categories and that, as botanical practice transformed itself into a science, empowered key eighteenth- and nineteenth-century professional male figures in the natural sciences to directly affect the restructuring of empirical and artistic processes.

Full-color botanical illustration such as Miller's *Indian Hemp* was often in contentious opposition to progressive nineteenth-century botany because it challenged the masculine identity of the professional botanist. As botany entered the lexicon of 'legitimate science' during the nineteenth century in Britain and North America, its practitioners complained that the numerous female associations summarily weakened botanical authority. Until the early nineteenth century, botany was a fairly egalitarian discipline. But in about 1830 male botanists began to object to what they considered the emphasis on superficial matters of poesy and polite botanical society, this emphasis being the result of women's intense consumption of floriculture in the form of painting, illustrating, and sentimental flower and garden poetry. However, as I will demonstrate later, women also were the beneficiaries of valuable practical knowledge that had been passed down through generations. It is no surprise that women, having been raised to identify and cultivate plants for their nutritional, medicinal and aesthetic value, were interested in the emerging science of botany and were eager to contribute. But nineteenth-century women, including Maria Morris Miller, came to realize that their botanical knowledge and scientific contributions were rated as 'amateur knowledge'.

The one element that all professional botanists agreed on was that the field of botany would gain credibility if taught in universities, which were of course predominately masculine. Men appointed themselves botanical experts, contending that they "possessed the learning and the resources deemed necessary to produce and judge scientific knowledge."[6] Still, in the nineteenth century, men who graduated with PhDs in the natural sciences and who entered professional circles comprised only a tiny percentage of the entire population of those (both women and men) who filled the ranks of field clubs and horticultural societies, and who had diverse interests ranging from polite floriculture to specialized interests in grasses or mosses, for example. Even those women who managed to earn PhDs were refused funding and had few opportunities to publish their findings in scientific forums. Such exclusionary practices restructured the botanical field into distinct amateur and professional groups and credited male-oriented science for most of the botanical advances. Yet, to suppose that professional scientific botanists were solely responsible for all botanical production grossly underestimates the contributions made by the amateur majority.

What we think of today as botanical science was, until the eighteenth century, only a natural philosophy for which art was a cooperative partner.[7] While the notion of gendered knowledge in the sixteenth century did not preclude equal participation, during the early nineteenth century the mere presence of women in the newly emerging professional circles was deemed unacceptable. As botanical philosophy slowly moved from the field to the university, and as men turned to botany as a professional study, newly ordained botanists, legendary in their own minds, took it upon themselves to proffer public opinions that were presented as empirical and objective in matters beyond

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[6] Ibid., 29.
[7] Robert Ornduff, "Darwin's Botany," *Taxon*, 33 (1984): 39.

botany.[8] Professional botanists and horticulturalists such as Joseph Paxton (1803-1865), John Loudon (1783-1843) and John Lindley (1799-1865) weighed in on many social issues of the day: women's rights, public education and health, importance of class structures and urban planning.[9] As trusted professionals, their opinions were influential throughout the British Empire's colonies concerning matters of land and society.[10] In truth, their 'scientific' conclusions had to do principally with establishing a male-oriented, professional botanical identity that distinguished it from amateur ranks.[11]

Professional male botanists did have something of a point insofar as there are clear distinctions between the documentary intent of the scientific illustration and the cultural intent of a floral still life. Gill Saunders notes that in the nineteenth century, most scientifically-minded botanical illustration was designed to supplement textual description, not to make an artistic statement. Text and illustration were meant to combine in order to give a complete history of the plant, its roots, leaf structure and/or seed, whereas a horticultural illustration could exist without the assistance of scientific text, since its arrangement was predicated only on plant identity.[12] However, both types of illustration appear at first glance to be very similar. The one factor that differentiates illustrations as primarily scientific from illustrations as cultural documents is the visual accuracy and completeness of their botanical information. The scientific illustrator's paramount concern was the portrayal of up-to-date botanical research, whereas a

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[8] A.J. Lustig, "Cultivating Knowledge in Nineteenth-Century English Gardens," *Science in Context* 13(2000) 164.

[9] Ibid., 164.

[10] Jim Burant, *Drawing on the Land: The New World Travel Diaries and Watercolours of Millicent Mary Chaplin, 1838-1842* (Manotick, Ontario: Penembra Press, 2004) 88.

[11] Thomas S. Kuhn, *The Structure of Scientific Revolutions*, (Chicago; University of Chicago Press 1970) 5.

[12] Gill Saunders, *Picturing Plants: An Analytical History of Botanical Illustration* (Berkeley: University of California Press in association with The Victoria and Albert Museum, London, 1995) 101.

horticultural illustrator, while often botanically informed, was more concerned with the portrayal of plant identity by means of flowering blossoms, color, and beauty. Gill Saunders notes that no general horticultural publication could have survived with black and white line drawings alone, unlike the scientific publications that could exist without color.[13] With heavy demand for horticultural publications, it was necessary to hand-color the printing plates as inexpensively and in as uncomplicated a way as possible. The result was a formulaic coloring schema which gave rise to exaggerated hues, lack of shading and over-saturated colors.[14] The prints produced from colored plates were enormously popular and were readily consumed by amateur audiences.

However, by the mid-nineteenth century, professional botanists questioned whether the glut of illustrations produced and consumed by the public communicated information that promoted dilettante botaniphilia or sound, scientific botany. Gill Saunders explains that botanical illustration posits distinct and visible theories: it is a "medium of intellectual exchange in the development of botanical science; illustrations expressed theoretical positions quite as much as they described their ostensible subjects."[15] The educational factor in illustration was the 'wild card' that fed the ongoing debate over the efficacy of text over art to demonstrate the essential characteristics of the plant. As botany centralized its knowledge in universities and government departments, the discipline required elaborate equipment and specialized nomenclature so that it no longer resembled the practical, hands-on botany of the past.[16] As a result, women botanical artists, in particular, found it more difficult to address an academic

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[13] Ibid., 101.
[14] Ibid., 102.
[15] Ibid., 85.
[16] Thomas S Kuhn, *The Structure of Scientific Revolutions* (Chicago; University of Chicago Press 1970) 64.

audience. Thus they produced for enthusiastic cultural and commercial audiences. This shift was problematic for professional male botanists since the horticultural illustration never lost its scientific style and assumption of empiricism. The horticultural illustration presented itself as an accurate and objective portrayal of a plant species even when the picture was highly subjective. The vast majority of botanical work produced by women in the nineteenth century was horticultural illustration, since women's authority to convey botanical knowledge was limited by institutional structures.[17]

Much of the twentieth-century literature on Maria Morris Miller's life and work concludes on the scientific intention of her illustrations.[18] Her association with two other professional men bolstered this recent assumption: botanists Titus Smith (1768-1850) and George Lawson (1827-1895). Smith was a respected public figure who had over fifty years of experience in botany, natural history and agriculture, and who had endorsed *Wildflowers of Nova Scotia* (1839-40) with descriptive texts.[19] Lawson, a prominent Canadian botanist and a chemistry professor at Dalhousie University, endorsed Miller's third and fourth series, entitled *Wildflowers of Nova Scotia and New Brunswick* (London and Halifax, 1866) and *Wildflowers of British North America* (London and Halifax, 1867).[20] He felt an urgency to document British North America's botanical landscape separately from and not under the auspices of England's Kew Gardens.[21]

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[17] Gill Saunders, *Picturing Plants: An Analytical History of Botanical Illustration* (Berkeley: University of California Press in association with The Victoria and Albert Museum, London, 1985) 108.

[18] See Mora Dianne O'Neill, "Maria Morris Miller: Growing Flowers on Stone," Art Gallery of Nova Scotia Vertical File and Mary Sparling, "The British Vision of Nova Scotia", MA thesis, Halifax University, 1978.

[19] Terrence M. Punch, "Smith, Titus," *Dictionary of Canadian Biography*, vol. vii (Toronto: University of Toronto Press, 1966) 815.

[20] Suzanne Zeller, "Lawson, George," *Dictionary of Canadian Biography*, vol. xii (Toronto: University of Toronto Press, 1966) 542.

[21] Because such a project was too large for one man alone, Lawson turned to regional amateur

Certainly Miller's association with Smith and Lawson attested to her botanical credibility. However, I suggest that in spite of these connections, she exemplifies the difficulty science-based botanists had with botanical art production, since her artwork is also infused with a cultural deference to nature as a master gardener. *Indian Hemp,* for example, combines a heavy underpinning of scientific detail with more subjective stylization. Though both Titus Smith and George Lawson were professional botanists, their attitudes were traditional in the sense that botany remained for them a field practice philosophy of which God in nature was an important component. Smith's botanical vision was not born from a university education or from the new laboratory-oriented science of botany. Instead, he was governed by three basic beliefs: in God; in the need for humanity to conserve nature's bounty; and in the idea that the processes of industrialization were out of rhythm with nature.[22] Terrance M. Punch cites a lecture Smith gave in 1835 in which he spoke of the forests as "the garden of God," where nothing was superfluous or out of place. Smith believed nature to be a direct expression of God's personality and power of creation, and an exemplary force for the preservation of the world. He was thus a staunch defender of Nature in the wake of industrial destruction.[23] He collected botanical specimens for Miller to illustrate and encouraged her to paint Nova Scotia flora. Suzanne Zeller quotes Lawson's philosophy in a brief

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botanists whose combined knowledge would create a botanical portrait of the new Dominion of Canada.[21] Lawson felt that a country like Canada had too long avoided its obligation to catalogue its natural resources. He founded the Botanical Society of Canada in 1860 to co-ordinate the research work of regional botanists into a repository of data regarding climate and soil conditions in relation to botanical diversity. For more information on George Lawson and his research, see Suzanne Zeller, "Lawson, George," *Dictionary of Canadian Biography*, vol. xii (Toronto: University of Toronto Press, 1966) 540, 542; Suzanne Zeller, *Inventing Canada: Early Victorian Science and the Idea of a Transcontinental Nation* (Toronto: University of Toronto Press, 1987) 231.

[22] Terrence M. Punch, "Smith, Titus," *Dictionary of Canadian Biography*, vol. vii (Toronto: University of Toronto Press, 1966) 815.

[23] Ibid., 815-816.

statement: "plants are living beings like ourselves," and a plant is "no mere machine acting a mechanical part."[24] Miller seemed to well understand the subtle philosophical balance of such traditional profession botanists as Smith and Lawson. Her egalitarian approach to the Nova Scotia landscape region combines precise scientific observation with an emphasis on beauty as nature's bounty.

The life of Maria Morris Miller, as well as those of Smith and Lawson, coincided with Nova Scotia's intellectual awakening, most pronounced between 1812 and 1835, during which an influx of Scottish and American immigrants settled in the province, breathing new life into tired industries and old-fashioned ways of thinking.[25] It was a time when the region was in great flux and was in its initial stages of establishing an artistic, scientific and intellectual identity.[26] Mora Dianne O'Neill says of Maria Morris Miller's artwork that "her effort to record the diverse flora of her native land is in accord with the patriotism of the era; her scientific and artistic attempt, with the utopian pursuit."[27] Miller was born into a wealthy Nova Scotia family in 1813. She married Garrett Trafalgar Nelson Miller in 1840 at 27 years of age, a marriage that was reportedly unhappy yet produced five children.[28] In total, she published four series comprising 99 sheets and representing 146 species. These illustrations were central to her life's accomplishments.[29]

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[24] Suzanne Zeller, *Inventing Canada: Early Victorian Science and the Idea of a Transcontinental Nation* (Toronto: University of Toronto Press, 1987) 230.
[25] D.C. Harvey, "The Intellectual Awakening of Nova Scotia," *The Dalhousie Review* (Halifax, 1933) 1-22.
[26] Ibid., 2.
[27] Mora Dianne O'Neill, "Maria Morris Miller: Growing Flowers on Stone," Art Gallery of Nova Scotia Vertical File, 1.
[28] Ibid., 1.
[29] Mary Sparling, "The British Vision of Nova Scotia", MA thesis, Halifax University, 1978, 92 and Charles Bruce Fergusson, "Morris, Maria Frances Ann (Miller)." *Dictionary of Canadian Biography*, vol. x. (Toronto: University of Toronto Press, 1966) 534.

Miller, Smith and Lawson operated under the same paradigm as late seventeenth-century urban artists, naturalists, apothecaries and poets who joined hands with theologians and scientists in their view that all life in Nature was perfect in God's plan;[30] wildflowers, weeds, insects and animals, which were naturally present in cultivated gardens, came to be acknowledged in sum as a beautiful recreation of Edenic paradise. This new, Christian-based spirituality held that the destruction of any natural specimen was immoral, since it would upset the delicate balance of nature.[31] Many of Miller's botanical illustrations were in accord with this garden mindset and depicted a sort of utopian garden landscape that posited Nova Scotia as nature's idyllic region.[32] However, her artistic approach demonstrates a progression of thought since the early paradise garden style was accessible only to the citizens who could afford to hire well-educated gardeners.

Thus, by the late eighteenth century, upper-class men and women enthusiastically shared in the collecting, identifying, and classifying of botanical specimens.[33] This was reinforced by the fact that, in the age of enlightenment, astronomy, geology, mineralogy, horticulture and botany, arithmetic and mathematics[34] were considered suitable studies for young elite women. In fact, with interest quickly growing in botany and horticulture, botanical illustration and writing became central to many upper-class women's achievements, skills that carried forward into Miller's life, as

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[30] Keith Thomas, *Man and the Natural World* (New York: Pantheon Books, 1983) 270-271.
[31] Ibid., 278.
[32] However, this position contrasts with sixteenth-century tradition that taught rural farmers to consider weeds in the field as "vegetable equivalent to vermin," and such plants were therefore swiftly exterminated. See Keith Thomas, *Man and the Natural World* (New York: Pantheon Books, 1983) 270.
[33] Verna Lillian Linney "The Flora Delanica: Mary Delany and Women's Art, Science and Friendship in 18thC England," Diss., York University, 1999, 170.
[34] Ibid., 176.

well. Women's access to the botanical field was made possible, to a certain extent, by the Linnaean taxonomy system—a system that women would enthusiastically employ for the next two hundred years. Swiss botanist Carolus Linnaeus (1707-1778) ushered in a new era for botanical science with his publication *Systema Naturea* (1735), wherein he organized plant specimens and established a nomenclature based on floral characteristics and sexual reproductive organs. He established categories of resemblances (genera and families) and differences (species and varieties) which were intended to easily establish plant identity.[35] Prior to Linnaeus, plants were alphabetized by their Latin or Greek names or by types (potherbs, medicinal herbs, corn, flowers, grasses and weeds) or by habitat.[36] Linnaeus's system was simple to disseminate and had wide appeal, in part due to an infusion of Christian sentiment in which he paired the task of a naturalist with that of a parson.[37] In *Systema Naturea*, he framed botanical texts as biblical verses, sermons and catechisms, leaving some to complain that "Linnaeus fancied himself 'a second Adam.'"[38] The hugely influential philosopher Jean-Jacques Rousseau had a particular affinity with the way Linnaeus integrated Lutheran morality into his taxonomy.[39] God in Nature and religion in botany were always present in popularizations of Linnaeus's books, pamphlets and botanical imagery.

By standardizing taxonomic categories, Linnaeus democraticized the accessibility of botany in a practical, work-a-day manner.[40] His system seemed to be a mini-course

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[35] Gill Saunders, *Picturing Plants: An Analytical History of Botanical Illustration* (Berkeley: University of California Press in association with The Victoria and Albert Museum, London, 1985) 20.
[36] Ibid., 28.
[37] Lisbet Koerner, *Linnaeus: Nature and Nation* (Cambridge, Massachusetts: Harvard University Press, 2000) 22.
[38] Ibid., 24.
[39] Ibid., 26.
[40] Ibid., 39-40.

on 'how-to-be-a-botanist', as its descriptions of botanical practices and nomenclature applied to practitioners of any status, leveling the field both economically and educationally for men and women alike. Botanists with textual materials and illustrations in hand could easily apply the Linnaean method. He translated Latin pamphlets and handbooks into common language so that poorer, less educated people could participate in botany without much expense.[41] In effect, because he opened the field, practitioners with wide-ranging expertise—from advanced to neophyte—across all classes, came to be identified as botanists.

Gender and sexuality, in particular, were strongly associated with botany, especially since Linnaeus concentrated on floral genitalia. He gendered taxonomy based on differentiating between root systems that were decidedly female gynia, and others that were decidedly male andria.[42] Linnaeus's scheme anthropomorphized flora. As Anne Shteir explains, he gave "accounts of brides and bridegrooms, of marriage and conjugal coupling, of 'clandestine marriages' and 'eunuchs' in the plant kingdom." Shteir continues, "Linnaeus presents as 'natural' what we should read as his discourse about sexuality, a discourse he shares with other proponents of the theory that the reproductive system of plants is directly analogous to human sexuality."[43] His work was among the earliest to legitimate human gender hierarchy and religious morality as part of a natural order. While Linnaeus's system encompassed both male and female, it took root within a broader cultural discourse that had long identified with female sexuality and in particular with flowers. This discourse can be traced to the ancient pantheon of "Flora, goddess of flowers, Pomona, her counterpart for

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[41] Ibid., 40-41.
[42] Ann B. Shteir, *Cultivating Women, Cultivating Science* (Baltimore: The Johns Hopkins University Press, 1996) 15.
[43] Ibid., 16.

fruit"[44] Linnaeus's emphasis on reproduction, unwittingly or not, reinforced prevailing cultural gender patterns that continued the promotion of the flower as an apt feminine metaphor that even today suggests beauty, moral purity and biological similitude. Moreover, the flower's dependence on the sun and climate for its reproductive efficacy was a metaphorical reinforcement of how women were believed to be, by natural law, fragile and dependent. Even though Linnaeus made great contributions to plant classification, his system encouraged the development of sentimentality by cultured amateurs who considered horticultural and floral decorum a significant part of botanical interpretation. In spite of the system's biological orientation, and to his credit, Linnaeus somewhat empowered women by encouraging them to learn and use his taxonomy alongside men.

Maria Morris Miller demonstrated a proficient knowledge of the components of Linnaean taxonomy. In spite of Miller's overall attention to scientific detail, the flower in *Indian Hemp* is the element of the picture that commands all the attention even though it comprises less than one-third of the composition. The flower is a critical identifier for the picture's cultural orientation since there is very little else beside the shape of the leaves that would accurately classify this plant as Indian hemp/milkweed. There are no cross-sections of stems or berries, no representation of the root system, or any magnifications of leaf or stem textures. The flower is what anchors the picture firmly as a culturally oriented-horticultural illustration.

Indian Hemp thus embodies Linnaean taxonomy, which was divested of its status around the same time Maria Morris Miller produced the illustration. Linnaeus's system

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[44] Martin Kemp, " 'Implanted in our Natures': Humans, plants, and the Stories of Art," *Visions of Empire: Voyages, Botany, and Representations of Nature*, ed. David Philip Miller and Peter Hanns Reill (Cambridge, England: Cambridge University Press, 1996) 212.

was invalidated for its overly simplistic organization and its female orientation, a focus that was not acceptable to a movement that sought to masculinize botany and to limit female participation in various sectors of the growing profession. The female contribution was not denied outright, but was instead retooled to fit within and compliment a new masculine botanical identity.

British botanist John Lindley played a large part in the nineteenth-century movement to transform botany into an academic science, controlled by and accessible only to men.[45] Lindley was a man of a certain repute: a professor of botany at London University and a fellow of the Society of Apothecaries, as well as an administrator in varying capacities at the Royal Horticultural Society. He advocated reshaping the botanist into a new kind of expert practitioner, which in Lindley's opinion meant masculinizing the botanist and distinguishing him from amateur women who were simple flower lovers or botanophiles.[46] Lindley questioned the "vexed issue of semantics" surrounding botanical practices,[47] arguing that the Linnaean system encouraged only superficial naming and thus was too simplistic and general for precise, meticulous, botanical science. Amongst many competent taxonomic systems, Lindley preferred the Continental theory, developed by Augustin-Pyramus de Candolle (1778-1841), a professor of botany in Geneva. This system ordered plants according to the physical makeup of their stems and leaves,[48] and paid particular attention to plant morphology by taking into account the totality of all the plant's organs, rather than isolating their

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[45] Ann B. Shteir, *Cultivating Women, Cultivating Science* (Baltimore: The Johns Hopkins University Press, 1996) 150.
[46] Ibid., 153.
[47] Ibid., 153.
[48] Ibid., 155.

reproductive features.[49] John Lindley, himself a full color botanical illustrator, produced artwork that demonstrated de Candolle's taxonomy. He fully accessorized his artworks with details and cross-sections of seeds, stems, leaves, and flowers that display the plant's entire life cycle. Using Candolle's approach to plant classifications, Lindley emphasized empirically-minded, rational botany and de-emphasized floral identity and superficial beauty. Whereas Linnaeus's illustrations taught the novice botanist how to visually identify the reproductive elements of the flower alone without complicated anatomical nomenclature, his strategy was to emphasize floral dissections to the exclusion of all else[50] (1804; Figure 2). Thus, Lindley's rejection of the Linnaean system was a rejection of polite botany that had developed, in large part, into feminine floriculture.[51]

On Thursday, April 30, 1829, John Lindley delivered his introductory lecture as professor of botany at London University. In it, he contested prevailing public opinion that botany-turned-science had little justification. He argued that botany, as a university science, would be valuable to the everyday world—a world that some practitioners believed would go on just as well even if no such science existed.[52] His lecture credited botanical science for advances in garden propagation and claimed it had improved fruit growers' understanding of tree pruning.[53] Lindley's intention was to elevate the field of botany to the stature of science, several degrees higher than common, everyday

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[49] Ibid., 155.
[50] Gill Saunders, *Picturing Plants: An Analytical History of Botanical Illustration* (Berkeley: University of California Press in association with The Victoria and Albert Museum, London, 1985) 85-88.
[51] Ann B. Shteir, *Cultivating Women, Cultivating Science* (Baltimore: The Johns Hopkins University Press, 1996) 157.
[52] John Lindley, "Introductory Lecture on Botany," *Ten Introductory Lectures Delivered at the Opening of the University of London* (London: Taylor, 1829) 17.
[53] Ibid., 22.

practices and polite botanical discourse. He justified the need for a new science by redefining his botanical objectives: "firstly, [botany identifies] the structure, both external and internal, of vegetable bodies, and the laws under which they live, and grow, and propagate. And secondly, [botany attains] the power of distinguishing with precision one kind of plant from another."[54] Yet, his claims of advancing knowledge did not necessarily apply to the everyday farmer or gardener and do not appear to have been relevant to the novice botanist or horticulturalist who was often more interested in bloom schedules and color schemes. Still, Lindley needed to modernize past the marker of "mere accomplishment" of bloom schedules and color schemes.[55] He wrote: "It has been very much the fashion of late years, in this country [England], to undervalue the importance of this science: and to consider it an amusement for ladies rather than an occupation for the serious thought of man."[56] His priority was to identify botany as a pure and integral science, one in which men would be the primary interpreters of all botanical findings.

Lindley's version of 'defeminization' did not exclude women altogether from the field. Within his broader botanical project, he felt women were well suited for teaching.[57] Thus, he published *Ladies' Botany: or a Familiar Introduction to the Study of the Natural System of Botany* (1834-37), a book Anne Shteir describes as an attempt to "teach a different language of flowers, in contrast to fashionable and dominant floral discourses of his day...It is based on the epistolary and maternal model of Rousseau, [and] is organized as fifty letters on structure and the natural system of classification, addressed

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[54] Ibid., 4.
[55] Ibid., 17.
[56] Ibid., 17.
[57] Ann B. Shteir, Cultivating Women, Cultivating Science (Baltimore: The Johns Hopkins University Press, 1996) 162.

to a mother who wants to teach her children about plants."[58] In effect, this book was an attempt to modernize polite botany and bring it out of the sentimental realm of amusement and accomplishment. It was not, however, a book designed to prepare women for higher levels of botanical research.[59] *Ladies' Botany* promoted knowledge more advanced than women previously had access to, but was not of the caliber of knowledge about higher botanical debates, government policies or agricultural advances.[60] In the preface of the abridged version (1850), Lindley advises women:

> The specimens [studied in *Ladies Botany*] should be carefully compared with the descriptions and plates; and when they are all remembered and understood, you will be a Botanist;--not a learned one—but acquainted with many of the fundamental facts of the science, and able to prosecute the inquiry to any further point...[61]

Ladies Botany was an attempt to create a separate female role that taught young men and boys introductory and fundamental principals of taxonomy (other than Linnaneus)—a role from which men were the direct beneficiaries but were ultimately disassociated.

At the time *Ladies' Botany* was published, Lindley and Charles Darwin (1809-1882) were corresponding on botanical issues. Lindley was also publishing Darwin's writings in the *Gardeners' Chronicle* (late August 1843). The two men were thus reading each other's research.[62] With the publication of his *Origin of Species* (1859), in which he presents his theory of evolution, natural selection and sexual selection, Darwin seems to concur with the prevailing attitudes regarding women's inferiority in the natural order.

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[58] Ibid., 163.
[59] Ibid., 165.
[60] Ibid., 163-165.
[61] John Lindley, *Ladies Botany of Professor Lindley/Abridged by the Author with Numerous Wood-cuts: For the Use of Schools and Young Persons*, (London: Ridgway, Picadilly c. 1850) xiv.
[62] Charles R. Darwin, "Letter 693--Darwin, C.R. to Gardeners' Chronicle, [late Aug 1843]," August 1843, *Darwin Correspondence Project*, 28 May 2008 <http://www.darwinproject.ac.uk/darwinletters/calendar/entry-693.html>.

He postulates that the evolutionary survival of all species of plants, insects and animals, but not humanity, is dependent on separately evolved male and female reproductive roles. However, in his later publication *Descent of Man and Relation to Sex* (1879), Darwin fully develops his evolutionary model to include humans in sexual selection. *Descent of Man* not only clarifies the evolutionary survival of flora and fauna, but also proposes that in human societies, sexuality and racial differences are equal constituents in evolution. In both *Origins* and *Descent*, Darwin suggests a gender hierarchy in which men are physically and intellectually superior to women. These opinions were not much disputed. Darwin wrote in *Descent of Man*:

> The chief distinction in the intellectual powers of the two sexes is shewn by man's attaining to a higher eminence, in whatever he takes up, than can woman- whether requiring deep thought, reason, or imagination, or merely the use of the senses and hands. If two lists were made of the most eminent men and women in poetry, painting, sculpture, music (inclusive both of composition and performance), history, science, and philosophy, with half-a-dozen names under each subject, the two lists would not bear comparison. We may also infer, from the law of the deviation from averages, so well illustrated by Mr. [Francis] Galton, in his work on Hereditary Genius, that if men are capable of a decided pre-eminence over women in many subjects, the average of mental power in man must be above that of woman.[63]

Although the term 'inferiority' never appears in these words, this passage and several others like it reinforced the hierarchy of men over women. The inequality of gender in society was a consequence of the 'natural order' of the laws of nature in this sense.[64]

The organized creation of a masculine botanical identity was, however, the result of a broader endeavor beyond that of John Lindley and Charles Darwin. It was a concerted effort to marginalize female participants in the new composite portrait of the

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[63] Charles R. Darwin, *Descent of Man and Selection in Relation to Sex* (New York: D. Appleton & Co., 1890) 564.

[64] See Sally Gregory Kohlstedt and Mark R. Jorgensen, " 'The Irrepressible Woman Question': Women's Responses to Evolutionary Ideology," *Disseminating Darwinism: The Role of Place, Race, Religion, and Gender*, eds. Ronald L. Numbers and John Stenhouse (Cambridge: Cambridge University Press, 2001) 267-285.

ideal botany student. Universities and academies granted funding to male botanists over equally competent women.[65] Moreover, into the late nineteenth century, masculinizing botany continued to be a popular topic in journal and newspaper publications. In 1887, J.F.A. Adams, M.D. published an article in *Science* magazine entitled "Is Botany a Suitable Study for Young Men?" Adams attempted to dispel the

> idea [that] seems to exist in the minds of some young men that botany is not a manly study; that it is merely one of the ornamental branches, suitable enough for young ladies and effeminate youths, but not adapted for able-bodied and vigorous-brained young men who wish to make the best use of their powers. I wish to show that this idea is wholly unfounded, but that, on the contrary, botany ought to be ranked as one of the most useful and most manly of studies, and an important, if not an indispensable, part of a well-rounded education.[66]

The article goes on to promote the study of botany as a demanding mental discipline, and as a rigorous physical activity that promised to be a source of lifelong happiness.[67] By reframing botany as an academic study, men no longer needed to apologize for their involvement in what had long been a women's endeavor.[68]

Margaret Rossiter explains that from 1820 to 1920, the psychic landscape of the female stereotype "limited [women] to soft, delicate, emotional, noncompetitive, and nurturing kinds of feelings and behavior. At the same time, the stereotype of 'science' was seen as almost the opposite: tough, rigorous, rational, impersonal, masculine, competitive, and unemotional."[69] Such stereotypes negated the very existence of a female scientist—a phrase that was generally assumed to be a contradiction in terms.[70]

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[65] Margaret W. Rossiter, *Women Scientists in America: Struggles and Strategies to 1940* (Baltimore: Johns Hopkins University Press, 1982) 267.
[66] J.F.A. Adams, "Is Botany a Suitable Study for Young Men?," *Science*, IX (1887): 116.
[67] Ibid., 116-117.
[68] Ann B. Shteir, *Cultivating Women, Cultivating Science* (Baltimore: The Johns Hopkins University Press, 1996) 151.
[69] Margaret W. Rossiter, *Women Scientists in America: Struggles and Strategies to 1940* (Baltimore: Johns Hopkins University Press, 1982) xv.
[70] Ibid., xv.

Nineteenth-century women who had scientific botanical interests and practical experience found themselves in direct conflict with prevailing gender assumptions that women were better suited for floriculture and ornamental botany. Caught between two stereotypes, the female scientist seemed to be an atypical, unnatural phenomenon.[71]

Still, North American universities were willing to educate women even if they were unwilling to employ them.[72] In 1875, Canadian Mt. Allison University was the first university to grant a Bachelor of Science to a woman. In the next fifteen years, other Canadian universities also issued undergraduate and graduate degrees to women: Victoria College, Queens University, Dalhousie University, University of Toronto and Trinity College and McGill University (first in Quebec).[73] Institutions of higher learning for women sprang up everywhere without set curricular standards. In fact only six of 209 American schools that accepted women in 1875 actually met accepted college standards.[74] Between 1830 and 1870, women's undergraduate curricula consisted mostly of the same liberal arts courses that were taught at men's colleges, but women's liberal arts educations were more strongly centered on Christian values.[75] Sometimes these institutions were labeled 'female seminaries,' and many new schools indiscriminately called themselves 'women's colleges,' but neither of these labels insured

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[71] See *Notable Women in the Life Sciences: A Biographical Dictionary*, ed. Benjamin F. Shearer and Barbara S. Shearer (Westport, Connecticut: Greenwood Press, 1996) and Emanuel D. Rudolph, "Women Who Studied Plants in the Pre-Twentieth Century United States and Canada," *Taxon*, 39 (May 1990): 151, 203-204. Also see Margaret W. Rossiter, *Women Scientists in America: Struggles and Strategies to 1940* (Baltimore: Johns Hopkins University Press, 1982) xv.

[72] Margaret W. Rossiter, *Women Scientists in America: Struggles and Strategies to 1940* (Baltimore: Johns Hopkins University Press, 1982) xvi.

[73] Margaret Gillet, *We Walked Very Warily: A History of Women at McGill* (Montreal: Eden Press Women's Publications, 1981) 11.

[74] Helen Lefkowitz Horowitz, *Alma Mater: Design and Experience in the Women's Colleges from their Nineteenth-Century Beginnings to the 1930's* (New York: Knopf, 1984) 56.

[75] Barbara Miller Solomon, *In the Company of Educated Women: A History of Women and Higher Education in America* (New Haven: Yale University Press, 1985) 23.

sufficient standards or guaranteed quality education.[76] Most university curricula were designed to educate women to be better mothers and teachers; family duties, religious piety and obedience were values that came first.[77] Learning the dead languages of Greek or Latin would only have taught women about heathen gods and would have had no bearing on true womanhood.[78]

But whereas women were widely welcome in liberal arts undergraduate programs, their access to university training usually ended there. In the 1870s, the matter of being awarded a Master's or PhD degree was a highly political process that most often ended unsuccessfully for women. Reputable universities were resistant to awarding women graduate degrees and deliberately complicated the process by requiring special dispensation from university presidents and boards of trustees.[79] Consequently women turned to less highly regarded universities that willingly granted them doctoral degrees in the sciences; in the 1870s these included institutions such as Syracuse University and Boston University, to name only two.[80] Finally, in 1894, McGill University issued its first Master of Science degree in botany to a woman.[81] In that same decade, six major American universities, Yale included, agreed to award women and men, on an equal basis, doctorates if their work merited it.[82] This was a major breakthrough, so that by 1910, with a great deal of organized pressure, all American

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[76] Helen Lefkowitz Horowitz, *Alma Mater: Design and Experience in the Women's Colleges from their Nineteenth-Century Beginnings to the 1930's* (New York: Knopf, 1984) 4, 29, 56.

[77] Barbara Miller Solomon, *In the Company of Educated Women: A History of Women and Higher Education in America* (New Haven: Yale University Press, 1985) 25.

[78] Ibid., 23.

[79] Margaret W. Rossiter, *Women Scientists in America: Struggles and Strategies to 1940* (Baltimore: Johns Hopkins University Press, 1982) 31.

[80] Ibid., 32.

[81] Margaret Gillet, *We Walked Very Warily: A History of Women at McGill* (Montreal: Eden Press Women's Publications, 1981) 419.

[82] Margaret W. Rossiter, *Women Scientists in America: Struggles and Strategies to 1940* (Baltimore: Johns Hopkins University Press, 1982) 33.

universities offered graduate degrees to women, and in 1938 Canadian universities such as University of Toronto and McGill University offered graduate degrees in all faculties to women as well as men.[83] By 1921, 40.8 per cent of professional male botanists had earned their PhDs in botany, while 55.2 per cent of female botanists had earned theirs.[84] But even though North American women succeeded in earning their PhDs in botany, they were consistently less successful in obtaining employment and were not treated equally in the workplace;[85] they were routinely categorized as amateur botanists. Male botanists denied women access to professional circles and rejected requests to publish their findings.[86] Consequently, women "frequently held lowly titles and [were] recognized only belatedly, in their obituaries, decades after their achievements."[87]

It seemed that in the nineteenth century, many social constructions were geared towards expanding male influence outward into public arenas and limiting women's progress in the interests of private domesticity. It was therefore probably no surprise when Herbert Spencer (1820-1903) first wrote of the 'survival of the fittest' in 1853 in terms of socio-cultural evolution.[88] Spencer focused less on the biological rationalization then Charles Darwin had, but instead studied the social and supposedly universal processes that encompassed all aspects of life, from the simplest amoeba to politics and the development of civilizations.[89] Spencer's evolutionary argument proposed that there

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[83] Ibid., 33-51, 154.
[84] Ibid., 85.
[85] Ibid., 51.
[86] Ibid., 85.
[87] Ibid., xvi.
[88] Jose Harris, "Spencer, Herbert (1820-1903)," *Oxford Dictionary of National Biography: In Association with the British Academy: From the Earliest Times to the Year 2000.* ed. H.C.G Mathew and Brian Harrison, vol. 51 (Oxford; New York, Oxford University Press, 2004) 854.
[89] Sue Zschoche, " 'Preserving Eden': Higher Education, Woman's Sphere, and the First Generation of College Women, 1870-1910," diss., University of Kansas, 1984, 52.

was a moral imperative for equality of the sexes, even though he included differentiating categories of labor: women's work and men's work. In his opinion, these were distinctions essential to an advanced society.[90] Spencer also "advocated the training of children by persuasion and rational argument rather than discipline and coercion."[91] His was a utopian society in perfect equilibrium. Spencer's evolutionary social theories were broadly accepted, earning him great international respect and a nomination for the Nobel Prize for literature in 1903.[92] They infiltrated Western Europe and North American life and made for convenient justifications in the social domination of women.

Unlike the pioneering generation of women who strove to obtain a university education equal to that of men, there was a certain faction of women who embraced Spencer's division of labor and who believed in their 'natural female aptitudes'; they therefore educated themselves in subjects that would ultimately enrich the home.[93] Within Spencer's schema, it probably seemed natural to many women to be avid horticulturalists and floriculturalists within their domestic domain, especially with the highly gendered taxonomy of Linnaeus still employed by women in the mid-nineteenth century. In spite of the increasing momentum of the women's movement, few women refuted the evolutionary implications of male/female hierarchy, even as many struggled for improvements in legal rights and personal freedoms. Most women, however, sat on

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[90] Jose Harris, "Spencer, Herbert (1820-1903)," *Oxford Dictionary of National Biography: In Association with the British Academy: From the Earliest Times to the Year 2000.* ed. H.C.G Mathew and Brian Harrison, vol. 51 (Oxford; New York, Oxford University Press, 2004) 854 and Sue Zschoche, " 'Preserving Eden': Higher Education, Woman's Sphere, and the First Generation of College Women, 1870-1910," diss., University of Kansas, 1984, 55.

[91] Jose Harris, "Spencer, Herbert (1820-1903)," *Oxford Dictionary of National Biography: In Association with the British Academy: From the Earliest Times to the Year 2000.* ed. H.C.G Mathew and Brian Harrison, vol. 51 (Oxford; New York, Oxford University Press, 2004) 854.

[92] Ibid., 855-858.

[93] Sue Zschoche, " 'Preserving Eden': Higher Education, Woman's Sphere, and the First Generation of College Women, 1870-1910," diss., University of Kansas, 1984, 132.

the periphery of these discourses and were thus dominated by the discourses' subordinating stance on the relationship between gender and evolution.

Evolutionary theory claimed to derive from natural laws that left the question of female inferiority irreducible and seemingly irrefutable. There were women, however, who publicly argued against the biologically and socially inferior female position. For example, Eliza Burt Gamble (1841-1920)[94] suggested that women were superior due to their ability to create life and were freer of male imperfections such as lack of endurance and disposition to disease. Gamble claimed that women represented a higher state of development because they were the moral and physical source of social bonding. As well, she insisted that female virtues such as altruism and compassion were superior to male competitiveness, a trait she argued was a hindrance to progress.[95] She attempted to establish a female identity that was biologically and socially stronger than that of men. But her attempt at reforming social evolution could not dissuade believers in Spencer's process—a process that subscribers felt would correct social imbalances.[96] Spencer's theory of social evolution was predicated on the differentiation of labor, and if Gamble's attempts at equalization of male and female intellectual capacities were successful, strictly speaking, then she threatened to invert the natural order and dethrone the authority of men. As women were caught between Darwinian biological evolution and Spencer's social evolution, those interested in botanical sciences continued

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[94] Mary Cohart, *Unsung Champions of Women* (Albuquerque: University of New Mexico Press, 1975) 1.

[95] Sally Gregory Kohlstedt and Mark R. Jorgensen, " 'The Irrepressible Woman Question': Women's Responses to Evolutionary Ideology," *Disseminating Darwinism: The Role of Place, Race, Religion, and Gender*, eds. Ronald L. Numbers and John Stenhouse (Cambridge: Cambridge University Press, 2001) 281.

[96] Sue Zschoche, " 'Preserving Eden': Higher Education, Woman's Sphere, and the First Generation of College Women, 1870-1910," diss., University of Kansas, 1984, 52-54.

to acquire skills that contributed to regional field clubs and societies, but they did so as amateurs.

Maria Morris Miller was caught up in the struggle between amateur and scientific professionals. Given that she moved in public circles and associated herself with professional male botanists, her publications never circulated widely within the scientific community as reference material.[97] Moreover, the fast-paced organization of new masculine botany also destabilized an integral facet of botany, the relationship between nature and the Divine, that to Maria Morris Miller was a relationship that was key in her botanical production. This would drive a wedge between professional, scientific botanists and everyone else who was working in the field on a more amateur basis. The trouble stemmed from Darwin's suggestion that variation in the natural world resulted from the evolutionary processes of Nature, not God.[98] His publication sparked debates that centered on whether the divine was ever part of nature, and whether there was proof of the existence of evolution and natural selection. Throughout the nineteenth century, such debates slowly chipped away at centuries-old ideologies in Western European and North American societies—societies that up until that point had firmly believed in the general synthesis of nature, divinity and morality. Natural history was witnessing a defining change that tore at the collaborative network common in the earlier centuries.

As tensions mounted, the botanical field was polarized into two camps: the new and the traditional. Part of the difficulty was that the traditional practice of botany would

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[97] See Mora Dianne O'Neill, "Maria Morris Miller: Growing Flowers on Stone," Art Gallery of Nova Scotia Vertical File, 1 and Mary Sparling, "The British Vision of Nova Scotia", MA thesis, Halifax University, 1978, and Charles Bruce Fergusson, "Morris, Maria Frances Ann (Miller)." *Dictionary of Canadian Biography*, vol. x. (Toronto: University of Toronto Press, 1966) 534.

[98] Carl Berger, Science, God, and Nature in Victorian Canada (Toronto: University of Toronto Press, 1983) 53.

not relinquish scripture as its main point of reference.[99] Traditional botanists in general, including Titus Smith and George Lawson, believed that the supernatural was inherent in nature; creation was a matter of direct intervention by God and "always defined the point beyond which scientific explanation could not go."[100] As Carl Berger so aptly states, "Charles Darwin was the reluctant father of a revolution that ultimately destroyed traditional natural history and the amalgam of science and faith."[101] At stake for traditional botany was the preservation of nature and Christian faith, two dovetailing rationales for the ephemeral mysteries of life.[102] It appeared to traditional botanists that the new science of botany searched for tangible Darwinian evidence of evolutionary adaptation in plant species. "In the post-Darwin period," writes Berger, "biology—the study of living organisms—was transformed by the principle of evolution and came to focus upon problems of the origin, derivation, and organ functions."[103] Such diverse botanical approaches deepened the divide for those who believed in divinity in the natural world, and "new investigators who left the field for the laboratory, [and] probed beneath the surface of things...[to] discover how particular adaptations had come to be."[104]

By the late nineteenth century, evolutionary science had been sufficiently integrated into the new lab-oriented botany and had gained enough momentum to disintegrate any remaining relationship between amateur and professional botanists. As a result, amateur botanizers fell out of the new botanical community altogether and

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[99] Ibid., 59.
[100] Ibid., 59.
[101] Ibid., 53.
[102] Barbara Novak, *Nature and Culture: American Landscape and Painting, 1825-1875* (New York: Oxford University Press, 1980) 114.
[103] Carl Berger, *Science, God, and Nature in Victorian Canada* (Toronto: University of Toronto Press, 1983) 90.
[104] Ibid., 76.

eventually lost their organizational network.[105] As Elizabeth Keeney explains, "in the 1890s [American] botanists formed their first professionals-only society, the Botanical Society of America. No longer were professionals and amateurs peacefully and productively co-existing....Jobs, training, and specialized societies all were in place, organized around a new biologically oriented style of botany that fit the needs and motivations of professionals alone."[106] In essence, practical/amateur botany lost touch with new professional botany that now required expensive lab equipment and an academic education, all of which were expensive and complicated.[107] The field of botany was now divided into "the general and the specialist, the popular and the academic, between the 'high' science of gentlemen in metropolitan learned societies and the 'low' science of practitioners who diffused scientific knowledge for practical use."[108] Anne Shteir describes "numerous consequences for different communities of interest, among whom were fellows of the Linnaean Society, members of field clubs, popularizers, agricultural and horticultural botanists, publishers of botanical periodicals, students at mechanics' institutes, and women plant collectors."[109]

Carl Berger explains that the traditional premise of "natural history [was] a vehicle through which divine purpose stood revealed; it was at once an acceptable form of leisure and a path to recognition; it provided an outlet for intellectual activity in a colonial environment."[110] Very influential in this regard to botanical artistic production of

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[105] Elizabeth B. Keeney, *The Botanizers: Amateur Scientists in Nineteenth-Century America* (Chapel Hill: The University of North Carolina Press, 1992) 37.
[106] Ibid., 37.
[107] Ibid., 37.
[108] Ann B. Shteir, *Cultivating Women, Cultivating Science* (Baltimore: The Johns Hopkins University Press, 1996) 151.
[109] Ibid., 150.
[110] Carl Berger, *Science, God, and Nature in Victorian Canada* (Toronto: University of Toronto Press, 1983) 77.

amateur botanizers was John Ruskin (1819-1900), who wrote prolifically about the qualities of "good art," especially what constituted realistic representations and religious presence in nature. He appealed heavily to the nineteenth-century American and Canadian art community by means of his popular book *Modern Painters* (1843); by 1855, Ruskin had developed an enormous readership amongst the religious, scientific, literary and art communities in North America.[111] According to Roger Stein, Americans in the mid-nineteenth century were struggling to develop a culture that was endemically representative of its character. The United States had proven to be commercially successful and independent from the European continent, but America also wanted to show the world that it could create a culture whose significance went beyond capital.[112] Sensitive to foreign accusations that they were philistines, Yankee peddlers and petit bourgeois, Americans turned to art, which promised a solution, since it created an opportunity to posit a set of ideals above materialism.[113]

Key to Ruskin's popularity in the United States was his rebellion against the "aesthetically numbing and socially debasing effects of the Industrial Revolution. He supported the theory that art is essentially spiritual."[114] Hence the scientific study and dissection of nature threatened what Ruskin believed was the sublime essence of nature and art. He believed that the spirituality of the natural world could not be defined by science, and his emphasis was therefore on capturing the character of the landscape or, more specially, the 'spirituality' of the root system, leaf structure, stem and flower within it. Ruskin writes in *Proserpina* (1885):

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[111] Roger Stein, *John Ruskin and Aesthetic Thought in America, 1840-1900* (Cambridge, Mass.: Harvard University Press, 1967) 2.
[112] Ibid., 8-9.
[113] Ibid., 11.
[114] "John Ruskin," *Microsoft Encarta 96 Encyclopedia* (Microsoft Corporation: Funk & Wagnalls Corporation, 1993-1995) 1.

> I said in my inaugural lectures at Oxford...that real botany is not so much the description of plants as their biography. Without entering at all into the history of its fruitage, the life and death of the blossom *itself* is always an eventful romance, which must be completely told, if well. The grouping given to the various states of form between bud and flower is always the most important part of the design of the plant; and in the modes of its death are some of the most touching lessons, or symbolisms, connected with its existence....It is still more curious that when I look for more definite instruction on such points to the higher ranks of botanists, I find in the index to Dr. Lindley's 'Introduction to Botany'—seven hundred pages of close print—not one of the four words 'Volitile,' 'Essence,' 'Scent,' or 'Perfume'...I examine the index to Gray's 'Structural and Systematic Botany,' with precisely the same success. I next consult Professors Balfour and Grindon, and am met by the same dignified silence.[115]

Ruskin's readership embraced the way he blended the material quality of nature and fervent religious spirituality into a living unity.[116] Roger Stein explains that according to Methodist minister Gilbert Haven in 1860, "Ruskin opened the world of art to the world of readers. Haven declared that the ruling passion of the age was science, and the dissection of nature. Another spirit was needed, one which would 'worship her living [nature]' rather than 'study her dead,' as did the scientists."[117] Haven praised Ruskin's belief that "art becomes the handmaiden of religion."[118] Other American theologians, clergy, laypeople and the press, including the *Boston Review*, abstracted Ruskin's messages into larger religious contexts; his writing was not only praised within art circles, but was appreciated within a purely religious framework.[119] In Canada, Ruskin's influence was present, but difficult to demarcate because Ruskin himself had almost no direct contact with his Canadian admirers, but his views on art and art education were disseminated by friends and followers who visited, lived in or were known in Canada and

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[115] John Ruskin, "Proserpina: Study of Wayside Flowers." *Works of John Ruskin* (New York: John B. Alden, 1885) 51-52, 241.
[116] Roger Stein, *John Ruskin and Aesthetic Thought in America, 1840-1900* (Cambridge, Mass.: Harvard University Press, 1967) 89.
[117] Ibid., 95.
[118] Ibid., 95.
[119] Ibid., 97-100.

by those Canadians who read Ruskin's work directly. What Canadians learned of Ruskin often came as second- or third-hand lecture material based on the speaker's interpretation, or from references in various journals distributed in Canada.[120]

American Transcendentalism, a semi-religious philosophy of the mid-nineteenth century, also offered hope of restoring the spiritual idealism that the new botany had usurped. Barbara Novak explains that for the American transcendentalist thinkers Ralph Waldo Emerson (1803-1882) and Henry David Thoreau (1817-1862), "nothing occurred without God's thought. It was, in effect, the most immutable blueprint of providential planning...Creations were the alpha and omega of all existence. This was the magic the artists and writers were eager for." According to Transcendentalism, the over-soul, a universal life energy of interconnectedness of all things, animate and inanimate,[121] brought together spirituality, God and social order. Emerson and other transcendentalist thinkers believed that vital life energy flowed through flowers, clouds, birds, the sun, the chill and warmth of the weather, and the beauty of evening.[122] God and Nature were inseparable for transcendentalist idealists. Nature, a creation of God, and the over-soul, united flora, fauna and humankind.

Transcendentalists believed that the essential mechanisms found at the heart of these mysteries were better left as they were, since too much investigation might intercept divine experience.[123] Thoreau challenged the idea that "knowledge" could be at all complete and suggested that those who made such claims did so to benefit only

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[120] Anita Grants, "Selectivity, Interpretation and Application: The Influence of John Ruskin in Canada," diss., Concordia University, 2006, 173 and 122-171.

[121] Brooks Atkinson, introduction, *The Complete Essays and Other Writings of Ralph Waldo Emerson* (New York: Modern Library, 1940) xx.

[122] Ibid., xx.

[123] Barbara Novak, *Nature and Culture: American Landscape and Painting, 1825-1875* (New York: Oxford University Press, 1980) 114.

science. Thus transcendentalists took a decided stand against science and warned the public not to grant it too much authority.[124] Thoreau felt that god-fearing men of science paid lip service to the deity, claiming that they spoke of the power of God as if He were a total stranger.[125] Thoreau noted: "If you would make acquaintance with the ferns, you must forget your botany. You must get rid of what is commonly called knowledge of them." Likewise Emerson wrote that "empirical science is apt to cloud the sight."[126] Transcendentalism relied on instinct and thus validated centuries of wisdom that had been dismissed by new botanists. In a practical sense, Transcendentalism re-unified the field of botany for those who felt alienated by the discipline's new demands and the limits of Christian theology. The transcendentalist philosophy was a spiritual alternative for professional and amateur naturalists who did not necessarily subscribe to dogmatic Christian interpretations but who believed in the power of divine spirit and the interconnectedness of everything. It shifted the central universal point of reference away from the Christian Church, which believed in the superiority of humanity over nature, toward an inclusive vision of humanity and nature: a position that did not undermine one's faith in the power of God. By the latter half of the nineteenth century, Transcendentalism was a modern yet traditionally viable philosophy because in a sense it merged Darwin's broader evolutionary vision of complex interconnections in nature without imposing antiseptic and lofty academic education and without denying the spiritual presence in nature. Moreover, the essence of transcendentalist thinking, also meant that in status, women were no longer lesser than but were now equal to men and all other elements in nature. Naturalists and botanical artists were therefore

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[124] Ibid., 114.
[125] Ibid., 114.
[126] Ibid., 114.

encouraged to focus on the essence of plant identity within its natural habitat and to interpret it freely with taxonomic theory, with pure artistry or with a combination thereof.

In spite of social instability, what was constant during the mid nineteenth century was a widespread expectation that botanical illustration should visually encapsulate some form of spirituality. Barbara Novak notes that art was a "miraculous language akin to the Holy Bible."[127] She explains that "science and art were both cited as routes to God; and this continued attempt to Christianize science was made urgent by the growing stress it was placing on the traditional interpretations of God's nature. [Religious and spiritualist thinkers] hoped that art's interpretive capacities would reconcile the contradictions science was forcing on the nineteenth-century mind."[128] The artist's interpretive capacity was the determining factor for botanical illustration, and since artists were heavily circumscribed by the dichotomous principles of Christianized and Darwinian science, they were faced with meeting the various needs of specialized audiences with blended interests.

A transcendentalist botanical vision was in itself a theoretical approach that did not often fulfill a scientific agenda. To modern scientific botanists, a botanical illustration was useful if it could visually translate microscopic detail with proper taxonomic emphasis. Professional botanists well understood the power of the illustration to teach; however, as was demonstrated near the start of this chapter, professional botanists questioned the validity of the knowledge such illustration conveyed to the audience.[129]

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127 Ibid., 14.

[128] Ibid., 8-9. and Elizabeth B. Keeney, *The Botanizers: Amateur Scientists in Nineteenth-Century America* (Chapel Hill: The University of North Carolina Press, 1992) 8-9.

[129] Anne Secord, "Botany on a Plate: Pleasure and the Power of Pictures in Promoting Early Nineteenth-Century Scientific Knowledge," *Isis*, 93 (2002): 32.

As Novak observes, the essential fluidity of the interpretation and motivation of botanical art found itself in opposition to the fixity of science.[130] The field had lost its delicate equilibrium, which is to say, it had lost its idealism—a centuries-old inspiration for artists and writers. Without the supernatural, the botanical illustration in particular, lacked the idealism necessary to inspire, and in essence the picture was left lifeless.[131]

The fact that the botanical field had been split into amateur and professional scientific groups did not lessen the production of women's art, writing, garden design, and poetry. In fact, the amateur sector was increasingly prolific in popular productions and was equally well organized in its distribution networks. Amateur groups helped to keep the necessary inspiration for all botanical art forms alive. Thus, British colonists and settlers had visual and written material to encourage the reformation of the landscape, and with that material came cultivation and control of the land. Botany was therefore an excellent agent to assist in the process of colonization of Canada. As women dominated in amateur botany, they were in a position to impose British attitudes on the Canadian landscape and to infuse domestic cultures with British horticultural protocol. The horticultural illustration was an ideal medium because it gave the desirable impression of botanical education in a scientific format. The popular consuming audience often did not discern the aesthetic quality of observation, but that audience did trust the illustration's scientific style. The following chapter will address the colonial agency of botanical production by amateur botanists and will examine how botany was used to educate and instill British values.

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[130] Barbara Novak, *Nature and Culture: American Landscape and Painting, 1825-1875* (New York: Oxford University Press, 1980) 108-110.
[131] Ibid., 130.

Chapter 2
Botanical Production as an Agent in the Colonial Process

In early nineteenth-century Canada, many botanical activities seemed to be inconsequential daily productions: a letter home to England about a Canadian garden scene, a journal entry detailing a Canadian medicinal garden, a simple sketch of a never-before-seen Canadian plant. Alone, such activities are insignificant, but in sum they tell the story of how botany was a functional agent in the British colonial process. The practice of botany assisted in the colonial re-sculpting of native flora and fauna, into the likeness of the Old World colonizer. While Chapter 1 was concerned with the quest to reform professional botanical identity, my argument in Chapter 2 focuses on how the steady flow of amateur botanical activity by British colonists helped settlers' promote a British vision of the land.

Mary Louise Pratt, author of *Imperial Eyes: Travel Writing and Transculturation* (1992) describes the production of letters, journals, sketches and artwork by European colonists as "linguistic apparatuses...that brought [botanical] knowledge into being in the public sphere, and created and sustained its value."[1] Linguistic apparatuses are essential to the colonial process because, as forms of communication, they can overwrite local and peasant ways of knowing the landscape and plant species within European classification structures.[2] The public and private botanical production I examine in this chapter, often sent to friends and family living in Britain, created a mythological knowledge about the Canadian landscape that held its value over time. Maintaining botanical value provided needed emotional support for colonists and protected the

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[1] Mary Louise Pratt, *Imperial Eyes: Travel Writing and Transculturation,* Second Edition, 1992 (New York: Routledge, 2008) 29.

[2] Ibid., 35.

establishment of cultural continuity in the British Canada. Moreover, to maintain an ongoing interest in botanical activities in the New World helped secure the claiming of the land and, in general, its natural resources.

In large part, Pratt attributes successful colonialization to Linnaeus's taxonomy. It is a classification structure, she claims, that "epitomized the continental, transcontinental aspirations of European science....it was a system that was designed to "classify all plants on earth, known and unknown, according to the characteristics of their reproductive parts."[3] With the Linnaean classification system in hand, British colonists could easily "systematize nature" and transform the vision of the new land to meet its own European standards. To understand amateur Canadian botanical production of all types is to often recognize within it, the reflection of Linnaean knowledge. As discussed in Chapter 1, botanical illustration is a form of intellectual exchange and is constituted in language. Thus the act of sketching, writing, naming and identifying plants in encounters with new landscapes is also a performance of language.[4] On a linguistic level, amateur botanical production should therefore be understood as a practical agent in the British colonial process.

The influential American Liberty Hyde Bailey wrote in 1902 that the moss pink is a species that is a "much prized old garden plant, useful for colonizing where it is desired to cover the earth with a mat."[5] In botanical nomenclature, to 'colonize' plants means to establish them in a new ecosystem or to create a new biological colony; however, for Bailey to use such a term in 1902 can also be interpreted as suggesting that the process of colonizing plants was an active cultural metaphor for colonizing

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[3] Ibid., 24-25.
[4] Ibid., 24-36.
[5] Eileen Woodhead, *Early Canadian Gardening: an 1827 Nursery Catalogue* (Montreal & Kingston: McGill-Queen's University Press, 1998) 144.

foreign lands and its people. Botany was an ideal enterprise for the promotion of social and political ideologies, especially in colonial territories, because it suggested some measure of scientific, economic and cultural superiority.

If, in part, we can presume that the colonial intention was to redirect or overwrite the new population's cultural ideology, then it would be practical to assume that botany could transform attitudes toward nature in the New World. Marcia Kline, in her book *Beyond the Land Itself: Views of Nature in Canada and the United States*, recognizes that the priority for Canadian colonists was the "institutional continuity between the Canadian settlements and Great Britain. Such links [the army garrison, the neat hedgerows and traditional social stability] would be the instruments to overcome environment."[6] Thus importing British plant species for one's private garden was a subtle and simple way to incorporate the British horticultural heritage and to contribute to the classification process of the colony. Cultivated plants stood for centuries-old symbols of the British aristocracy, for example. My interest is not necessarily in the numerous ways in which botany and all its horticulture and floriculture subsets became profitable; rather, my interest is in how the majority of everyday botanists applied the discipline with cultural emphasis. Amongst the most popular cultivated plants were irises, roses, and tulips, each with lengthy political, religious, commercial histories that spanned many countries in Europe and the symbolism of which was often distilled into cultural meanings.

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[6] Marcia B. Kline, *Beyond the Land Itself: Views of Nature in Canada and the United States* (Cambridge, Mass.: Harvard University Press, 1970) 55.

An important floral symbol is the fleur-de-lys, France's national emblem, patterned after the iris.[7] According to tradition, Louis VII of France in 1147 adopted the purple iris as an emblem of his monarchy. In time, the fleur-de-lys became a potent symbol of liberty—despite the revolutionaries of 1789 who set out to "obliterate it as a symbol of the hated monarchy."[8] Throughout France's history, the fleur-de-lys, like the rose, has been a motif in fashionable interiors and on tapestries, has been distilled into cosmetics and perfumes and has been worn by the wealthiest French aristocrats.[9] Its use in the private and domestic sphere usually symbolized royal affiliation.

The rose, as well, has cultural associations stretching back to Roman emperors of the first century AD.[10] Later, the royal families of York, Lancaster and Tudor appropriated the rose as their family symbol. The rose remains England's national flower to this day.[11] The presence of a rose in one's garden also implied more than royal status, as it could signify the holiness of the Virgin Mary as well as devotion to purity in earthly love (the Catholic rosary).[12] The rose not only held religious, political and social importance, it was also central to commerce. It was a pharmaceutical remedy in 1562 England, used by physician Willyam Bulleyn (1491-1571), cousin of Anne Boleyn (1500?-1536), wife of Henry VIII (1491-1547). For his well-to-do patients, Willyam prescribed an expensive rose remedy for everything ranging from colds to lung infections and

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[7] Buckner Hollingsworth, *Flower Chronicles* (Chicago; London: University of Chicago Press, 2004) 59, 62.
[8] Ibid., 60.
[9] Ibid., 62.
[10] Ibid., 29.
[11] Ibid., 54.
[12] Paul Taylor, *Dutch Flower Painting: 1600-1720* (New Haven: Yale University Press, 1995) 55-57.

tumors.[13] Moreover, rose perfume was enormously popular in France and in England. Edward VI (1537-1553), the son of Henry VIII, used rose perfume to condition the stale air of the palace rooms afflicted with "gross ayres."[14] Through these and multiple other associations, the rose developed into a powerful cultural symbol that signified wealth, religious purity and good health.

Because the rose was culturally endemic in British gardens, it was often exported to colonies such as Canada, where its popularity was asserted by, for example, *A Moss Rose* (1848) (Figure 3), a water color by Anne Ross McCord (1807-1870), the matriarch of the wealthy McCord family. The McCords were a well-established Ulster-Scot merchant family from Ireland.[15] At the age of four, John Samuel McCord (1801-1865) had immigrated with his family to Montreal, Quebec where he lived out his life.[16] In 1832 he married Anne Ross a descendent of Montreal's most influential Scots-Irish family of lawyers.[17] Anne and Samuel McCord were securely positioned in the upper-middle class of Montreal by birth and marriage.[18] She was a talented amateur botanical illustrator from Montreal who produced most of her botanical artwork between 1834 and c.1857. She was a student of the Montreal picturesque landscape and genre painter James Duncan (1806-1881), who was recognized as an artist of distinction.[19] It is not

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[13] Buckner Hollingsworth, *Flower Chronicles* (Chicago; London: University of Chicago Press, 2004) 34-38.
[14] Ibid., 41.
[15] Donald Fyson and Brian Young, "Origins, Wealth, and Work" *La Famille McCord: Une vision passionnée: The McCord Family: A Passionate Vision* (Montreal: McCord Museum of Canadian History, 1992) 27.
[16] Ibid., 29.
[17] Ibid., 73-75.
[18] Pamela Miller and Brian Young, "Private, Family and Community Life," *La Famille McCord: Une vision passionnée: The McCord Family: A Passionate Vision* (Montreal: McCord Museum of Canadian History, 1992) 79.
[19] Patricia A. Todd, "Duncan, James D.," *Dictionary of Canadian Biography*, vol. xi (Toronto: University of Toronto Press, 1966) 286.

surprising that McCord chose to showcase the moss rose over thousands of probable cultivars.

From a distance, *A Moss Rose* appears delicate; up close however, McCord magnified the identifying characteristics of the flower; the sawtooth edges of the leaves and the imperfections resulting from drought, insects and age.[20] She expertly shaded the colors of the flower blossom without abstracting the vein patterns in the petals. The thorns along the stem are tactile, sharp and highly realistic. Anne Ross McCord valorized the rose with larger-than-life, exacting, scientific detail, likely captured with the use of the camera obscura owned by father-in-law, John McCord (1711-1793), a man who himself experimented with numerous horticultural specimens.[21]

For all the precision and apparent objectivity of *A Moss Rose,* McCord's floral relationships are determined by her cultural predisposition to historical floral hierarchies and the poetic associations that so often suggest both divinity and refined cultural superiority. McCord's unpublished poem "The Discussion of the Flower" (undated) portrays the rose as a symbol of "love," "truth," and "hope." For her, it was the maiden of the garden, in harmonious surroundings of friends and supporters: birds, insects and an "eastern army" of "gold spears" of corn. The poem describes the rose as the "bride of

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[20] To professional Christian botanists such as Sir John Dawson, principal of McGill University from 1855 to 1893, Anne Ross McCord's work would have reflected a scientific disposition without sacrificing the presence of the Divine. Although her illustrations sit on the margins of science, they are by Gill Saunders's strictest definition a series of horticultural illustrations. As discussed in Chapter 1, Saunders defines a horticultural illustration as one that is concerned with color, plant identity and the emphasis on the flower to the exclusion of all else. For more information on the horticultural illustration, see Gill Saunders, *Picturing Plants: An Analytical History of Botanical Illustration* (Berkeley: University of California Press in association with The Victoria and Albert Museum, London, 1985) 101-108.

[21] Pamela Miller and Brian Young, "Private, Family and Community Life," *La Famille McCord: Une vision passionnée: The McCord Family: A Passionate Vision* (Montreal: McCord Museum of Canadian History, 1992) 63.

the sun," innocent, gentle, mystical and virginal.[22] Hand in hand, "The Discussion of the Flower" and *A Moss Rose* reinforce McCord's colonial view that armies of gold spears protect the botanical landscape inhabited by a society of virtue and purity. The painting is not moralistic or sentimental and does not pretend to be a new discovery for the Canadian botanical registry. But in conjunction with the poem it reflects the traditions of integrating the cultivar into socio-political and religious contexts and by association reflects on the McCord family as one that has imperial importance to the Canadian colony.

Given the wealth of symbolism that could be associated with plants, it was no surprise that plant species were widely exploited for their social value. Trading nations invested a great deal of money and manpower in foraging new lands for useful and beautiful plant specimens. For example, the Jesuits of the sixteenth and seventeenth centuries introduced many exotic plant species to trading nations. They had immediate access to botanical material because of their work in the French colonies of North America and China. The Jesuits sent seeds and specimens to the Jardin des Plantes in Paris, one of the premiere botanical gardens in Europe, which then distributed the specimens throughout the rest of the continent. At the same time, Britain and the Netherlands, also very active trading nations, shipped goods including newly discovered botanical specimens from Asia, the Pacific, Australia, Africa and the Americas, routing them from far-flung colonies, around the Cape of Good Hope to Europe. With trade being so dependent on exploration, botanists were sent by the crown into unknown territories to assess and analyze new landscapes for their botanical value. These exotics were then planted in Europe as displays of their new owners' social distinction and

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[22] McCord Family Papers file no. 422-440.

wealth. From the sixteenth to the nineteenth centuries, private and public European gardens amassed a collection of innumerable foreign species—species that enhanced these already superior gardens.[23]

Separate from the official activities of trading nations, a strong private botanical trade between the Old and New worlds flourished. Private trade often took the form of letters containing descriptions and sketches of Canadian garden plants with accompanying seeds that were unknown in England. In turn, settlers requested seeds of familiar British vegetation to be shipped back to Canada. Many of the British plants that were requested by Canadian settlers held sentimental value, so when transplanted in the new colony their British identity was transplanted too. As this type of exchange increased the demand across the two continents for seed varieties and cultivars, nurserymen from the United States and Britain capitalized on Canadian desire.[24] Seeds and cuttings were distributed within domestic markets and for public garden organizations. However, colonists did not exclusively plant British varietals. Instead, they created combination gardens; thus when cultivated tulips, roses, and irises appeared together with wild, indigenous Canadian plants, the garden imitated the colonial dynamic of blending the old and new. As early as the middle of the eighteenth century, however, professional gardeners and resident colonists had voiced clear concerns about the introduction of non-native species into new landscapes, since the existing floral populations were becoming swamped with plants that were considered uncontrollable and troublesome. In 1747, for example, the Swedish naturalist Peter Kalm claimed to have found growing plentifully throughout North America, non-native puslane or

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[23] See Eileen Woodhead, *Early Canadian Gardening: an 1827 Nursery Catalogue* (Montreal & Kingston: McGill-Queen's University Press, 1998) 38.

[24] Edwinna Von Baeyer, *Rhetoric and Roses: A History of Canadian Gardening 1900-1930* (Markham, Ontario: Fitzhenry & Whiteside, 1984) 8.

portulaca oleracea, one of the worst weeds plaguing gardens in Europe.[25] His concerns suggest an aspect of the interaction of Old World and New World botanical transfer: an aspect that would exemplify the dilemmas of colonization. Specifically, the act of colonization involves not just juxtapositioning and mixing, but also control. From a colonial perspective, losing control of unwanted populations (human or otherwise) defeats the colonial agenda.

The discipline of botany turned out to be an ideal touchstone for the eighteenth- and nineteenth-century British military personnel who traveled to Canada to fortify it against the territorial ambitions of France and the United Sates of America and to quell possible rebellion in Upper and Lower Canada.[26] British officials and their wives were sent to Canada for months or years, during which time they raised families and married off their children, who then started new families of their own. Such military occupation was part of the initial development of the new land. The wives of British officials were prominent members of upper-class and garrison societies who were raised to appreciate the historical continuity of the land.[27] They had studied botany, gardening, and illustration as part of their general upbringing, and thus they were prepared to encounter the land by exploring North American plants.[28] Lady Elizabeth Simcoe (1762-1850), Lady Christian Dalhousie (before 1790-1839), Anna Jameson (1794-1860), Fanny Amelia Bayfield (1813/14-1891), Millicent Mary Chaplin (1790-1858) and Catharine Parr Traill (1802-1899) are a few of the women who worked alongside their husbands in the

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[25] Eileen Woodhead, *Early Canadian Gardening: an 1827 Nursery Catalogue* (Montreal & Kingston: McGill-Queen's University Press, 1998) 52.

[26] Jim Burant, *Drawing on the Land: The New World Travel Diaries and Watercolours of Millicent Mary Chaplin, 1838-1842* (Manotick, Ontario: Penembra Press, 2004) 9-10.

[27] Marcia B. Kline, *Beyond the Land Itself: Views of Nature in Canada and the United States* (Cambridge, Mass.: Harvard University Press, 1970) 54-55.

[28] Jim Burant, *Drawing on the Land: The New World Travel Diaries and Watercolours of Millicent Mary Chaplin, 1838-1842* (Manotick, Ontario: Penembra Press, 2004) 85-86.

new dominion of Canada. None of these women was a professional botanist, but they are noteworthy today for their daily botanical production whether public or private.

Elizabeth Simcoe was the wife of a high-ranking military officer, John Graves Simcoe (1752-1806), the first governor of Upper Canada (1791-1796). She was a traditional amateur botanist and possessed characteristics that inclined her to prolific daily botanical production in its cultural form. She was born into a wealthy family in Northamptonshire, England and married in the spring of 1782.[29] In preparation for her lengthy tour through Canada, she entrusted to her childhood friend Mary Anne Burges (1763-1813) with the care of Wolford estate in addition to the well being and education of her four daughters who remained in England. Mary Anne Burges was a proficient amateur botanist and geologist who prepared an exhaustive account of the British Lepidoptera (which does not seem to have been printed), illustrating it with her own hand.[30] She was Lady Simcoe's special advisor and primary correspondent throughout her years in Canada.[31] Their letters reveal an intense interest in the botanical affairs at home and abroad. Mary Beacock Fryer writes that Burges especially loved the trillium that Elizabeth had sent from Canada, and "believed that the blooms on the plants grown from the seeds must be smaller in Devar than in Canada, or [else] Elizabeth would never have fancied them. Mary Anne promised to send [Elizabeth] a short account of the different plant classes. Elizabeth might not read a book on the subject but would read what her friend wrote."[32] Fryer's biography cites several other botanical passages about

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[29] Edith G. Firth, "Gwillim, Elizabeth Posthuma (Simcoe)," *Dictionary of Canadian Biography*, vol. vii (Toronto: University of Toronto Press, 1966) 361.

[30] "Burges, Mary Anne," *Dictionary of National Biography,* ed. Leslie Stephen, vol. VII, (London: Smith, Elder, & Co., 1886) 307.

[31] Helen M. Buss, *Mapping Our Selves: Canadian Women's Autobiography in English* (Montreal: McGill-Queen's University Press, 1993) 39-40.

[32] Mary Beacock Fryer, *Elizabeth Postuma Simcoe: A Biography* (Toronto: Durum Press, 1989) 95.

seed exchanges as it seems that Burges planted whatever she received from Simcoe. Clearly, they were fully engaged in the process of systematizing nature and classifying plant species into British orders. Throughout Simcoe's travel, Burges planted seeds native to Canada and wrote out diagrams of general plant classifications for Simcoe to use in her encounters with unknown species of Canada. The Simcoes' five-year journey ended in 1796, when they made the return trip from Quebec to their Wolford estate in England and (though not for a lack of desire), they never returned to Canada.[33]

Lady Simcoe left behind an archive of personal documents from her stay in Canada. She wrote journals and supplemented her entries with portrait and formal landscape sketches done in the picturesque style. Her journal entries record her wild seed collection (may apple, wild asparagus, yellow chive, Toronto lilies, and silky cotton) and note her preparations for seed shipments to Burges and other friends and family back home. The following passage from her journal demonstrates her continued concentration on learning the names and uses of wild plants of the Canadian landscape. She wrote on Sunday June 12, 1796 while staying in with her friend, a Mr. Green:

> I gathered a great many plants, Green gave them all names, & I stopped at his House to write them down. Ginseng, a root which the Merchants tell me they send to England & in some years has sold at a guinea a pound, Sarsaparilla—Golden thread—the roots look like gold thread. When steeped in brandy they make a fine aromatic tincture & liquorice plant; consumption vine, a pretty Creeper. Green's daughter was cured of a consumption by drinking tea made of it. Poison vine in appearance much like the former but differs in the number of leaves, one has 5, the other 7. Madder, toothache plant, a beautiful species of fern, Sore Throat weed, Dragon's blood, Adam & Eve or ivy blade, very large, which heals Cuts or burns, dropping of beach, enchanter's nightshade, Dewberrys, Wild Turnip which cures a cough—it is like an Arum.[34]

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[33] Edith G. Firth, "Gwillim, Elizabeth Posthuma (Simcoe)," *Dictionary of Canadian Biography*, vol. vii (Toronto: University of Toronto Press, 1966) 361.

[34] Elizabeth Simcoe, *Mrs. Simcoe's Diary*, ed. Mary Quayle Innis (Toronto: Macmillan of Canada, 1978) 184.

It is difficult to estimate the accuracy of Green's botanical knowledge, and difficult to determine how familiar Lady Simcoe was with these plants, but what is interesting here is her dedication to documenting Green's plants by their common names and keeping track of each plant's medicinal use. Her articulate yet anecdotal language is a testament to her clear facility and ongoing interest in classifying Canadian plants in whatever way possible. Moreover her journal entries make distinct botanical comparisons of the Canadian landscape to her familiar homeland. [35] There is evidence that she wrote at least three versions of each journal.[36] Her daily entries are self-consciously assembled accounts of daily Canadian life.

Lady Simcoe's botanical interests were largely private in nature, shared with friend and relatives. Those of Lady Christian Dalhousie of Nova Scotia, on the other hand, were actively instrumental in contributing to the infrastructure of botany, agriculture, horticulture and floriculture. She was the wife of George Ramsay (1770–1838), the ninth Earl of Dalhousie, heir to Dalhousie Castle in Scotland and the Lieutenant Governor of Nova Scotia from 1816-1820. Both were born in Scotland. They married in 1805. The earl, in his early career, was a military officer, and in 1816 the couple left for Nova Scotia, where he served as a colonial administrator.[37] There they made significant personal and political advances in the areas of agriculture with the establishment of Dalhousie College and other publicly accessible educational institutions.[38] In 1820, Lord Dalhousie was promoted to governor–in-chief of British

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[35] Edith G. Firth, "Gwillim, Elizabeth Posthuma (Simcoe)," *Dictionary of Canadian Biography*, vol. vii (Toronto: University of Toronto Press, 1966) 362.
[36] Ibid., 362.
[37] Peter Burroughs, "Ramsay, George, 9th Earl of Dalhousie," *Dictionary of Canadian Biography*, vol. vii (Toronto: University of Toronto Press, 1966) 722.
[38] Jim Burant, *Drawing on the Land: The New World Travel Diaries and Watercolours of Millicent Mary Chaplin, 1838-1842* (Manotick, Ontario: Penembra Press, 2004) 87.

North America, after which he and his wife relocated to Quebec City, where they began a botanical garden and diligently traded plants with Dalhousie Castle in Scotland.[39] From Quebec City, they continued to work toward successful colonization of Lower and Upper Canadian settlements.[40]

As the wife of a civil administrator, Lady Dalhousie conscientiously carried out her duties by accompanying her husband everywhere and sharing his interests in science, agriculture and the arts.[41] It seems that she understood the power of her position and lent her patronage in key areas of education and for that effort, was well recognized by professional botanists. Professional British botanist William Jackson Hooker (1785-1865), as Jim Burant writes, kept in close contact with Lady Dalhousie to ensure that botanical samples were continually collected and catalogued.[42] He later recognized her collection of specimens in and around Quebec and included it in his massive volume *Flora Boreali-Americana* (1840). Lady Dalhousie herself, published lists from her collections in botanical journals and elsewhere.[43] Such activities were unusual for women, but her public botanical production was acknowledged primarily because she was the 'first lady' of Canada, a central political and cultural position. While she is often co-credited for Lord Dalhousie's achievements, she was rarely credited on her own accord.

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[39] Peter Burroughs, "Ramsay, George, 9th Earl of Dalhousie," *Dictionary of Canadian Biography*, vol. vii (Toronto: University of Toronto Press, 1966) 725.

[40] Jim Burant, *Drawing on the Land: The New World Travel Diaries and Watercolours of Millicent Mary Chaplin, 1838-1842* (Manotick, Ontario: Penembra Press, 2004) 87.

[41] Peter Burroughs, "Ramsay, George, 9th Earl of Dalhousie," *Dictionary of Canadian Biography*, vol. vii (Toronto: University of Toronto Press, 1966) 722,732, and Jim Burant, *Drawing on the Land: The New World Travel Diaries and Watercolours of Millicent Mary Chaplin, 1838-1842* (Manotick, Ontario: Penembra Press, 2004) 88.

[42] Jim Burant, *Drawing on the Land: The New World Travel Diaries and Watercolours of Millicent Mary Chaplin, 1838-1842* (Manotick, Ontario: Penembra Press, 2004) 87.

[43] Peter Burroughs, "Ramsay, George, 9th Earl of Dalhousie," *Dictionary of Canadian Biography*, vol. vii (Toronto: University of Toronto Press, 1966) 725.

While she was an exemplary woman in her public role as the governor's wife, and while she aided in the advancement of new educational structures in botany, she was primarily a cultural figurehead, dedicated to her husband's scientific pursuits. Her position was contradictory in that she did not further the role of women in botany per se. In the end, her contributions encouraged botany's transfer into male-oriented academia and modernized what John Lindley considered polite botany. As Lindley argued for a masculine character for the emerging science, he also envisioned the ideal woman botanist as one who focused her efforts on education. Thus Lady Dalhousie seemed to embody Lindley's vision as he described it in *Ladies Botany*. Her influence helped to reshape Canadian botanical education to closely resemble the British model.

The Dalhousies helped organize botanical clubs and field groups in various Canadian regions. Amateur botanists especially benefited from cultural exchange and individual recognition. These clubs and societies explored and documented the regional landscapes and subsequently shared the collected information in circulated printed materials. The Dalhousies supported the foundation of the Quebec Literary and Historical Society (QLHS) in 1824, which eventually merged with its rival group, the Society for the Encouragement of Arts and Sciences in Canada in 1829. Lord Dalhousie wrote:

> In England these societies lead to every improvement, amusing, instructive, moral & Religious...In Canada, they will...open views, and new sentiments more suited to the present state of the civilized world...[for fear] that if not pushed with spirit now in the outset,...it [Canada] may droop & die as almost all foreign, or European plants do in the Province at the present day.[44]

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[44] Ibid., 725.

Dalhousie employed the same botanical metaphor as Liberty Hyde Bailey—a metaphor that substitutes the language of plants for the colonial process.[45]

In addition to journal writing and book publishing, illustrating botanicals was another form of daily botanical practice that helped promote the illusion of a unified vision towards nature and establish botanical standards in Canada. Typically, when wealthy and prestigious wives of military men painted wildflowers, they portrayed them as exemplary specimens, cleaned up and formalized for the picture. Influential female British colonists and botanical illustrators Fanny Amelia Bayfield (1813/14-1891) and Millicent Mary Chaplin (1790-1858) were such women. Each painted Canadian wildflowers with empirical botanical competence; however, as demonstrated in Chapter 1, these works are horticultural illustration; the intention of these artworks is to highlight the beauty of the floral detail and underscore plant identity, two factors that kept them squarely in the cultural rather than the avowedly scientific domain.

In 1838, while living in Canada, the British-born Fanny Amelia Wright married a fellow Englishman, Henry Wolsey Bayfield (1795-1885), while he was the superintendent of the hydrographic survey of the entire St. Lawrence region.[46] Fanny Amelia's British upbringing predisposed her to the typical female accomplishments. As her new husband commented: "[She is] handsome, amiable, religious, and accomplished. She plays and sings English and Italian, [and] draws extremely well."[47] Bayfield himself was by then distinguished and accomplished in his survey work of the waterways of Eastern Canada. His principal objective was to provide safe passage for the thousands of shipping

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[45] See René Villeneuve, *Lord Dalhousie: Patron and Collector* (Ottawa: National Gallery of Canada, 2008).

[46] Ruth McKenzie, "Wright, Fanny Amelia (Bayfield)," *Dictionary of Canadian Biography*, vol. xii (Toronto: University of Toronto Press, 1966) 1131.

[47] Ibid., 1131.

vessels, sailing ships and steamers that passed through Canadian waterways each year.[48] In 1841, Bayfield transferred his hydrographic headquarters and residence to Charlottetown, where he and Fanny lived out the rest of their lives.[49] Being the wife of a prominent military man carried with it an imperative to live as an exemplary colonist.[50] Illustrating botanical specimens was one practice that demonstrated high cultural and supreme British gentility. Fanny Amelia Bayfield followed the British tradition of amateur painters who copied plates and painted popular groups of plant specimens.[51] She bequeathed an album of botanical illustrations, entitled *Canadian Wildflowers*, to her son Edward; it includes sixty-nine watercolors of plants as well as six separate watercolors of butterflies, insects and plants.[52] None of the works is dated or signed; however, the album is thought to have been begun as early as 1831, with the last entry possibly made in 1860.

In typical horticultural fashion, Bayfield illustrates the flowers in *Trillium Erectum, Lysimachia, (Wild Onion)* (1831-1850) (Figure 4) to be front and center with enhanced color intensity. She excludes possible imperfections, restores the posture of drooping stems and replaces broken or missing leaves. The light source is directly overhead, a position where the sun is in its fullest intensity, an intensity that normally casts even light over the composition, but in this case the intense overhead light floods the details of the uppermost leaves in order to create a contrasting backdrop for the purple trillium. The lower leaves catch some shadow without being obscured, a device that again

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[48] Ibid., 55.
[49] Ibid., 1131.
[50] At the age of 60, Henry Bayfield was awarded the prestigious title of admiral, the highest ranking in a naval fleet.
[51] Ruth McKenzie, " Wright, Fanny Amelia (Bayfield)," *Dictionary of Canadian Biography*, vol. xii (Toronto: University of Toronto Press, 1966) 1131.
[52] Jim Burant, *Drawing on the Land: The New World Travel Diaries and Watercolours of Millicent Mary Chaplin, 1838-1842* (Manotick, Ontario: Penembra Press, 2004) 83.

creates contrast for the white trillium flower. Bayfield has created horticultural emphasis by muting the color of the leaves in order to highlight the intensity of color saturation of the flower. Nature's wild, random and spontaneous composition is eclipsed by Bayfield's structured cultural framework as the stems, flowers and leaves are idealized and directed out of the frame to face the viewer. It is a composition in which Bayfield has refashioned the untamed, wild specimen into one that suggests gentility. By beautifying the appearance of wild plants, Bayfield creates a colonial vision and, within such a statement, creates a British horticultural standard. *Trillium Erectum, Lysimachia* and other similar illustrations systematizes New World randomness to Old World categories and reinforce the colonial standards of botany in British North America.

The Bayfields were stationed at the garrison in Quebec City, where Fanny seems to have spent a great deal of time with Millicent Mary Chaplin,[53] who with her husband was stationed at the same garrison. Jim Burant suggests that there existed a sketching relationship and possible long-term friendship between Chaplin and Bayfield, since they were two women with similar backgrounds. Millicent Mary Chaplin was born into the landed gentry of Lincoln, England. She was married late, at the age of 38, to Lieutenant-Colonel Thomas Chaplin in October of 1828, a marriage that ultimately bore no children.[54] She followed her husband to Canada in 1838 and spent four years immersed in North American society.[55] Like other colonial women, Chaplin was an amateur botanist who recorded her experiences and impressions in journals, letters and illustrations,[56] and

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[53] Ibid., 82.
[54] Ibid., 17-25.
[55] Ibid., 9.
[56] Like Bayfield, Chaplin produced an album of wildflowers to which she added a separate pencil and chalk landscape that she received in 1853 from Helen Bayfield, Fanny's grown daughter who would have been just a toddler when Bayfield and Chaplin lived at the garrison. This landscape suggests that the two women kept in contact long after their

like Bayfield, produced an album of wildflowers. As Burant shows of the twenty-four botanical subjects found in Chaplin's album, at least nine have the same title and composition as illustrations found in Bayfield's: *Rudbeckia* and *Saggitate sagittifolia* (Figure 5, 1831-1850: Figure 6, 1841) to name two. Based on the close similarities of their works, it is likely that the two women were each painting their specimens at the same time, either in the open air or from private collections.[57]

Both Chaplin and Bayfield produced personal albums of their botanical work; however, neither woman's illustration portrays cultivated garden flowers. Instead they painted wildflowers as single stems or in bouquets.[58] Burant notes that most of the flowers in their albums are specifically Canadian, specimens that are listed by habitat in Hooker's *Flora* and by Lady Dalhousie (around Québec, Labrador, eastern North America and/or Saskatchewan and Red River).[59] Their flower albums seem to indicate that Bayfield and Chaplin took notice of the flower studies circulating across the botanical network; however, their individual wildflower albums were private compilations, and were not for public consumption. They chose to paint Canadian plant species perhaps as a matter of record; in retrospect we can also understand their botanical albums as part of a colonial language that created the illusion of knowledge about Canadian nature that was in accord with British cultural traditions of botanical practice. Their botanical albums therefore contributed the botanical value of Canada.[60]

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garrison years. See Jim Burant, *Drawing on the Land: The New World Travel Diaries and Watercolours of Millicent Mary Chaplin, 1838-1842* (Manotick, Ontario: Penembra Press, 2004) 83.

[57] Jim Burant, *Drawing on the Land: The New World Travel Diaries and Watercolours of Millicent Mary Chaplin, 1838-1842* (Manotick, Ontario: Penembra Press, 2004) 84.

[58] Ibid., 90.

[59] Ibid., 89-90.

[60] Mary Louise Pratt, *Imperial Eyes: Travel Writing and Transculturation,* Second Edition, 1992 (New York: Routledge, 2008) 29.

British-born Catharine Parr Traill was no exception to the category of well-born English women interested in flora. She was a prolific writer and teacher of the natural sciences (botany especially), and a writer of fiction and personal memoirs, as well as an amateur botanical artist. She was the youngest of six daughters, born into the established and wealthy Strickland family of land-owning heritage. She grew up surrounded by cultural accoutrements of books and art. In 1818, not long after the Napoleonic wars, the family fell into genteel poverty and soon afterward her father, Thomas Strickland, died, leaving the family destitute. As a result, the Strickland girls supplemented the family income by publishing poems and fiction.[61] Later, in 1832, at the age of thirty, Catharine married Thomas Traill in her home parish church of Reydon. It was thought to be a good marriage since her new husband was a member of one of the oldest families in Orkney and an officer in the Royal Scotch Fusiliers.[62] Several months after the wedding, the couple sailed for Canada with grand hopes of prosperity. As Charlotte Gray describes them, "the Traills and Moodies[63] persuaded themselves that they would form the land-owning cream of Upper Canada."[64] Catharine Parr Traill's earliest efforts in Canada were directed towards creating a landscape that resembled her childhood home of Suffolk. The following excerpt is from a letter written in 1833, within a year of her arrival in Canada, in which she requested specific seeds from the homeland:

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[61] Charlotte Gray, *Sisters in the Wilderness: The Lives of Susanna Moodie and Catharine Parr Traill* (Toronto: Viking, 1999) 15.

[62] Edward S. Caswell, introduction, *The Backwoods of Canada: Being Letters from the Wife of an Emigrant Officer, Illustrative of the Domestic Economy of British America*, 1836, by Catharine Parr Traill (Toronto: McClelland & Stewart, Limited, 1929) 12-13.

[63] The Moodies were Susanna Strickland and Major Moodie, sister and brother-in-law of Catharine Par Traill.

[64] Charlotte Gray, preface, *Sisters in the Wilderness: The Lives of Susanna Moodie and Catharine Parr Traill* (Toronto: Viking, 1999) iv.

> the [next] time you send a parcel or box, do not forget to enclose flower-seeds, and the stones of plums, damsons, bullace, pips of the best kinds of apples, in the orchard and garden, as apples may be raised here from seed... I am very desirous of having the seeds of our wild primrose and sweet violet preserved for me; I long to introduce them in our meadows and gardens. Pray let the cottage children collect some. My husband requests a small quantity of lucerne-seed, which he seems inclined to think may be cultivated to advantage.[65]

Botany for Parr Traill produced immediate results. Having been born into the landed gentry, she could likely identify by name many of the cultivated and wild plants that were essential to an estate garden. At the same time, her requests were very practical. She and her husband requested those seeds that start a proper estate orchard and that benefit a family's immediate survival: apples, and several types of plums and Lucerne seed (a species of agricultural alfalfa) for livestock. Botany was an industry with enormous potential in the new land, but it also carried a sense of nostalgia as it seemed to satisfy many physical and emotional needs. Catharine never returned to England, not even for a visit, yet she remained loyal to her native land, including its plant life, in spite of her near seventy years in Canada.[66]

The Traills' dream of becoming part of the landowning "cream" of Upper Canada was never realized, as they suffered a hard, poverty-stricken life. Catharine's writings suggest, however, that nature remained a constant source of comfort and inspiration, and also that her interest in botany, though it had a strong attachment to British species, also grew to encompass North American plants. This was to be expected; she lived longer in Canada than did many of the wives of senior government officials, and

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[65] Catharine Parr Traill, "Letter IX (April 18, 1833): Building a Log Cabin," *The Backwoods of Canada: Being Letters from the Wife of an Emigrant Officer, Illustrative of the Domestic Economy of British America, 1836* (Toronto: McClelland & Stewart, Limited, 1929) 159. Also see Edwinna Von Baeyer and Pleasance Crawford, "Catharine Parr Traill: 1833," *Garden Voices: Two Centuries of Canadian Garden Writing* (Toronto: Random House of Canada, 1995) 222-223.

[66] Michael A. Peterman, "Strickland, Catharine Parr (Traill)," *Dictionary of Canadian Biography*, vol. xii (Toronto: University of Toronto Press, 1966) 995.

her difficult financial situation—part of her life as a backwoods settler—necessarily led her to a close relationship with the local flora. She writes in 1836 that "every flower and shrub and forest tree awakened an interest in my mind, so that I began to thirst for more intimate knowledge of them. They became like dear friends, soothing and cheering by their unconscious influence hours of loneliness and hours of sorrow and suffering."[67] By her own confession, Catharine took comfort in daily botanical activities: letters, journal entries, illustration, and poetry. Her style of botany was of a civilized British tradition that did not necessarily speak of any vulnerabilities she may have experienced as she faced the daily forces of nature. In 1857, when Catharine's husband died following a tragic house fire that burned all their books, manuscripts and other valuables, she again turned to botany as a source of income and for much-needed public identity; she supported herself by writing and pressing dried flowers to sell as gifts or at competitions.[68] Parr Traill's amateur daily botanical production extended into public and commercial arenas. She published seventeen books in all, nine of them of Canadian origin. These include *Backwoods of Canada* (1836), *Stories of the Canadian Forest* (1857), *Canadian Wild Flowers* (1895), *Studies in Plant-Life in Canada* (1885), and works of fiction and poetry.[69]

Parr Traill's style of botany was a blend of empirical information and Christian underpinnings. Parr Traill organized *Studies in Plant-Life in Canada* within a Christian ethos—the forest, she wrote, was her backyard garden paradise, where "hedges put out

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[67] Edward S. Caswell, introduction, *The Backwoods of Canada: Being Letters from the Wife of an Emigrant Officer, Illustrative of the Domestic Economy of British America*, 1836, by Catharine Parr Traill (Toronto: McClelland & Stewart, Limited, 1929) 15.

[68] Michael A. Peterman, "Strickland, Catharine Parr (Traill)," *Dictionary of Canadian Biography*, vol. xii (Toronto: University of Toronto Press, 1966) 998.

[69] Edward S. Caswell, introduction, *The Backwoods of Canada: Being Letters from the Wife of an Emigrant Officer, Illustrative of the Domestic Economy of British America*, 1836, by Catharine Parr Traill (Toronto: McClelland & Stewart, Limited, 1929) 19-20.

their green buds, and Violets scent the air; when pale Primroses and the gay starry Celandine gladden the eye, and the little green lanes and wood-paths are so pleasant to ramble through among the Daisies and Bluebells and Buttercups."[70] The imagery in Parr Traill's passage is active in the sense that the hedges, violets, primroses, daisies and celandine mobilize as individuals within a civilized plant community existing in edenic, harmonious balance.[71] Parr Traill's teaching style, as Michael Peterman explains, was characterized by a "desire to create 'short floral biographies' [in which]...the name, season, appearance, lore, and useful properties—of the plant or flower were pleasingly presented."[72] As Pratt explains that producing order out of a chaotic world is very much part of colonizing Canada.[73] Teaching botany as idealized portraitures, in which plants live as happy individuals within structured societies, was an unwitting contribution to the colonial process, more reflective of the carefully cultivated gardens of Parr Traill's youth than of the wilder landscape in which she lived in Canada.

This style of botany was exactly what Lindley had hoped to discredit as amateur flower worship and scientifically inferior. However, underneath the floral poesy was dependable science. Parr Traill studied from a small botanical handbook by botanist Frederick Pursh, lent to her by a friend[74] even though she struggled with the Latin. And while she never intended her books to enter professional circles, her work was deemed

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[70] Catharine Parr Traill, *Studies of Plant Life in Canada: Wild Flowers, Flowering Shrubs, and Grasses* (Toronto: William Briggs, 1906) xvi.

[71] Parr Traill was in concert with the botanical climate of her day—a climate in which masculine identity had assumed authority and, according to Spencer's natural order of society, women were better suited to manage cultural matters.

[72] Michael Peterman, " 'Splendid Anachronism,' The Record of Catharine Parr Traill's Struggles as an Amateur Botanist in Nineteenth-Century Canada," *Re(dis)covering Our Foremothers: Nineteenth-Century Canadian Women Writers*, ed. Lorraine McMullen (Ottawa: University of Ottawa Press, 1990) 178.

[73] Mary Louise Pratt, *Imperial Eyes: Travel Writing and Transculturation,* Second Edition, 1992 (New York: Routledge, 2008) 30.

[74] Catharine Parr Traill, *Studies of Plant Life in Canada: Wild Flowers, Flowering Shrubs, and Grasses* (Toronto: William Briggs, 1906) xvi.

reliable and credible thanks to two leading Canadian botanists, John Macoun (1831-1920) and James Fletcher (1852-1908), both of whom stood as professional advisors for *Studies of Plant-Life in Canada; Wild Flowers, Flowering Shrubs, and Grasses*, Parr Traill's botanical volume of over 200 plants, shrubs and trees.[75] *Studies of Plant-Life in Canada* was illustrated by Parr Traill's niece Agnes Chamberlin and was well received, particularly by Fletcher. Michael Peterman quotes Fletcher's reaction to Parr Traill's published work, and to her professional humility:

> With regard to your disclaiming the title of botanist, all I can say is, that I wish a fraction of one percent of the students of plants who call themselves botanists, could use their eyes half as well as you have done. I think indeed your work of describing all the wild plants, in your book, so accurately that each one could have the name applied to it without doubt, is one of the greatest triumphs which [anyone] could achieve.[76]

Catharine Parr Traill, by her own admission learned botany from the older settler wives and the Aboriginal inhabitants of Upper Canada, and she assembled her entries in order of physical appearance, location and growth.[77] She preferred to label the plants according to their common rather than their Latin names perhaps because, as Berger claims, the common name makes literary allusions to her homeland's great authors Shakespeare and Milton.[78] Such a decision suited an important part of the audience of her books: high-minded British women living in Canada and in England.[79] Catharine Parr Traill approached her new home of Canada starting with the landscape as her primary

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[75] Michael Peterman, " 'Splendid Anachronism,' The Record of Catharine Parr Traill's Struggles as an Amateur Botanist in Nineteenth-Century Canada," *Re(dis)covering Our Foremothers: Nineteenth-Century Canadian Women Writers*, ed. Lorraine McMullen (Ottawa: University of Ottawa Press, 1990) 175.

[76] Ibid., 176.

[77] Carl Berger, *Science, God, and Nature in Victorian Canada* (Toronto: University of Toronto Press, 1983) 36.

[78] Ibid., 36.

[79] Michael Peterman, " 'Splendid Anachronism,' The Record of Catharine Parr Traill's Struggles as an Amateur Botanist in Nineteenth-Century Canada," *Re(dis)covering Our Foremothers: Nineteenth-Century Canadian Women Writers*, ed. Lorraine McMullen (Ottawa: University of Ottawa Press, 1990) 178.

reference point. Her writing belying much of the harshness of her North American life helped portray a pastoral Canada that was similar to her homeland of England.

A gentler Nature was the foundation of Catharine Parr Traill's culture. Transforming wild areas into beautiful cities, towns, public and private parks and gardens were concerns of the high social circles of the Simcoe, Bayfield, Chaplin and Strickland families. Old World British colonists considered public landscaping a necessary foothold of intellectual and moral authority in the new territory of Canada.[80] On a smaller scale, the private garden became an individual statement of horticultural and social sophistication. Exemplary gardens demonstrated Old World botanical knowledge and were virtual showcases of high citizenry. As cities and towns expanded, "new property owners looked to the horticultural world for guidance in establishing themselves appropriately in the new environments."[81] In a practical sense, a 'proper' garden gave a distinct social advantage and was evidence of intellectual and material accomplishment. Perhaps the definitive statement on proper gardening and citizenry had been made much earlier in England, in 1835, when J.C. Loudon published an article in *Gardener's Magazine* discussing garden layout for the suburban London home. He proposed the adoption of an aesthetic layout designed to exhibit approximately 800 different and unrepeated varieties of ornamental, herbaceous and floral annuals and perennials, shrubs, trees, and vegetables planted in small spaces.[82] He called his horticultural credo the "gardenesque," a term that he differentiated from the Picturesque

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[80] Carl Berger, *Science, God, and Nature in Victorian Canada* (Toronto: University of Toronto Press, 1983) 8-9.

[81] A.J. Lustig, "Cultivating Knowledge in Nineteenth-Century English Gardens," *Science in Context* 13 (2000) 156.

[82] Ibid., 173.

aesthetic.[83] Essentially the "gardenesque" was a "botany [that] was seamlessly integrated into aesthetic."[84] Such a garden must showcase as many species as possible and in so doing, make an aesthetic statement that focused the attention on the individual beauty and growth pattern of each plant, thereby emphasizing botanical richness.[85] Moreover, those gardeners affluent enough to keep the gardenesque alive needed the help of a progressive hothouse or greenhouse where well-educated professional horticulturalists cultivated tropical exotics—species which demanded foreign environments beyond the local natural temperature range, humidity levels and knowledge base. This specificity of knowledge earned them honorary membership in the scientific community.[86] The British garden of the 1830 was encoded with intellectual and scientific markers of civilization—markers that informed many Canadian gardens as well. The gardenesque garden displayed the owner's "educated botanical tastes."[87] I am suggesting that to own botanical specimens was a metaphoric mirror for colonizing territories and its people.

The wealthy McCord family constructed Temple Grove in Montreal as an outstanding example of such a Canadian estate garden. The estate garden at Temple Grove was completed in 1838 at a cost of 1,389 British pounds.[88] The property plans of Temple Grove show the house situated on the south side of Mount Royal with superb

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[83] Ibid., 173.
[84] Ibid., 173-174.
[85] Ibid., 173.
[86] Edwinna Von Baeyer, *Rhetoric and Roses: A History of Canadian Gardening 1900-1930* (Markham, Ontario: Fitzhenry & Whiteside, 1984) 100.
[87] A.J. Lustig, "Cultivating Knowledge in Nineteenth-Century English Gardens," *Science in Context* 13(2000) 173.
[88] Richard G. Starke, "Notes on Old and Modern Gardens of Montreal: Part IX," *Canadian Horticultural Magazine* (1898): 335.

views overlooking the city and the St. Lawrence River[89] (Figure 7[90], 1854: Figure 8, 1866). On the grounds were orchards, a vegetable garden, a barn and stable, a gardening cottage, prairies and grazing pastures, shrubberies, and flower gardens with numerous cultivars such as petunias, asters, zinnias, and marigold, amongst many others[91] (Figures 9, 1866: Figure 10, 1861). Photographs show ponds and fountains, sculpture, croquet lawns, and serpentine stone pathways situated in clearings where garden visitors play croquet in top hats and tuxedos (Figure 11). Young describes the garden as "carefully conceived nature: garden, gazebo, arbour, and decorative bridge over babbling brook (Figure 12). Seeds and bulbs were imported from New York and England."[92] Local publications also acknowledged that Temple Grove embodied all the signs of advancing civilization and wealth.[93] It follows a pre-existing McCord tradition of elaborate estate gardening: a tradition started by John Samuel's father, John McCord, who constructed a garden at his first house, La Grange des Pauvres, in Montreal. Based on surviving records, we know he ordered plants and seeds from Pritchet's, Oxford Street, London, and that in 1827, when advertising the sale of La Grange, he described the property as a "Garden [to be] in the highest state of cultivation, and contains a Hot-

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[89] Brian Young, *The Making and Unmaking of a University Museum: The McCord, 1921-1996* (Montreal: McGill-Queen's University Press, 2000) 24.

[90] James Duncan, City of Montreal from the Mountain, before 1854. This painting was produced by artist and family friend James Duncan. The McCord Museum website offers the following description of the painting: "This view looks east from the western slopes of Mount Royal towards the city and St. Helen's Island. In fact, the watercolour was painted from the garden of Temple Grove, the home of the McCord family. A horse-drawn carriage can be seen travelling along the Côte-des-Neiges Road. The row of lombardy poplars on the right marks the boundary of the Priest's Farm, which eventually became the site of the Grand Séminaire." http://www.mccord-museum.qc.ca/en/collection/artifacts/M315&section=196.

[91] McCord Family Papers, file no. 422-440.

[92] Brian Young, *The Making and Unmaking of a University Museum: The McCord, 1921-1996* (Montreal: McGill-Queen's University Press, 2000) 24.

[93] Richard G. Starke, "Notes on Old and Modern Gardens of Montreal: Part IX," *Canadian Horticultural Magazine* (1898) 335-341.

House, Vinery, &c. The Ice House, Stables, Root-House, &c. are in the best order."[94] The McCords thus demonstrated an awareness of British estate garden protocols and a desire to emulate British garden fashion.

The process of building an estate garden involves a mindset inclined towards collecting items that document and celebrate dominance and power. John Samuel and Anne Ross McCord were avid collectors as gardeners and as patrons of the arts and sciences.[95] Their son David Ross McCord (1844-1930) was a full-time collector of historical artifacts, preserving them as a testament to Canadian history.[96] The McCords collected at the height of an imperialist movement that strove to create Canada in the image of the British Empire. As Donald Wright describes imperialism, it was "more than a school of nationalism, it was very much a secular religion, a way of life."[97] It is no exaggeration to say that Anne Ross McCord and her family crusaded for a Canada that kept close to British gentility and political structures.

Wealthy estate gardens were, in part, the underpinnings of the colonial process as their beauty and wealth of knowledge helped sustain value of British horticultural standards. It is evidence that gardens were also a venue for those of the lower social orders who wanted to emulate gentility and envision the New World in terms of the Picturesque—or at least the version of the Picturesque that existed in the late nineteenth

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[94] Pamela Miller and Brian Young, "Private, Family and Community Life," *La Famille McCord: Une vision passionnée: The McCord Family: A Passionate Vision* (Montreal: McCord Museum of Canadian History, 1992) 69.

[95] Donald Wright, "David Ross McCord's Crusade," *La Famille McCord: Une vision passionnée: The McCord Family: A Passionate Vision* (Montreal: McCord Museum of Canadian History, 1992) 89.

[96] The McCord Museum in Montreal, based on his collections, opened in 1921.

[97] Donald Wright, "David Ross McCord's Crusade," *The McCord Family: A Passionate Vision* (Montreal: McCord Museum of Canadian History, 1992) 89.

century. In her book *Rhetoric and Roses,* Edwina von Baeyer explained that property owners well understood these demands in the early twentieth century:

> Canadians were not allowed to putter [in their gardens]...They were told to clean up their backyards, [create] gardens for moral and spiritual welfare, and [to rid] the grounds of pest-filled eyesores. After the back-yard, the front was to be ornamented by judicious tree planting, lawn care, even corner rockery—all contributing to Civic beautification...[However] beauty ceased to be the main goal; [the garden] now struggled for a place alongside good citizenship, improvement, social remedy, morality and material progress.[98]

Gardens of all styles and types were believed to foster a respectable social posture. Good citizenry was believed to be a direct result of proper gardening.

In the late nineteenth century, however, there were issues other than the design and purpose of gardens to worry about. Canada faced an agricultural farm crisis as the promise of factory work in the cities drained labor from rural areas. As a result, rural communities and farms suffered from isolation and loss of capable labor. Canadians worried about a potential collapse of rural society and a weakening of its major industry: agriculture. Urban thinkers believed that the solution was a matter of education; teach the rural population the latest scientific farming methods, and rural life would revitalize.[99]

With the depression of 1893 and with the United States facing a similar rural crisis as Canada, Liberty Hyde Bailey designed the Nature Study program, premised on the new European educational model of "learning by doing."[100] That model stressed that "doing" must be related to a child's immediate environment. In the outdoor classroom,

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[98] Edwinna Von Baeyer, *Rhetoric and Roses: A History of Canadian Gardening 1900-1930* (Markham, Ontario: Fitzhenry & Whiteside, 1984) 2-3.

[99] Ibid., 36.

[100] "Nature Study and Rural Education," *Liberty Hyde Bailey: A Man for All Seasons, 2004,* Cornell University, Division of Rare and Manuscript Collections, 13 September 2005 <http://rmc.library.cornell.edu/bailey/naturestudy/index.html>.

children studied real grasshoppers, for example, not those in books. The inception of nature study is owed to the Association for Improving the Conditions of the Poor in New York City, who themselves organized the Committee for the Promotion of Agriculture (1893). "Liberty Hyde Bailey, who believed that children should grow up appreciating nature, assumed responsibility for the new [nature study] program and immediately appointed Anna Comstock, a member of the committee, to run it."[101] Moreover, for Liberty Hyde Bailey, nature study fostered and accentuated cooperation between lab-oriented botany and practical knowledge—the two, he thought, must cooperate for successful utility of agricultural, horticultural and general botanical practices. He credited amateurs for their accumulated field knowledge. Nature study validated the repetitive tasks of collecting and examining for the purposes of teaching and, in this way, also reinforced the amateur effort on moral and scientific grounds: nature study was imperative to the future of North American farming and to the self-improvement of society.[102] It was intended that nature study would stimulate the pursuit of the natural sciences across all sections of society.[103]

By 1900, Canadian educators had begun to discuss nature study as a viable solution for rural migration. The garden could become a modern classroom and serve as a model for Canadian society. The general theory of garden education was that successful gardens are governed by practical applications for the subjects of mathematics, reading, drawing, spelling and language skills.[104] As part of establishing a

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[101] Ibid.
[102] Elizabeth B. Keeney, *The Botanizers: Amateur Scientists in Nineteenth-Century America* (Chapel Hill: The University of North Carolina Press, 1992) 1-8.
[103] Anne Secord, "Botany on a Plate: Pleasure and the Power of Pictures in Promoting Early Nineteenth-Century Scientific Knowledge," *Isis*, 93 (2002): 30.
[104] Edwinna Von Baeyer, *Rhetoric and Roses: A History of Canadian Gardening 1900-1930* (Markham, Ontario: Fitzhenry & Whiteside, 1984) 38-42.

school garden, for example, children must design the plot, consider where the sun will rise and set, choose the plants and their best locations relative to the climate conditions, understand soil chemistry, measurements and dimensions, and become familiar with Latin, spelling and so forth. Gardening was also believed to teach children traditional moral values and amiable citizenship.[105] Educators thought that school gardening produced a well-educated, intelligent and prosperous generation of citizens who in their adult years, would gravitate to farm life and vitalize Canadian agriculture.[106] The Canadian version of nature study taught the most current botanical knowledge of the New Dominion, but did so through an Old World attitude. With the school garden, educators promoted an idyllic society, much like the ideal society proposed by the ambitious gardens discussed above.[107] Theoretically, nature was the best teaching aid, since its connection to children seemed by all accounts intrinsic.[108]

The school garden movement was a popular one and received generous financial assistance; in the late nineteenth century, the Ontario government gave grants and equipment in support of horticultural education, and around the same time Montreal and Ontario horticultural societies distributed seeds and plants to selected schools.[109] William Lochhead (1864-1927), professor of biology and geology at the Ontario Collegiate Institute, and later professor at Macdonald College, specialized in economic entomology and zoology, and celebrated the school garden in an article published in the *Canadian*

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[105] Ibid., 36-37.
[106] It must be noted that in spite of a vigorous school garden effort, migration from rural to urban centers did not abate. For more information, see Edwinna Von Baeyer, *Rhetoric and Roses: A History of Canadian Gardening 1900-1930* (Markham, Ontario: Fitzhenry & Whiteside, 1984) 43, 46.
[107] Edwinna Von Baeyer, *Rhetoric and Roses: A History of Canadian Gardening 1900-1930* (Markham, Ontario: Fitzhenry & Whiteside, 1984) 61.
[108] Ibid., 37.
[109] Ibid., 39.

Horticulturist in 1903. This article claimed that the Canadian school garden was the "miracle cure" for ailments plaguing Canadian culture and its education system: "The children are crying out for gardens;" it argued, "the home demands a garden; the state should insist upon a garden; and civilization will revert without gardens."[110] Similarly, James W. Robertson (1857-1930) was the Dominion's first commissioner of agriculture and dairying with the Department of Agriculture (1890-1904). Robertson spoke against what he considered to be the result of "book farming."[111] He believed that in the absence of manual labor skills, rural children contributed little or nothing that was useful to their communities, leaving them, by his definition, uneducated, ignorant, helpless and selfish.[112] The land was a primary and integral component of self-sufficiency and intelligent education throughout all regions of Canada. Untidy and uncomfortable surroundings had a "tendency to dull the taste and the judgment of young persons," while beauty of both an interior and exterior environment encouraged harmony, "regularity, punctuality, obedience, industry and self-control."[113] According to Robertson, beauty could transform humanity to "become respectful and reverent towards the beautiful and the good."[114] Lockhead, Robertson, and other prominent Canadians believed that the garden was a potent site to educate and thus could influence social change. The garden was a location that demanded skill, industry and scientific observation and where each student had the promise of being a better citizen in every

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[110] Ibid., 39.
[111] Ibid., 37.
[112] James W. Robertson, "Evidence of James W. Robertson, Commissioner of Agriculture and Dairying, before the Select Standing Committee on Agriculture and Colonization," *The Macdonald Funds for Manual Training and the Improvement of Rural Schools* (Ottawa: S.E. Dawson: King's Printer, 1904) 7.
[113] Ibid., 31.
[114] Ibid., 32.

sense.[115] However, while the focus of the Canadian school garden was unified education, the spin-off effect was the subtle encouragement of class divisions—divisions that mimicked well-established social structures that have been explored by this chapter. Edwinna Von Baeyer suggests that the school garden was an "instrument of social control [and] promoted middle-class social and moral values. Molding rural children into idealized, hierarchical roles in society and channeling their choice of occupation were the unstated, but underlying intentions of the developing school garden movement."[116] The school garden movement maintained the "right order of society by creating citizens who knew their place."[117]

Canadian intellectuals and educators understood that if the goal was to achieve prosperous industry, intelligence and beauty, then the land must be a site that enhanced common intelligence. It was thought that school gardens taught social, moral and intellectual skills that were essential to a prosperous British Canada. However, much earlier in the century, ornamental garden design in colonial Canada had developed relative to that of Britain, but was forced to adapt its style according to climatic differences and geographical limitations. Chapter 3 will examine the social and physical forces that impinged on Canadian garden design, and how artwork about the Canadian garden became a national expression of the country's colonial character, especially in the later nineteenth century.

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[115] James W. Robertson, "The Macdonald College Movement," *Proceedings of the Association* (Denver, Colorado: National Education Association of the United States, 1909) 94-95.
[116] Edwinna Von Baeyer, *Rhetoric and Roses: A History of Canadian Gardening 1900-1930* (Markham, Ontario: Fitzhenry & Whiteside, 1984) 46.
[117] Ibid., 43.

Chapter 3
The Wild Gardening Style and the Old-Fashioned Canadian Wildflower

While Chapter 1 was concerned with the quest to reform professional botanical identity, and Chapter 2 focused on the steady flow of amateur botanical activity by British colonists in Canada and its significance in promoting a British vision towards the land, this third and final chapter examines colonial Canada's adoption of British garden design as a platform to develop Canadian garden character within an emerging nation. This first section gives a brief account of garden history to 1870 to show that garden designs were the result of cultural and political influence. Here, I will establish England as the horticultural model. The chapter then narrows into a discussion of the formalized garden and the subsequent dismissal of it, in favor of the wild landscape garden.

The art of gardening and the representation of gardens in art (garden art) have a long history dating back to ancient Egypt, Greece and Rome, when gardens were sacred locations that held mystic, symbolic and religious significance. Different from everyday vegetable and medicinal gardens, they were prestigious creations, designed as places of study and conversation. They could contain frescoes, water pools, defensive walls, exotic flowers, topiary and trees.[1] There were also Islamic and later monastic gardens, secular gardens, and gardens of popes, lords and kings throughout Italy, France, England and the rest of Europe, each in a regional style and having identifiable characteristics and philosophies.[2]

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[1] Lucia Impelluso, *Gardens in Art*, trans. Stephen Sartarelli (Los Angeles: J. Paul Getty Museum, 2007) 10-15.

[2] This information has been taken from several chapters of Lucia Impelluso, *Gardens in Art*, trans. Stephen Sartarelli (Los Angeles: J. Paul Getty Museum, 2007).

Common to all, whether in grand expanses of countryside or in smaller urban settings, was a high degree of formality and geometric patterning.

In eighteenth- and nineteenth-century England, the formal, geometric garden designs of J.C. Loudon (1783-1843) were standard for aristocratic landowners. Characteristic of this style of garden is the sweeping vista comprised of highly manicured parterres, which force tender plants into stiff and unnatural patterns. Constructing a formal garden was an invasive process as it required acres of cleared forest, the diversion of rivers and streams, the flooding of land to create lakes and ponds, and orchards and arboretums containing imported and exotic trees. These elements and processes seemed contrary to the rhythms of the natural habitat.

Not all British landowners were enamored of the formal garden dictates of J.C. Loudon. Nachmani writes that as early as the seventeenth century, the aristocratic Augustan circle of writers, philosophers and architects, and people of the Anglican faith and of the liberal Whig political persuasion, considered the patterned and forced schematization of the typical "Continental garden"—where nature was noticeably controlled by the hand and mind of man—to be synonymous with the Catholic absolutism of Louis XIV and of England's hated enemy, France.[3] Such resistance was the motivation behind the "liberated" or landscape garden—today's typical English garden—that became less a self-contained enclosure and more a "landscape merging with the surrounding countryside, providing a vastness of prospect to the unfettered mind by unbound

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[3] Cynthia Wolk Nachmani, "Taste in the English Garden: Nature, the Picturesque, and Ornament," *Say it with Flowers: An Exhibition of the Imagery of Flowers, June 17-August 31, 1973* (Hempstead: Emily Lowe Gallery, 1973) 2.

nature in its natural state."[4] The underlying principle of the landscape garden is its refusal to dominate nature, except to give it some order. It was conceived under the rubric of democracy and freedom from constrictions.[5] However, Loudon's formal garden ideal still dominated the field, and by the onset of the nineteenth century his traditional, formal, bedded-out garden designs had effectively destroyed much of England's relationship with the natural character of its flora and fauna, even though for the previous three centuries the landscape had been believed to be an intrinsic part of English heritage.[6]

But all this began to change when nineteenth-century British society started to lament the loss of pre-industrial life as the physical damages of the industrial revolution became evident. A resurgent interest in its indigenous countryside swept the nation and came to define English culture—a definition that remains today. There was in fact a renaissance of England's relationship with nature and the arts—or art—of the garden.[7] The formal garden was no longer a suitable expression of the growing 'appreciation' for nature. Anne Helmreich explains:

> The garden [embodies] a collection of ideologies, sometimes contradictory, bundled together and put to numerous uses. At the turn of the nineteenth century] the latter included counterbalancing fears of change, accentuating desires for an alternative way of life, harmonizing and smoothing over differences, or accentuating them. Through these processes, the garden

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[4] Lucia Impelluso, *Gardens in Art*, trans. Stephen Sartarelli (Los Angeles: J. Paul Getty Museum, 2007) 87 and Cynthia Wolk Nachmani, "Taste in the English Garden: Nature, the Picturesque, and Ornament," *Say it with Flowers: An Exhibition of the Imagery of Flowers, June 17-August 31, 1973* (Hempstead: Emily Lowe Gallery, 1973) 3.

[5] Ibid., 88.

[6] Anne Linden Helmreich, "Contested Grounds: Garden Painting and the Invention of National Identity in England, 1880-1914," diss., Northwestern University, 1994, 263.

[7] Ibid., 264.

> became constitutive of national identity...The garden implied continuity with the past as well as membership within the exclusive club of Englishness...[8]

The landscape garden came to be considered as uniquely reflective of British character. It was therefore an element of the colonial package that was eminently transportable to new lands. Nineteenth-century garden owners and designers carefully created landscape gardens following the doctrines of picturesque landscape art. Cynthia Wolk Nachmani explains that "the gardener became dependent upon the landscape scenes provided by the painter, and borrowed from him the same contemporary aesthetic theories of the sublime, the beautiful, and the picturesque."[9] Because picturesque landscape paintings were highly esteemed artworks, so were the landscape gardens designed in their image—a physical manifestation of the ideals of nature's perfection. Thus, for landscape garden designers the garden was an art-ificial representation—a mere facsimile of the picturesque canvas (Figure 13, undated: Figure 14, 1710) .

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I believe that the garden art of Canada corresponded nicely with England's newly developed attitude towards the landscape—one that found value and inspiration in unplowed woodlands. These attitudinal changes crystallized in the writings of British garden designer William Robinson, who had studied the Loudon formal garden tradition but disagreed with the contrived approach to the garden and the surrounding landscape. In 1870, he attempted to dismantle the British

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[8] Anne Helmreich, *The English Garden and National Identity: The Competing Styles of Garden Design, 1870-1914* (Cambridge: Cambridge University Press, 2002) 3-4.

[9] Cynthia Wolk Nachmani, "Taste in the English Garden: Nature, the Picturesque, and Ornament," *Say it with Flowers: An Exhibition of the Imagery of Flowers, June 17-August 31, 1973* (Hempstead: Emily Lowe Gallery, 1973) 3.

ideals of formal garden design in his publication *The Wild Garden*, promoting instead a garden that appeared to be under the control of nature. It was conceived as spontaneous and natural, and was to be arranged in groupings of form and color upon which no earthly gardener could hope to improve.[10] Robinson's intention was to "[naturalize] many beautiful plants [from] many regions of the earth [into Britain's] fields, woods and copses, outer parts of pleasure ground, and in neglected places in almost every kind of garden." He sought to develop every detritus corner, using cultivated, imported or exotic plants that appeared to grow wild and that required very little care, but that in fact had the opposite qualities. The irony of the wild garden is that while it proposed and appeared to defer to nature as the sole source of beauty in garden design, according to Robinson, it was as manipulated a creation as the formal garden.[11]

Robinson's dislike of the formal garden was born from what he felt were disrespectful practices of gardeners who "threw aside with contempt all the lovely things that through their height or form did not conform...(so stupid as to life)."[12] He charged the time-honored formal garden with disconnecting the English from their indigenous landscape, writing of formal gardeners as though they had gone mad and were totally out of synch with their natural surroundings.[13] He considered the formal garden to be the garden of scientific botany, while the wild garden and

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[10] Richard Maybe, introduction, *The Wild Garden: or the Naturalization and Natural Grouping of Hardy Exotic Plants with a Chapter on the Garden of British Wild Flowers*, by William Robinson, 1870 (London: Century Publishing, 1983) xvii.

[11] Anne Helmreich, *The English Garden and National Identity: The Competing Styles of Garden Design, 1870-1914* (Cambridge: Cambridge University Press, 2002) 42.

[12] William Robinson, *The English Flower Garden and Home Grounds: Design and Arrangement Shown by Existing Examples of Gardens in Great Britain and Ireland by a Description of the Plants, Shrubs and Trees for the Open-air Garden and their Culture*, 10th ed. (London: J. Murray, 1906) viii.

[13] Ibid., viii.

corresponding cottage garden, discussed later, suited the amateur gardener perfectly. Hence, the wild garden was the garden of the British people—people who considered themselves viscerally connected to the countryside and to natural history. Robinson pays credit to new botany; however, he emphatically states that "the subordination of the garden to Botany has been fruitful of the greatest evil to artistic gardening. The way of arranging a garden like a book, and a very ugly book, as in the French botanic gardens...in which one sees a sea of showy labels, where one might look for the life and peace of a garden, is a blinding obstacle to beautiful gardening."[14] Robinson objected most to the repetitive use of imported and exotic flowers that were bedded-out "in the thousands and tens of thousands, and with these, patterns, more or less elaborate, were carried out in every garden save the very poorest cottage garden."[15] This was contrary to the "varied [English] countryside" and "orchid-flecked meadows...untroubled by the plough."[16] The wild garden was not predicated, however, on xenophobic exclusions of foreign and exotic plants; in fact, Robinson encouraged naturalizing exotics that comfortably acclimated themselves to the British climate and habitat: a very Darwinian attitude.[17] Robinson's intended audience was the landowning classes; the wild garden was meant to be pleasurable creation that inspired a deep connection with the 'natural' landscape.[18]

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[14] Ibid., viii-ix.
[15] Ibid., vii.
[16] Ibid., vii.
[17] Anne Linden Helmreich, "Contested Grounds: Garden Painting and the Invention of National Identity in England, 1880-1914," diss., Northwestern University, 1994, 261.
[18] Anne Helmreich, *The English Garden and National Identity: The Competing Styles of Garden Design, 1870-1914* (Cambridge: Cambridge University Press, 2002) 44.

Robinson acknowledges the crucial role that English artist Alfred Parsons (1847-1920) played in the public's reception of his wild garden designs.[19] Parsons's black and white drawings supported Ruskin's view "that every herb and flower of the field has its specific, distinct, and perfect beauty...its peculiar habitation, expression, and function," and that the artist need only paint nature's perfection without alteration[20] (1870) (Figure 15). Parsons's drawings of private wild gardens were published in books and magazines and were circulated amongst the public, serving as models for a national aesthetic. It gave those citizens who had never seen a wild garden and were not estate landowners an opportunity to enjoy the benefits of those things.[21]

The notion of privileging wild, unspoiled nature derives in part from Ruskinian principles.[22] In Robinson's 1883 book, *The English Flower Garden*, the first chapter is devoted to the subject of art and the flower garden. He criticizes the overuse of the terms "realism" and "idealism," explaining that "bad pictures are shown as examples of 'realism' which leave out all the refinement, subtlety, truth of tone, and perhaps even the very light and shade in which all the real things we see are set...But many people do not judge pictures by Nature, but by pictures and therefore they miss her subtleties and delicate realities on which all

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[19] William Robinson, *The Wild Garden: or the Naturalization and Natural Grouping of Hardy Exotic Plants with a Chapter on the Garden of British Wild Flowers, 1870* (London: Century Publishing, 1983) xxiv.

[20] Anne Helmreich, *The English Garden and National Identity: The Competing Styles of Garden Design, 1870-1914* (Cambridge: Cambridge University Press, 2002) 55.

[21] Ibid., 60.

[22] Anne Linden Helmreich, "Contested Grounds: Garden Painting and the Invention of National Identity in England, 1880-1914," diss., Northwestern University, 1994, 248.

true work depends."[23] This quotation perfectly illustrates John Ruskin's significant influence in the fields of art production, art criticism, and the artist's relationship to nature.

From approximately the mid- to late nineteenth century, there was a rejection of what seemed like contrived and shallow landscape art, in favor of an image that captured the ephemeral interconnectedness of all things. This had much to do with the sentimentalization and moralizing of nature that was discussed in Chapter 1, as well as with the concomitant shift from formal to informal gardens. As will be seen below, Canadian women's horticultural illustrations of the early part of the century laid the groundwork for the Canadian wild garden. I will examine how horticultural illustration was conceptualized as a garden painting rather than as a scientific illustration. The horticultural illustration belongs to two types of garden experience: the private estate garden, and the regional wilderness area commonly thought of as nature's landscape garden. Both experiences are visible in the illustrations of Anne Ross McCord and Maria Morris Miller. These artists predate the wild garden style of the late nineteenth century and its subset, the cottage garden.

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The perception of an uncontrollable Canadian landscape and the differences in climates were the primary limitations for British-minded gardeners.

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[23] William Robinson, *The English Flower Garden and Home Grounds: Design and Arrangement Shown by Existing Examples of Gardens in Great Britain and Ireland by a Description of the Plants, Shrubs and Trees for the Open-air Garden and their Culture*, 10th ed. (London: J. Murray, 1906) 4.

Even though nineteenth-century Canadian colonists were committed to British gardening traditions and wanted to follow the English horticultural model, they had to be selective in their applications because they were bound by a different set of circumstances. Still, records show that there was an earnest attempt by Canadian gardeners to approximate British horticultural standards. For instance, Mary Gapper (1798-1879), who was in Upper Canada from 1828-1830 for a family visit, and who eventually stayed on to marry into the O'Brien family and settle in Shanty Bay on Lake Simcoe,[24] chronicles the condition of her newly settled estate in her journal entry of June 25, 1830:

> E[dward] thought it as well to go & look at...our fruit garden containing raspberries, strawberries, currants & plums—It is watered by a beautiful trout stream...running out of the forest thro' a poplar copse which is just now covered with some of the prettiest white flowers which have something the air of anemones—Then he wanted to look for cedar poles so we crossed the fence into the swamp & from thence returned thro' the wood having walked all around the estate."[25]

It was an era when the emerging middle class began to borrow from upper-class estate gardening as a symbol of identity. O'Brien's felicitous rendition of her estate recounts the ongoing transformation from swamp to copse and mentions British design tropes necessary for a proper estate garden. The journal passage moves through sections of established orchards, to trout streams, poplar and cedar stands, wildflower sprays, and ultimately to swamp. The room-like compartments characterized a style preferred by the middle classes in both Britain and Canada: a class that valued liberal rules.[26]

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[24] Edwinna Von Baeyer and Pleasance Crawford, *Garden Voices: Two Centuries of Canadian Garden Writing* (Toronto: Random House of Canada, 1995) 87.

[25] As cited in Edwinna Von Baeyer and Pleasance Crawford, *Garden Voices: Two Centuries of Canadian Garden Writing* (Toronto: Random House of Canada, 1995) 89.

[26] Anne Linden Helmreich, "Contested Grounds: Garden Painting and the Invention of

In contrast to the development of Mary Gapper O'Brien's garden, the estate garden of Temple Grove, owned by the upper-middle-class McCord family, contained all of the proper social and spiritual markers of the formal garden. Whereas in Chapter 2 I examined the layout and design of Anne Ross McCord's estate garden at Temple Grove as signs of advancing society within a colonial context, I now turn to an examination of her artwork as a reflection of her estate garden. Brian Young explains that the McCord family's closest friends and frequent guests were lay leaders, bishops and chapel deans. The first Anglican bishop of Montreal, Francis Fulford (1803-1868), one of the founders of the Art Association of Montreal (1860), had unlimited access to Temple Grove for his walks and meditations.[27]

Anne Ross McCord[28] shared Bishop Fulford's keen aesthetic sense and interest in art. Her work received generous praise from botany professionals such as John William Dawson, principal of McGill University from 1855 to 1893, who once remarked that her illustrations were not only works of art, but were detailed enough to use as a teaching aid for his botany classes[29] (1851) (Figure 16).

McCord's illustrations focused on single plants, a trend in botanical art that, in Canada, and despite McCord's fondness for imported flora such as roses, often showcased "wild" flowers (usually suitable species for the garden) from specific

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National Identity in England, 1880-1914," diss., Northwestern University, 1994, 308, 316.

[27] John Irwin Cooper, "Fulford, Francis," *Dictionary of Canadian Biography*, vol. ix (Toronto: University of Toronto Press, 1966) 293.

[28] Anne Ross McCord is the matriarch of the McCord family and is not to be confused with her daughter Anne McCord.

[29] Donald Wright, "David Ross McCord's Crusade," *La Famille McCord: Une vision passionnée: The McCord Family: A Passionate Vision* (Montreal: McCord Museum of Canadian History, 1992) 89.

regions. To me, they represent an intention to transform Canadian landscape from a wilderness to a refined cultural garden. This is especially the case because McCord portrayed wildflowers from a perspective that is precise and controlled, and she also integrated imported and domestic specimens into single images from her Temple Grove garden.[30]

McCord's scientific style and artistic competence were convincing even in the face of morphological inaccuracies. For example, in *Convalaria trifolia. Orchis fimbriata. Copied from nature 18th June 1837 Temple Grove*, (Figure 17) McCord portrays two plants: the convalaria trifolia, otherwise known as a three-leafed false Solomon's seal, and the orchis fimbriata, a purple, fringed orchid flower. She illustrates the plants' anatomy with apparent accuracy, detailing each vein and cuticle in each leaf's upper epidermis. The chlorophyll shimmers in light and shadow. McCord follows the flower's natural symmetry along the stem, ready with reproductive seeds.[31] The viewer sees the plants in profile, from the back, from the front and from slightly underneath. She carefully represents the intricacies of the root systems as demonstrated by the tiny shoots growing from the main root and secondary roots. Nonetheless, although the false Solomon's seal is accurately portrayed, the leaf of the purple orchid is wildly exaggerated, being more voluminous than would ever be the case in nature or in cultivation. The leaves of most orchid varieties are narrow and tall, as is more accurately portrayed in other of McCord's paintings: *Three Wild Flowers, Trillium, Eriophorum and an Orchid*

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[30] My discussion about seeing from within the landscape is inspired by John Barrell, *The Dark Side of the Landscape: The Rural Poor in English Painting, 1730-1840* (Cambridge, New York: Cambridge University Press, 1980) 1-33.

[31] John Ruskin, "Proserpina: Study of Wayside Flowers," *Works of John Ruskin* (New York: John B. Alden, 1885) 49.

(1834-1852) (Figure 18), for example. In *Convalaria trifolia. Orchis fimbriata* the large leaves appear to be those of a plantain hosta lily rather than of an orchid, a possible suggestion that unusual exotics have eagerly rooted themselves on her rich land. Unfortunately, her records provide no insight either way. The close physical relationship of the two very different plants, combined with the exaggerated characteristics of one of them, suggests a horticulturally artificial nature: a garden, in other words (McCord titled the piece to indicate that these specimens came from "nature" at Temple Grove.)

Botanical illustration, even of plants seen singly or in pairs, that suggests the process of cultivating non-formal gardens in the Canadian landscape, was also furthered by Maria Morris Miller. Her *Indian Hemp* (discussed in Chapter 1) shows a plant that was of interest not only for its botanical value, but because it was a hardy and beautiful plant; she enhanced its aesthetic value in spite of the fact it was an out of favor, regional plant.[32] I suggest the horticultural manner in which Miller was painting was part of a general trend that would have a huge impact on Canada some fifty years later. The wild garden philosophy—a philosophy that was dedicated to the use of indigenous regional species, "spontaneous" forms of nature, and the natural, untouched character of the landscape is in accord with Maria Morris Miller's botanical approach; whatever was growing on the forest floor was aesthetically equal to the prized cultivated imports from England.

Such democracy or equal representation of plant life is perhaps most clearly visible in Miller's illustration *Twin Berry Mitchella Repens* (1853) (Figure 19). This image represents the twin berry or mitchella repens at various stages of

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[32] Anne Helmreich, *The English Garden and National Identity: The Competing Styles of Garden Design, 1870-1914* (Cambridge: Cambridge University Press, 2002) 47.

white flower and red berry, rooted in its natural habitat of moss bedding, a typical situation for these plants living on the moist forest floor. The roots of these two plants commingle below in a diffuse nutrition system and are depicted with a degree of detail that some observers might have thought inappropriate in an illustration of such a humble plant. The two plants in the picture are equal: neither overwhelms the other. This is the same harmony that Miller would have seen in the wild landscape setting. For Maria Morris Miller, her indigenous countryside of Nova Scotia was synonymous with the lush Canadian landscape garden, and every bit as engaging as the more formal gardens from European history. I consider the wild flowers painted by Maria Morris Miller "old-fashioned" in the sense that they were flowers that would eventually be appropriated for the cottage garden and its subsequent art.

* * *

The idealized wild garden championed by William Robinson—a garden implied, as I have argued in illustrations by Anne Ross McCord and Maria Morris Miller—ran concomitantly with the idealizing vision of rural cottage life—a life also desired by the middle and upper-middle classes. The cottage garden is distinct from Robinson's wild garden mostly for its smaller scale and its charm. Anne Helmreich, author of *The English Garden and National Identity* (2002), explains that the country cottage was more than a quaint style of architecture: "The preservation, or 'invention,' of the cottage ideal became a pressing issue for the turn-of-the-[twentieth]-century English culture because at the same time the cottage and its garden were idealized, they were elevated as icons of national identity." The myth of the cottage structure is fraught with conflicting realities: it

can be anything from a cramped, ruinous hovel, leased by agricultural laborers, to a substantial home, crafted by specialized tradesmen and decorated with fashionable accoutrements.[33] But, the myth of the cottage structure in England, came to signify the "pre-industrial," or "pre-urban" past of plentitude and fecundity.[34] It was a respite from the tumult of the industrialized town.[35] The cottage garden recalled the quiet simplicity of a lost era, when "there was, happily, always the beauty of the woods and lanes and the lovely cottage gardens in the country round London...a quiet garden with things as the great mother made them and grouped them."[36] *The Times*, for example, published an article in 1907 entitled "English Ideals of Gardening." It is a summary of the increasing national identification with old-fashioned images: "In England, the cottage garden sets the standard, whereas in other countries the standard is set by the garden of the palace or the villa. And the reason for this is that, though circumstances have made us herd together in towns, we remain at heart a country people unlike the French or the Italians, and more even than the Germans."[37] The article describes further that the cottage garden equalizes rural life, in which the poor man cannot hope to compete with the palace garden or its architecture, but where he can proudly create an English cottage garden in which he grows plants for himself:

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[33] Ibid., 68.
[34] Ibid., 72.
[35] Anne Linden Helmreich, "Contested Grounds: Garden Painting and the Invention of National Identity in England, 1880-1914," diss., Northwestern University, 1994, 275.
[36] William Robinson, *The English Flower Garden and Home Grounds: Design and Arrangement Shown by Existing Examples of Gardens in Great Britain and Ireland by a Description of the Plants, Shrubs and Trees for the Open-air Garden and their Culture*, 10th ed. (London: J. Murray, 1906) viii.
[37] "English Ideals of Gardening," *The Times*, Nov. 16, 1907: 3, and Anne Helmreich, *The English Garden and National Identity: The Competing Styles of Garden Design, 1870-1914* (Cambridge: Cambridge University Press, 2002) 67.

something the rich must hire a gardener to do.[38] "The flowery cottage garden," as Helmreich explains, "functioned as an 'invented tradition,' to borrow Eric Hobsbawm's phrase. It represented what Englanders were in their minds—domestic, home-loving, and in touch with nature—if not in practice."[39]

In English Canada, where the middle and upper classes often looked to Britain for their cultural cues, the desire to enhance the aesthetic both of the wild garden and then of the cottage garden was predictably strong. In Canada, the cottage garden was ideal for the late nineteenth-century settler and colonist because it presented itself as the garden of democracy, easily created by anyone from any station. This suited the ethos in North America as it was especially exemplified by the United States but, in Canada, was blended with deference to British culture. In colonial Canada it was impractical to try to emulate formal gardens of palaces or villas because of the harsh landscape and underdeveloped commerce; however, the "old-fashioned" cottage garden was applicable across Canadian regions and climates. Wild and cottage gardens were appealing for Canadian horticulturalists because the landscape was abundant with a variety of uncultivated native plants. The key to a successful wild or cottage garden was the appearance of naturalized plant life that required very little care. Helmreich explains that Robinson delighted in the notion of other countries adopting his ideas.[40] However, with possibly a few exceptions, the well-established English wild and/or cottage garden far surpassed Canadian versions; horticultural practice was far more advanced in England than in her colonies.

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[38] "English Ideals of Gardening," *The Times*, Nov. 16, 1907: 3.
[39] Anne Helmreich, *The English Garden and National Identity: The Competing Styles of Garden Design, 1870-1914* (Cambridge: Cambridge University Press, 2002) 73.
[40] Ibid., 61.

Except for a few physical and character differences, the garden art produced by Mary Ella Williams Dignam (1860-1938) and Mary Hiester Reid (1854-1921) closely resembles the idealism of the British cottage garden. The Canadian art is similar to the English in that it harkens back to old-fashioned, pre-industrial Canada, and the sentimental charm of plants. For Dignam and Reid as well as other Canadian artists such as Anne Langton (1804-1894), John Ruskin's spiritual approach must have struck a chord. He wrote: "Any work of art which represents, not a material object, but the mental conception of a material object, is in the primary sense of the word ideal; that is to say, it represents an idea, and not a thing."[41] Painting garden scenes depended on, as Ruskin put it, painting Nature as she really was, "but directing the eyes and thoughts to what [was] most perfect in her"[42] With his evocation of religion and nature continuously linked, Ruskin greatly influenced perspectives on nature, and rebuked scientific botany's nomenclature and exclusionary practices.[43]

Artist Mary Ella Williams Dignam, a noted painter of landscapes (among other subjects), was equally outspoken about her philosophical positions on art and national character.[44] She was a teacher and art promoter who began her art instruction with Paul Peel in London (Ontario) and went on to study in London

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[41] John Ruskin, *The True and the Beautiful in Nature, Art, Morals, and Religion* (New York: J. Wiley, 1887) 34.
[42] Ibid., 216.
[43] Anne Secord, "Botany on a Plate: Pleasure and the Power of Pictures in Promoting Early Nineteenth-Century Scientific Knowledge," *Isis*, 93 (2002): 33.
[44] "Mary Dignam, "Canadian Artists, Declares All Art is National, All Artists Mathematicians," Art Gallery of Ontario vertical file.

(England) and Paris and later in Italy and Holland.[45] She is best known for her contributions to societies and associations that supported women's efforts to gain recognition as painters equal to the recognition accorded to men. She founded the Women's Art Club in 1886 with twenty members and in 1892 incorporated it under the name of Women's Art Association of Canada.[46] She founded the International Society of Women Painters and Sculptors, and was also the first head of the art department at Moulton College at McMaster University.[47]

In 1893, Dignam wrote in the *McMaster University Monthly* that the great need of her era was for "intelligent and critical appreciation of art." Her article objects to the modeling of art education programs in Canada after the art school at South Kensington—a school that Dignam felt produced students who were skilled only in competing for the Prix de Rome and Prix de Paris. Very few graduates, she wrote, become original and great artists because the program only taught superficial qualities of painting for competition.[48] In light of this, she believed that the "Canadian artist [on the international stage] is considered a good technician, but he[/she] is not painting Canada."[49] Her goal was for the people of

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[45] "Canadian Women Artists: Historical Database, Dignam, Mary Ella," 8 November 2007, *Canadian Women Artists History Initiative*, Concordia University, 5 June 2008, page 1 <http://cwahi.concordia.ca/sources/artists/displayArtist.php?ID_artist=99>.

[46] "Mrs. Dignam, Toronto Art Leader, Dies in Eighty-Second Year," *Globe and Mail* (Toronto) 7 September 1938.

[47] "Canadian Women Artists: Historical Database, Dignam, Mary Ella," 8 November 2007, *Canadian Women Artists History Initiative*, Concordia University, 5 June 2008, page 1 <http://cwahi.concordia.ca/sources/artists/displayArtist.php?ID_artist=99>.

[48] Mary Dignam, "The Development of Art," *The McMaster University Monthly* (June 1893): 18.

[49] "Mary Dignam, "Canadian Artists, Declares All Art is National, All Artists Mathematicians," Art Gallery of Ontario (AGO) vertical file.

England and France to know Canada by its depictions of autumn landscapes, which she considered an expression of Canadian life at its most beautiful.[50]

In Dignam's painting *Kay's Cottage, Caledon* (undated) (Figure 20) we see a cottage garden, complete with winding paths, a garden gate, and a water well. Since this painting is undated, we cannot be certain whether it was produced in Canada or Ireland;[51] however, it is a reasonable assumption that Kay's cottage is located in Caledon, northern Ontario. There are several markers of Canada in the painting: the style of architecture; the construction materials; the specific character of the cottage garden itself; and the fact that the painting is owned by Museum London in Ontario. First, the architecture of Kay's cottage does not match the quaint English cottage architecture, which often used oak beam framing and lime-whitened brick and plaster, with weather-tile or stone on the second floor.[52] Kay's cottage is a single-floor cabin, built with wooden post, beams and logs—materials that were abundant in Canada. The high-pitched roof is typical of the Canadian style, and was designed to withstand the weight of deep snow. The roofing material is light in color, creating a square pattern that looks as if it could be wood shingles, whereas the roofing materials used in cottages of Surrey (the home of the cottage garden) were stone Horsham slabs—dark and slate colored.[53]

Another sign that this painting is Canadian is Mary Dignam's depiction of the cottage garden. It is painted in similitude to English gardens, but with a few

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[50] Ibid.

[51] "Canadian Women Artists: Historical Database, Dignam, Mary Ella," 8 November 2007, *Canadian Women Artists History Initiative*, Concordia University, 5 June 2008, page 1 <http://cwahi.concordia.ca/sources/artists/displayArtist.php?ID_artist=99>.

[52] Gertrude Jekyll, *Old West Surrey: Some Notes and Memories* (London: Longmans, Green, and Co., 1904) 1-4.

[53] Ibid., 4.

significant differences. In his garden scenes, Alfred Parsons portrays a mature scene, characterized by young and old trees at different stages of growth (1883) (Figure 21). His flowerbeds are dense with a variety of vegetation. Dignam's version of the wild garden is simpler. In the foreground is a colonized stand of a single variety of flower (possibly carnations), each stem supporting flower blossoms of pinks, salmons and whites. Along the back edge of the stand grows a small patch of golden flowers (possibly rudbeckia), and close to the house grow young sprays of what appear to be hollyhocks or foxglove. The garden is thus wild in style but lacks the maturity of Parsons's English vignettes. It appears to be a first-generation homestead, laid out in a straightforward manner: plainly cultivated yet dominated by the surrounding landscape. The painting meets its cottage garden objectives with colorful flower blossoms, manicured winding paths and a verdant setting, but the painting also reflects a "Canadian" character, one which I consider as practical, no-nonsense and hearty, with a willing disposition toward cultural refinement. *Kay's Cottage* is a Canadian adaptation of Robinson's wild garden that continues the process of claiming the Canadian land in a subtler more culturally oriented way.

Mary Hiester Reid is another artist famous her floral still lifes, landscapes and garden painting. She was born in Reading, Pennsylvania and studied design and fine arts in Philadelphia, where she met Canadian artist George Reid, whom she married in 1885. They honeymooned in Europe for four months, traveling to London, Paris, Italy and Spain, and on the couple's return to Toronto eventually settled in 1907 in a home that George designed in Wychwood Park, a pastoral

community north of Toronto.[54] The couple had no children. They traveled to England and France three more times, in 1888-1889, 1902, and 1910. Her husband remarked that even though Mary arrived in Canada as an adult, she "was devoted to Canada and only thought of herself as a Canadian artist."[55] She was a prolific painter, producing her garden scenes in Canada, Onteora, New York and only occasionally in Europe.

While traveling through Great Britain, she painted *Garden in Surrey* (1910) (Figure 22).[56] *Garden in Surrey* features a section of wild garden in the foreground, with a two-story cottage in the background, larger than that of *Kay's Cottage*. In the late nineteenth century Surrey was a relatively densely wooded area not far from London. It was where William Robinson spent much of his later career.[57] Its soil conditions were optimal and the residents had a strong exchange network for plants and design ideas.[58] It was a "landscape of hedgerow, copse, and stream where old manners and customs linger[ed]."[59] As the reputed home of England's most beautiful gardens it thus became a tourist destination.[60]

In Reid's *Garden in Surrey*, we appear to be looking from the perspective of a passerby on the road. The house appears well established but is anonymous and generic as we look up from below the embankment near the corner of the

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[54] Brian Foss, "Hiester, Mary Augusta Catharine (Reid)," 2000, *Dictionary of Canadian Biography Online*, University of Toronto/Université Laval, 5 June 2008, page 1 <http://www.biographi.ca/EN/ShowBio.asp?BioId=42327&query=reid>.

[55] Janice Anderson, "Negotiating Gendered Spaces: the Artistic Practice of Mary Hiester Reid," in Brian Foss and Janice Anderson, *Quiet Harmony: The Art of Mary Hiester Reid* (Toronto: Art Gallery of Ontario, 2000) 32.

[56] Ibid., 32.

[57] Anne Helmreich, *The English Garden and National Identity: The Competing Styles of Garden Design, 1870-1914* (Cambridge: Cambridge University Press, 2002) 50.

[58] Ibid., 62.

[59] Ibid., 51.

[60] Ibid., 78-79.

garden. The flowers seem to be at an advanced stage of self-seeding as they mingle with competitive native plants that enjoy the same soil, water and light conditions—it is a scene that is weedy and untended and appears to have been planted long ago. The color palette is not drab, but is an exhibition of reds and golden yellows, filled with varieties of dense grass, leggy trees and colorful low-growing and medium-flowering plants.

By comparison, *Perennial Border* (1915) (Figure 23) was probably painted in Canada, perhaps in the Wychwood Park area. It is a scene that shows intensely colorful sprays of lupins or perhaps delphiniums, towering over low-growing golden-yellow pansies. By nature, wild gardens must contain perennials, and Reid pointed out in the title that these plants were planted for their perennial character; i.e., their hardiness for surviving the cold winters. The scene is situated next to a cool, dense and moist stand of trees, which is why green grass grows along the footpath. The trees are bigger and denser than those of *Garden in Surrey*, and like *Kay's Cottage*, there are few varieties of plants growing in the perennial bed. William Gerdts explains that for Ruskin, "the most beautiful position in which flowers can be seen is precisely the most natural one—low flowers relieved by grass or moss, and tree flowers relieved against the sky."[61] Reid's paintings suggest that she was likely aware of Ruskin's mindset. And, like *Kay's Cottage*, they are fine examples of the Canadian adoption and adaptation of the English cottage garden.

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[61] William H. Gerdts, "The Influence of Ruskin and Pre-Raphaelitism on American Still-Life Painting," *The American Art Journal*, 1 (Autumn, 1969): 87.

Early Canadian botanical artists emphasized the individuality of cultivated and wild plants as a device to infuse cultural meaning into the garden. Anne Ross McCord and Maria Morris Miller illustrated flowers in the first half of the nineteenth century, an era that struggled to get a foothold on a landscape that probably seemed at times indomitable. For settlers in general and artists in particular, the garden and its inhabitants constituted a small-scale vision of an ideal landscape where numerous cultural meanings and expectations could be conveyed. A garden was suggestive of education, wealth, British affiliations and ambition. This chapter demonstrated that Canadian gardening was not an art of monarchies or palaces or acres of highly cultivated, manicured land. Instead I show that Canadian residents were able to balance between the formality and informality of culture, science and climate. With the indigenous plant life of the Canadian landscape, McCord and Miller as well as the hundreds of other flower illustrators painting at the same time, such as Julia Bullock-Webster (1826-1907) in the West and Agnes Fitzgibbon (1833-1913) in the East, created on a small-scale vision of a landscape that was idealized and controllable, exemplary of their respective regions and of what would become later in the nineteenth and throughout the twentieth centuries, Canadian botanical heritage. Collectively, their illustrations contributed to an artistic registry of native wild flowers and garden plants of early nineteenth-century Canada. Their artwork functioned as a record of the indigenous, Canadian landscape. Mary Ella Dignam and Mary Hiester Reid, among others, directed the eye towards British horticultural tradition and spiritual Ruskinian principles of art, while at the same time they managed to visually parse out Canadian features.

Figure 1 Maria Morris Miller. *Indian Hemp-Milk Weed.* 1840. Lithograph with watercolor on wove paper. 30.7 x 24.1 cm. National Gallery of Canada.

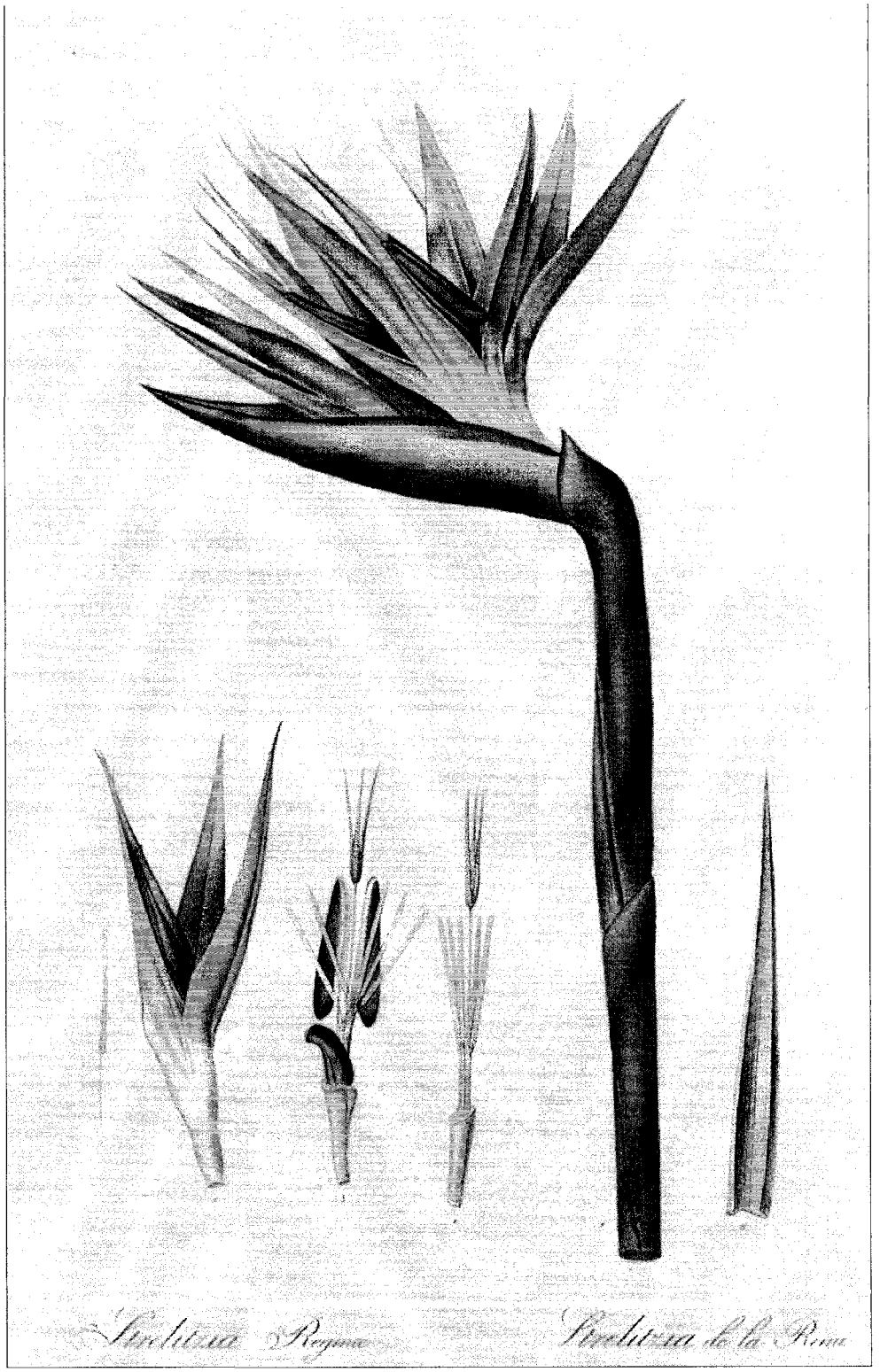

Figure 2. *Strelitzia Reginae.* Stipple engraving by Phelip-peaux, colour-printed *à la poupée* and hand-coloured, after a painting by Pierre-Joseph Redouté from *Les Liliacées,* Volume 11 (1804).

Figure 3. Anne Ross McCord. *A Moss Rose*. 1848. Coloured ink and graphite on paper mounted on board. 20.8 x 14.9 cm. McCord Museum of Canadian History.

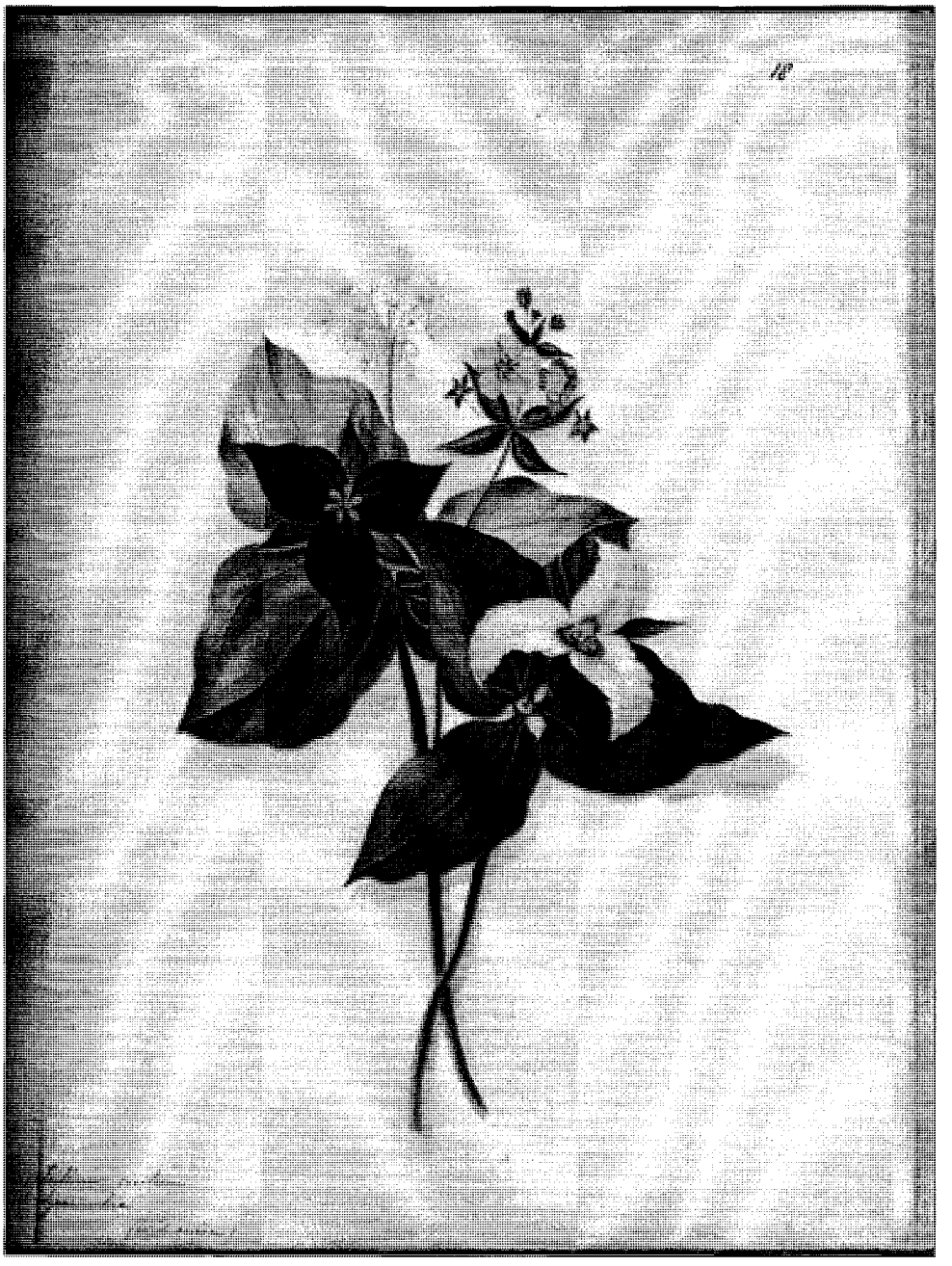

Figure 4. Fanny Amelia Bayfield Wright. *Trillium Erectum, Lysimachia, (Wild Onion).* c. 1831-1850. Watercolour with gum arabic over pencil on wove paper. 37.9 x 29.5 cm. Library and Archives Canada.

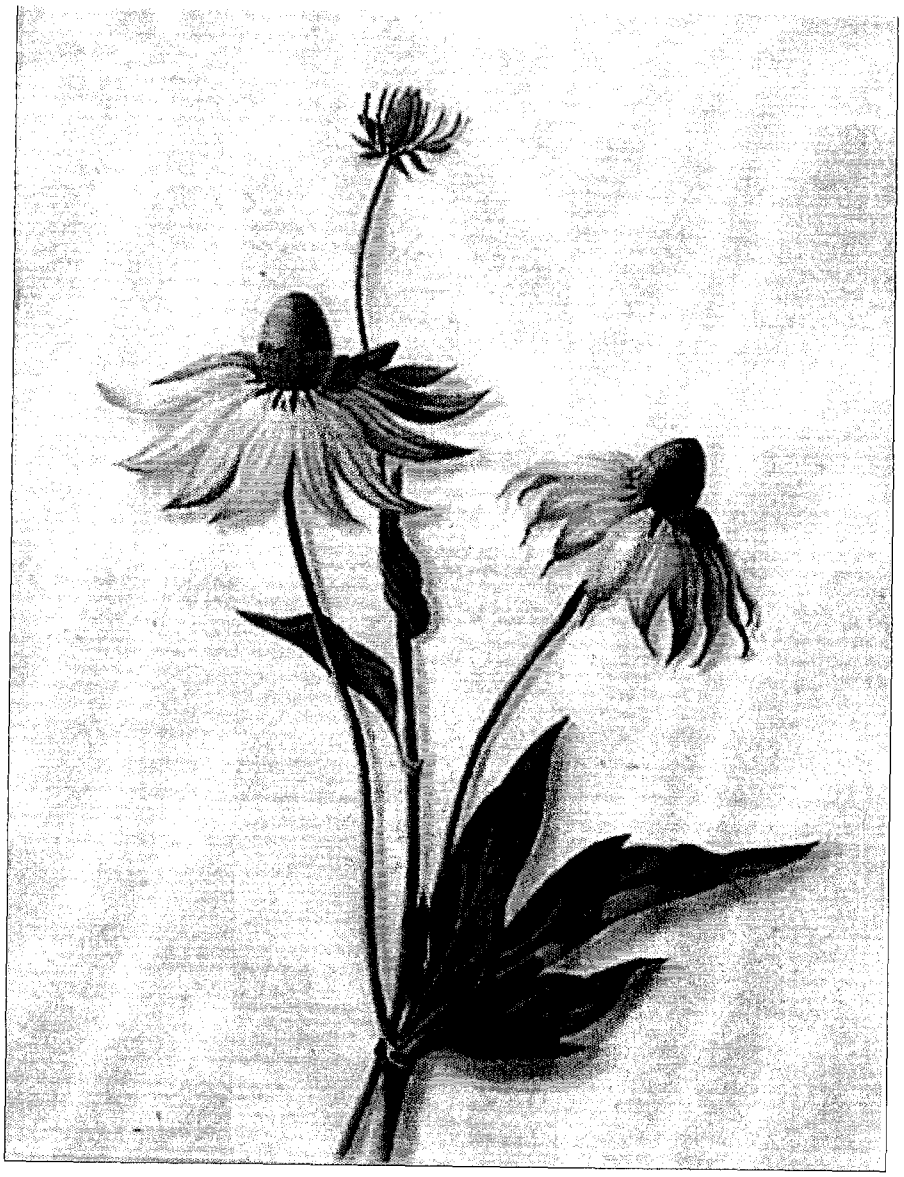

Figure 5. Fanny Amelia Bayfield Wright. *Rudbeckia*. c. 1831-1850. Watercolour with gum arabic over pencil on wove paper. 37.8 x 27.6 cm. Library and Archives Canada.

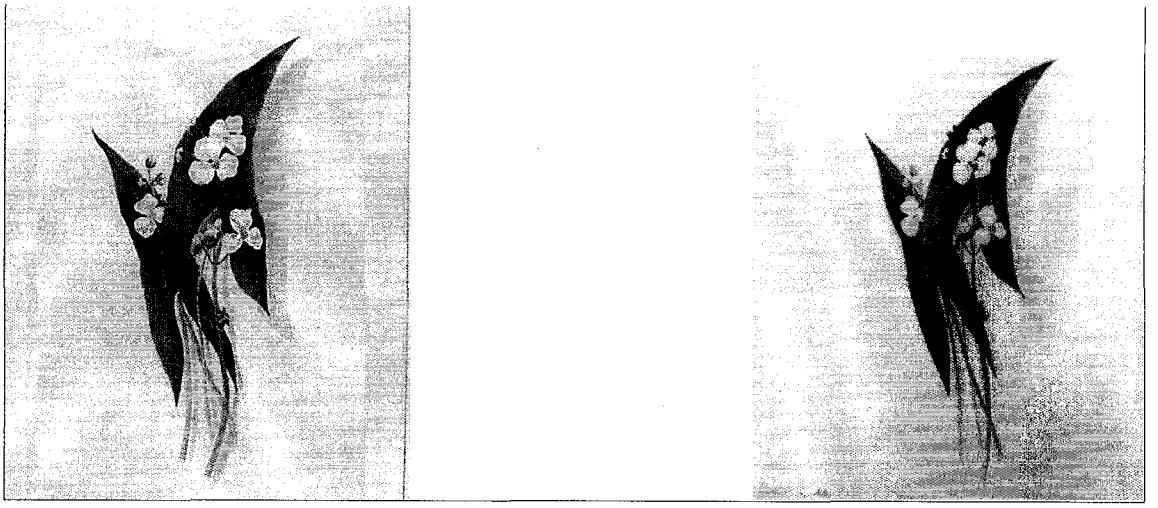

Figure 6. Left. Mary Millicent Chaplin. *Sagittaria Sagittata*. c. 1841. Watercolour. 35.5 x 25.1 cm. Library and Archives Canada, Acc. No. 1997-365-3.
Right. Fanny Amelia Bayfield Wright. *Saggitaria Saggitata*. ca 1831-1850. watercolour: watercolour over pencil with gum arabic on wove paper. Library and Archives Canada, Acc. No. 1963-103-8.

Figure 7. James Duncan. *City of Montreal from the Mountain. Before 1854.* Watercolour, graphite and gouache on paper. 45.1 x 63.5 cm. McCord Museum of Canadian History.

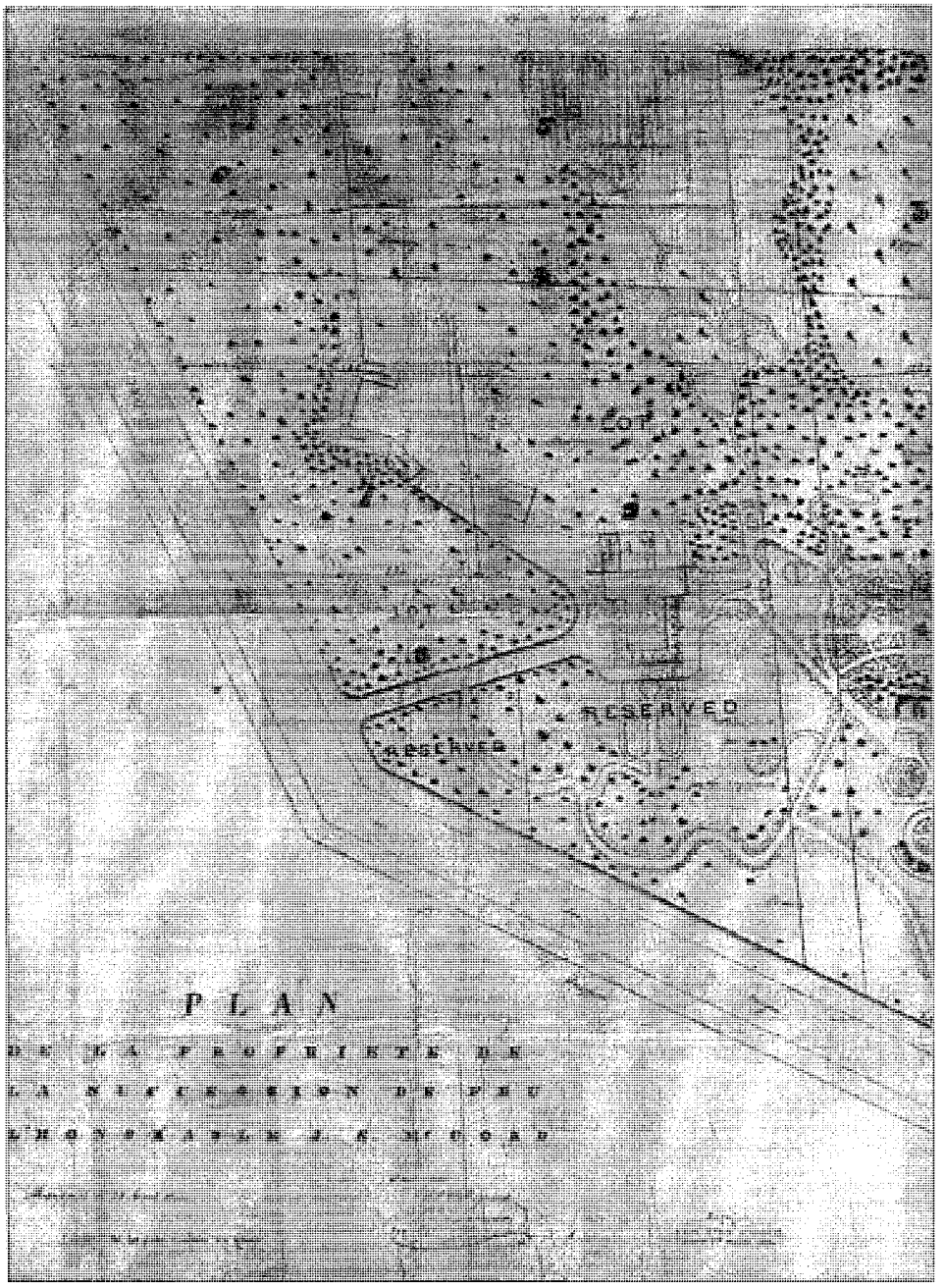

Figure 8. Regnaud. "Plan de la Propriete de la Succession de Feu L'Honorable J.R. McCord." 1866. Ink on paper. McCord Museum of Canadian History Archives.

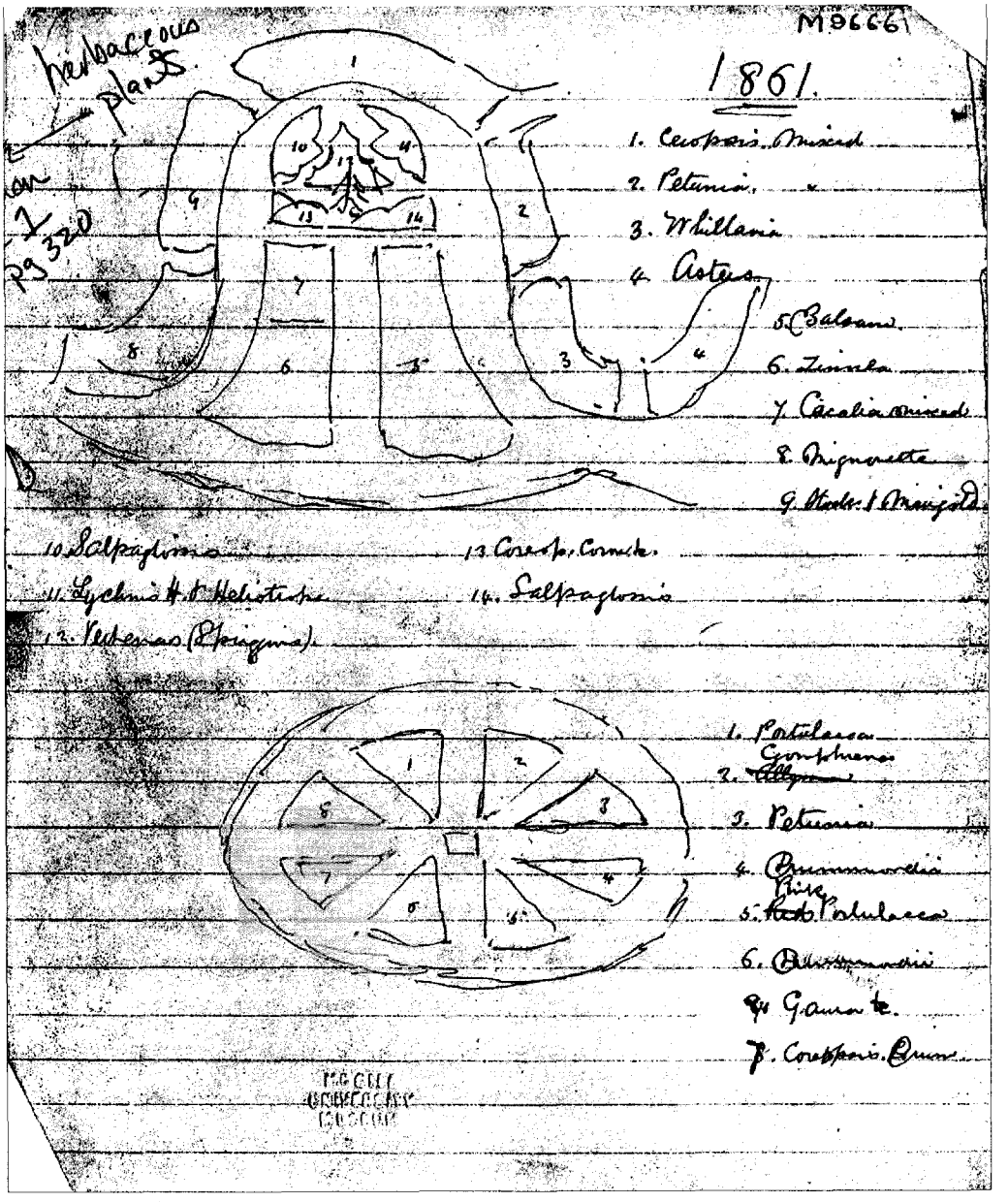

Figure 9. Untitled. (Drawing of Garden Beds). 1861. Ink on Paper. 23 x 19.4 cm. McCord Museum of Canadian History Archives.

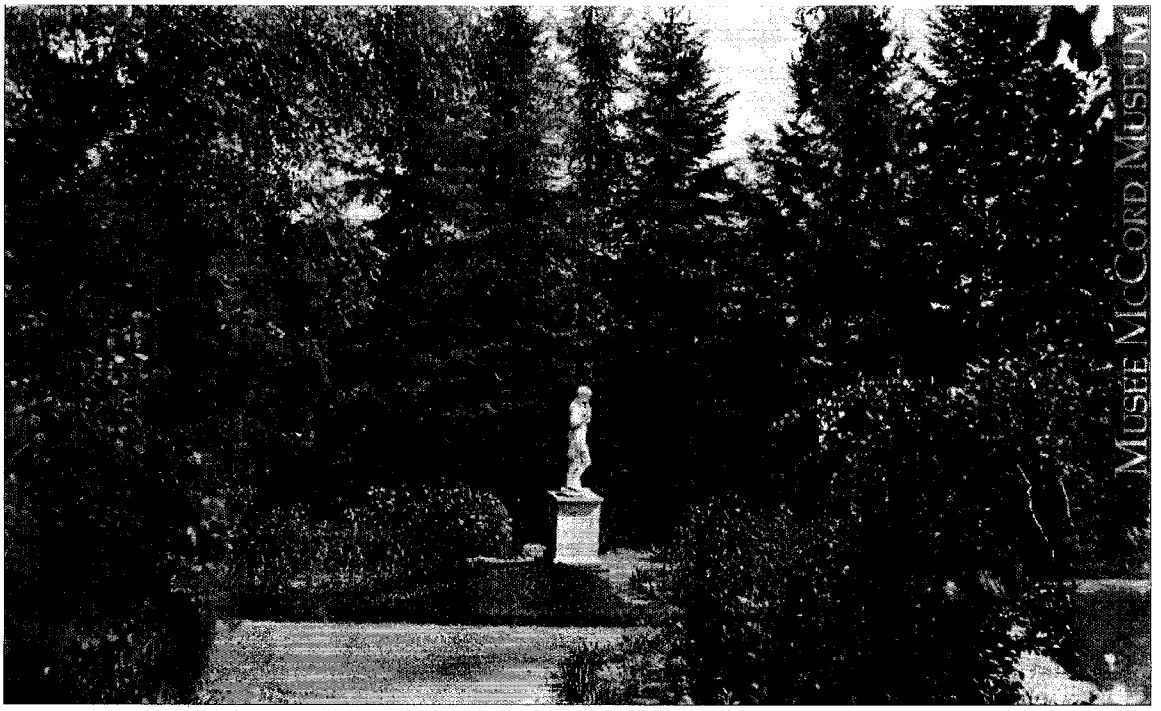

Figure 10. Alexander Henderson. *Statuary in David Ross McCord's garden, "Temple Grove," Cote des Neiges, Montreal, QC.* 1872. Photograph. 11.5 x 19.2 cm. McCord Museum of Canadian History.

Figure 11. Alexander Henderson. *Temple Grove, The Croquet Lawn, Montreal, QC.* Undated. Wet Collodion on Glass Negative. 12.2 x 20.3 cm. McCord Museum of Canadian History.

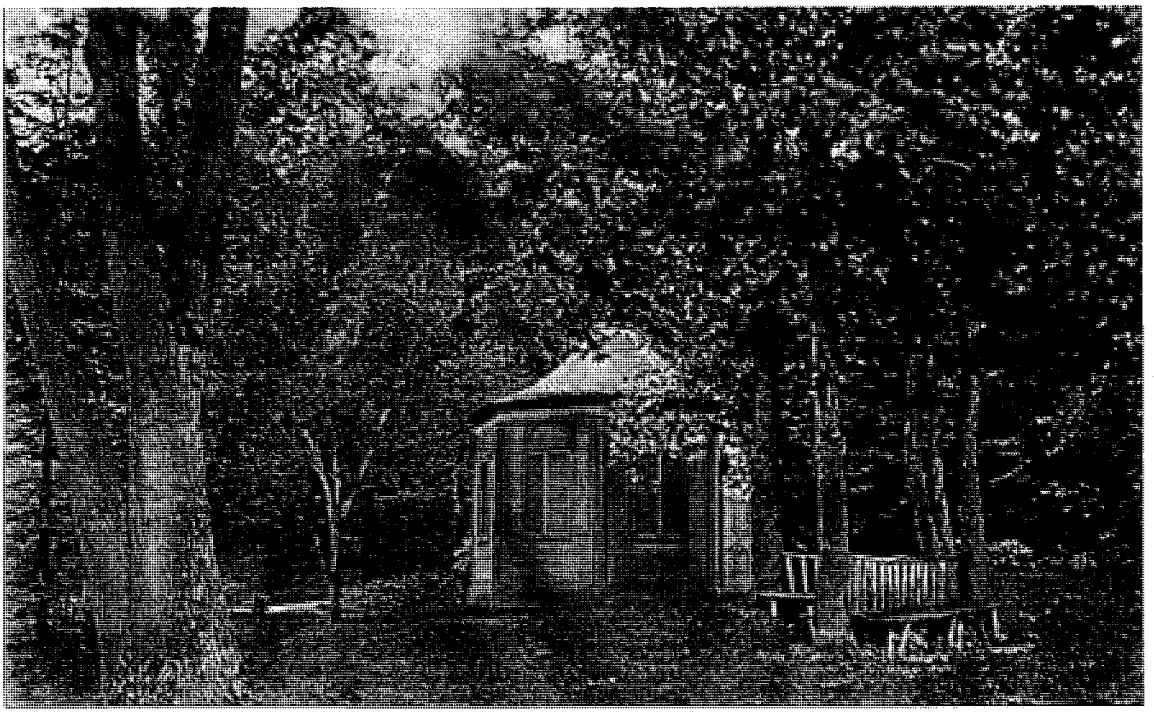

Figure 12. Alexander Henderson. *Temple Grove, Montreal, The Summer House.* Wet Collodion on Glass Negative. 12.8 x 20.5 cm. McCord Museum of Canadian History.

Figure 13. *Trellis of Flowers at Trentham Hall*, from E. Adveno Brooke, *The Garden of England* (London, 1857).

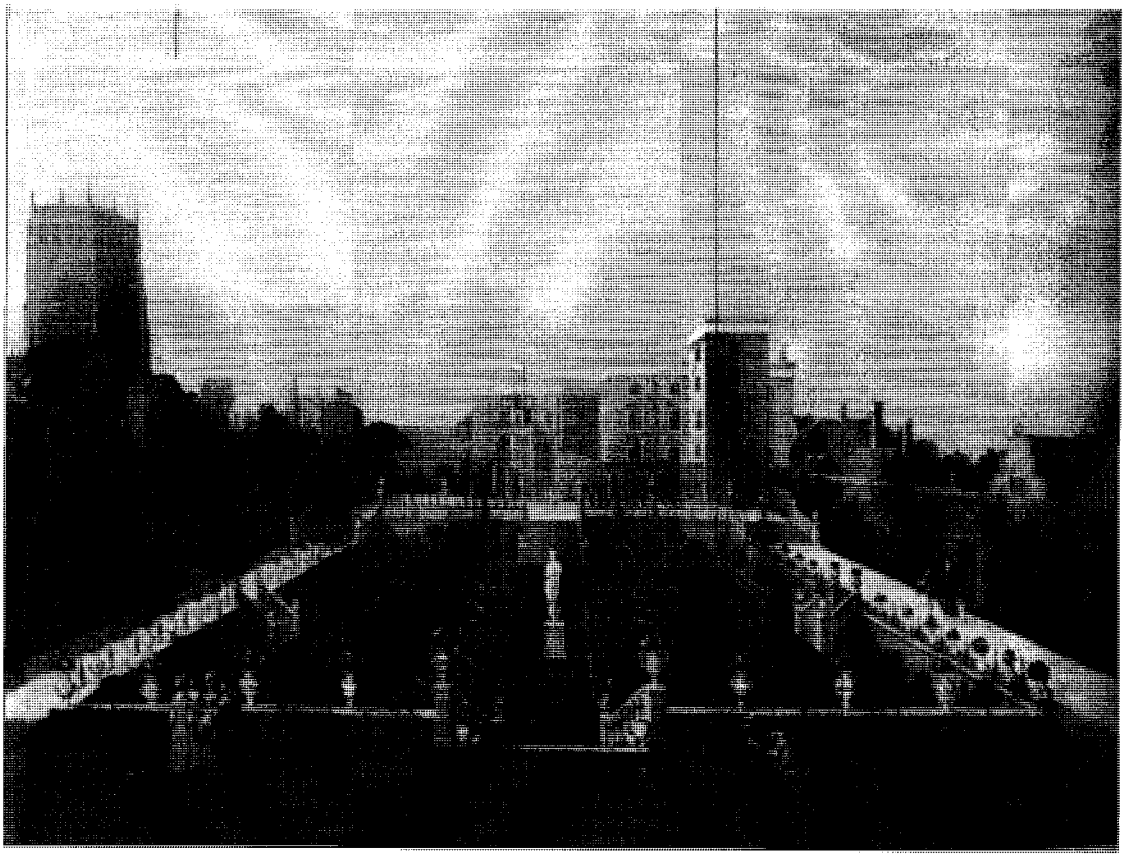

Figure 14. *Pierrepont House at Nottingham [English School].* c. 1710. New Haven, Yale Center for British Art, Paul Mellon Collection.

Figure 15. Alfred Parsons. *Monkshood, naturalized.* c. 1870. From William Robinson's The *Wild Garden or the Naturalization and Natural Grouping of Hardy Exotic Plants* (Great Britain, 1870).

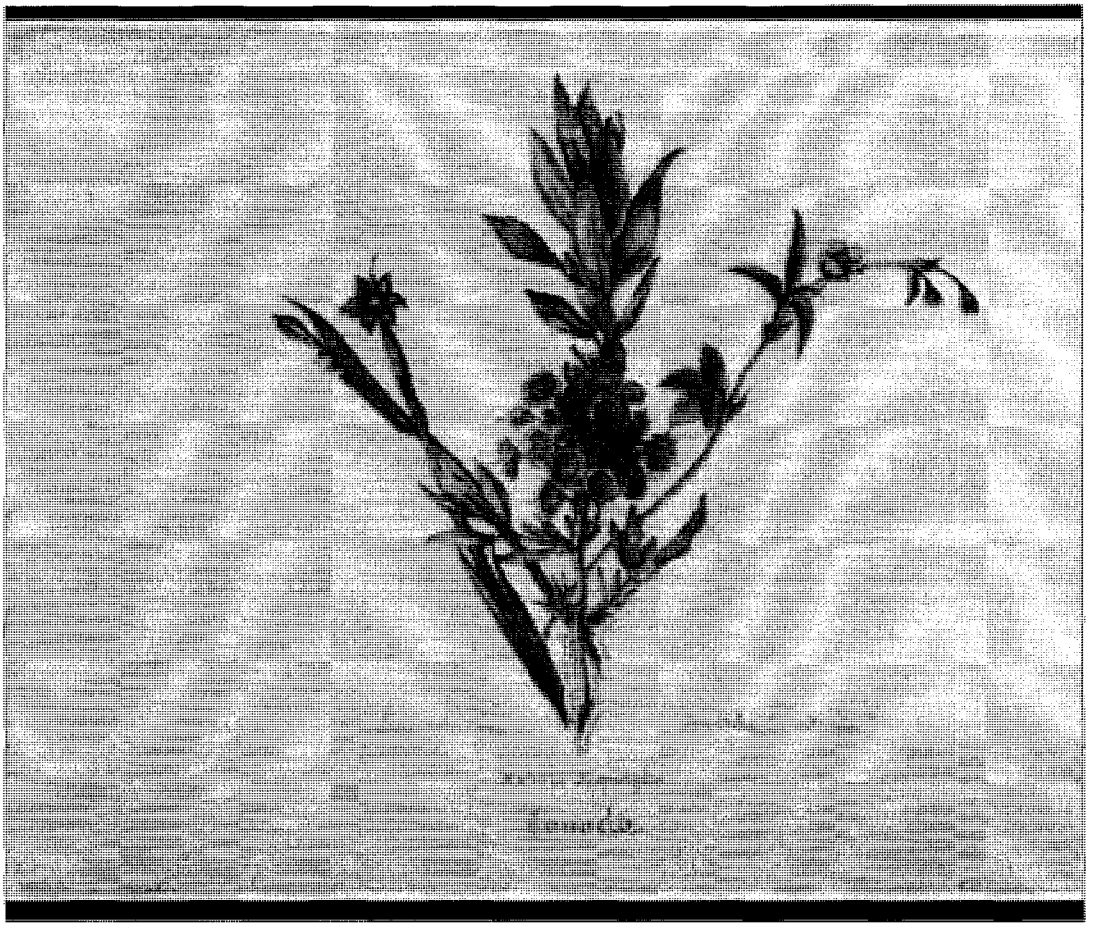

Figure 16. Anne Ross McCord. *Lisyrinchium. Potentilla Canadensis. Kalmia Angustifolia Canada*. 1851. 20.0 x 26.7 cm. McCord Museum of Canadian History.

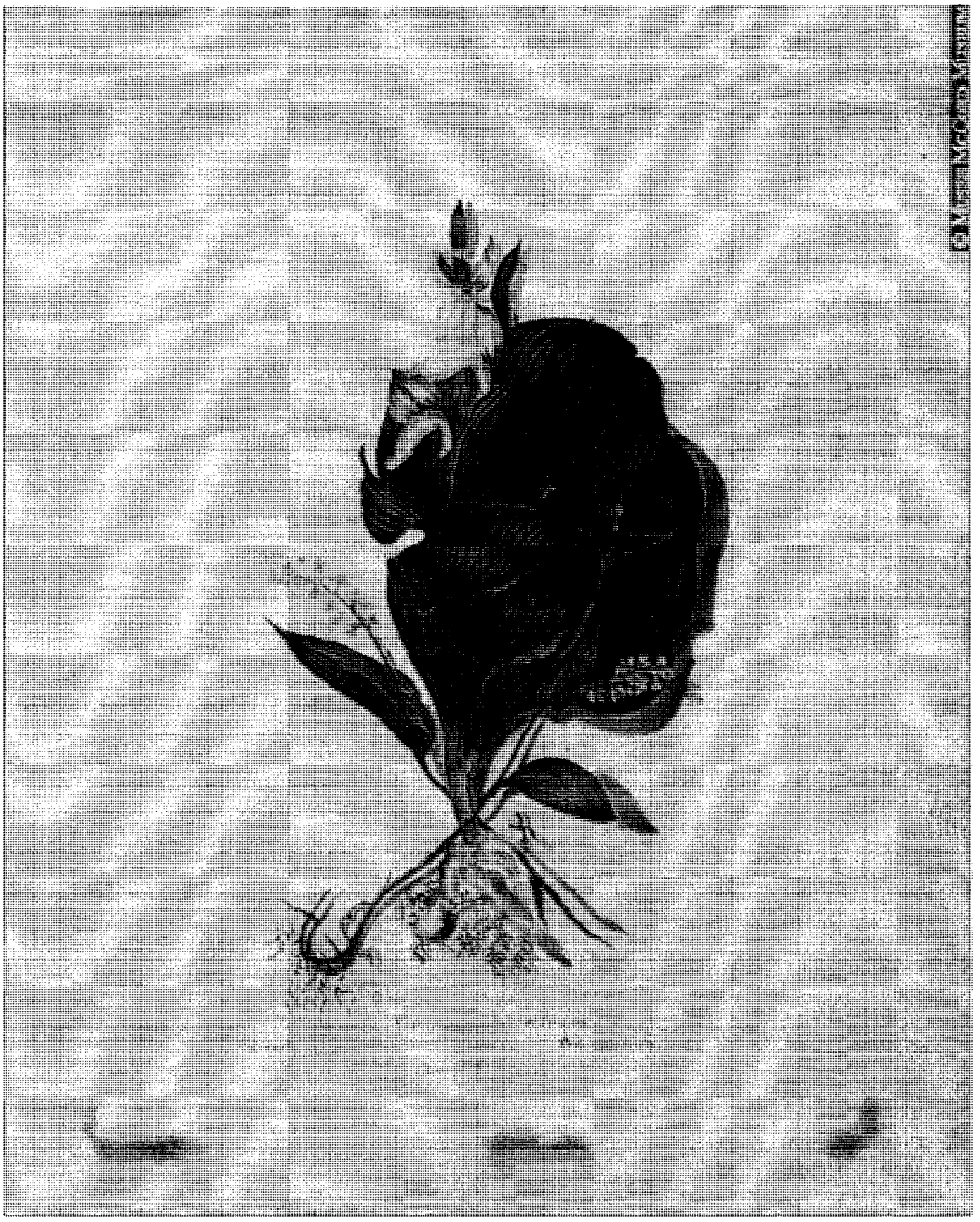

Figure 17. Anne Ross McCord. *Convalaria trifolia. Orchis fimbriata.* Copied from nature 18th June 1837 Temple Grove. 1837. 27.7 x 22.7 cm. McCord Museum of Canadian History.

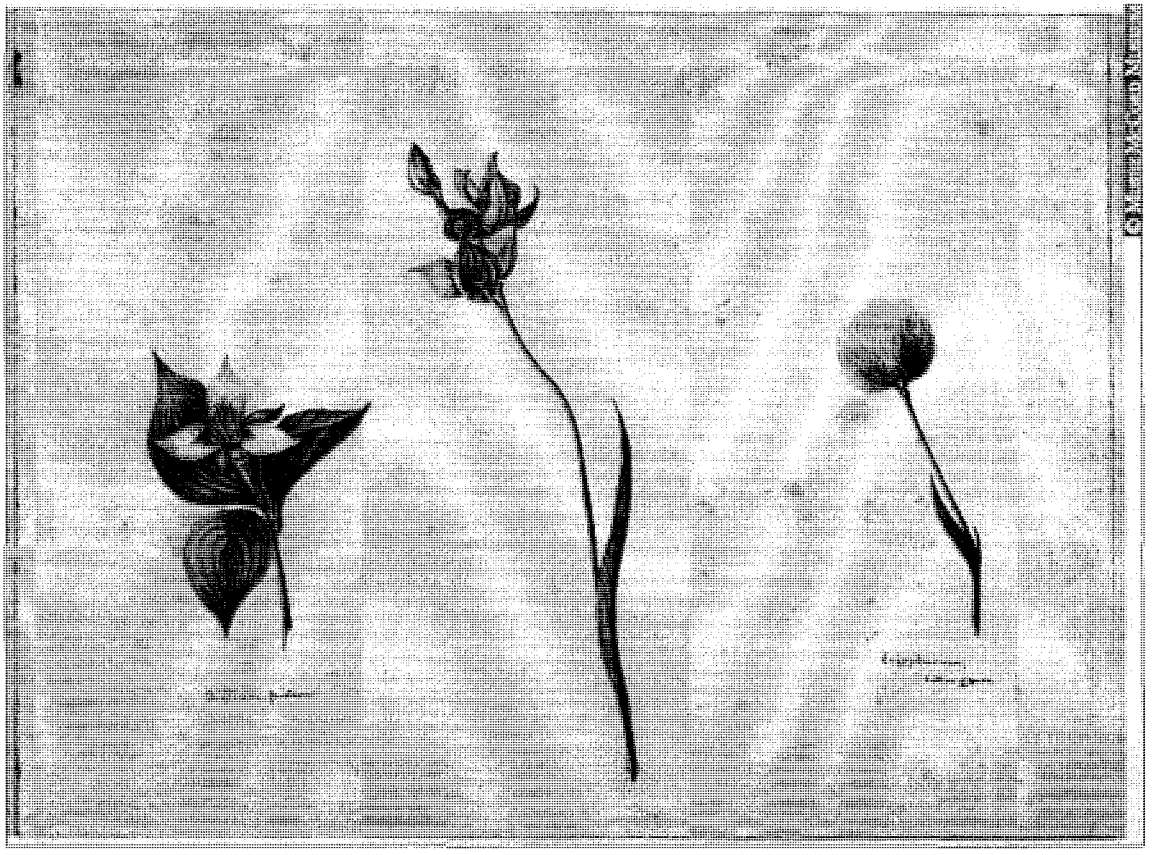

Figure 18. Anne Ross McCord. *Three Wild Flowers, Trillium, Eriophorum and an Orchid*. 1834-1852. 21.6 x 29.2 cm. McCord Museum of Canadian History.

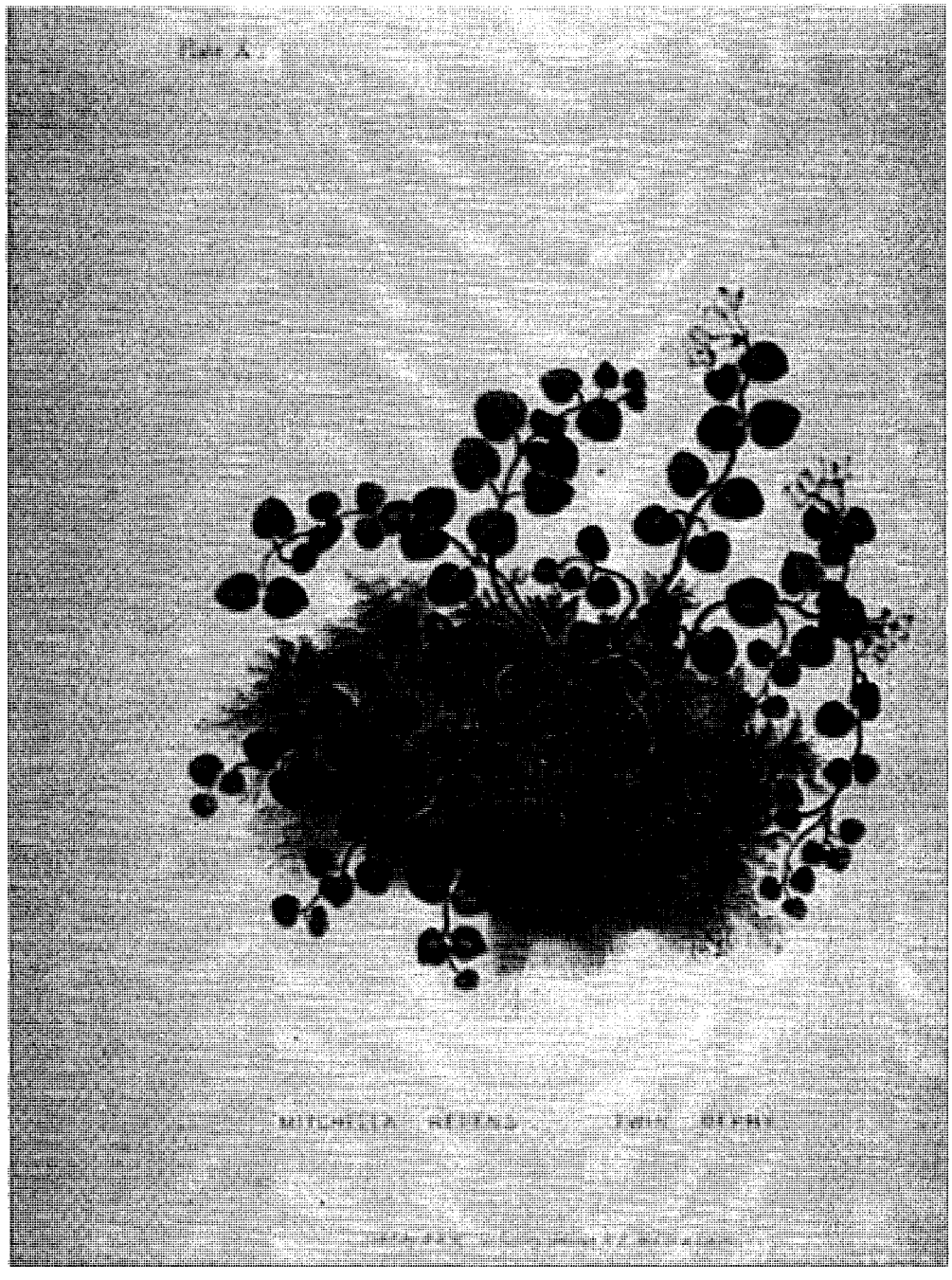

Figure 19. Maria Morris Miller. *Mitchella Repens Twin Berry.* 1853. 30.7 x 24.6 cm. National Gallery of Canada.

Figure 20. Mary Ella Dignam. *Kay's Cottage, Caledon.* Undated. Oil on canvas. 38.1 x 61 cm. Museum London, Ontario.

Figure 21. Alfred Parsons. *Cawdor, showing effect of garden with natural forms*. c. 1883. From William Robinson's *The English Flower Garden and Home Grounds*. (London, 1883).

Figure 22. Mary Hiester Reid. *Garden in Surrey*. c. 1910. Graphite and coloured chalks on brown wove paper. 35.5 x 25.4 cm. Private collection, Calgary.

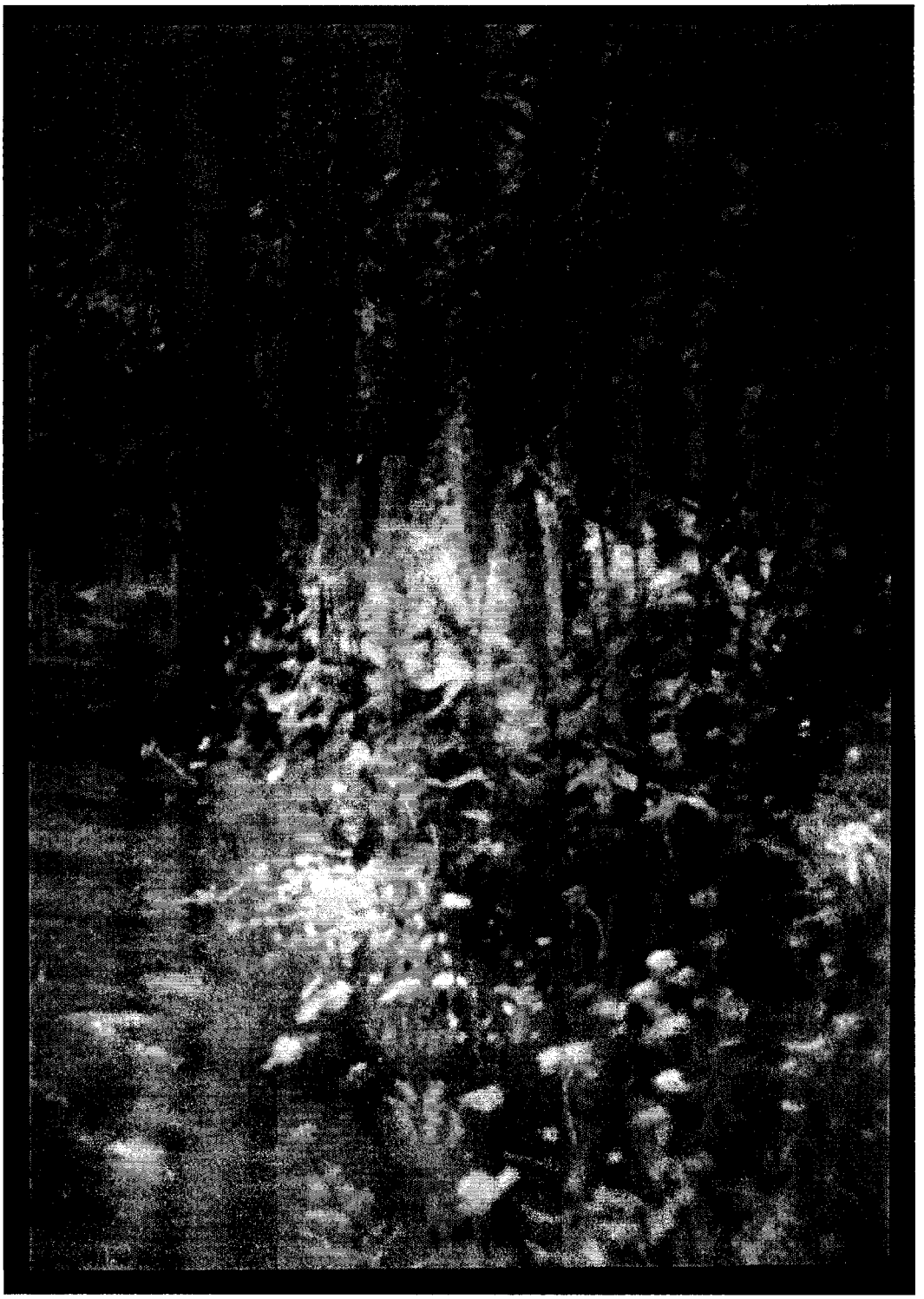

Figure 23. Mary Hiester Reid. *Perennial Border*. c. 1915. Pastel. Private Collection.

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