

Ideal Citizens, Better Workers:
National Cash Register Company's Garden Programmes
and Factory Tourism (1897–1913)

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Abstract

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Sara Nicole England

Public concerns about the degrading effects of industrial labour on workers' moral and physical development in the 1880s led some American factories to institute garden programmes for their workers. Companies undertaking various forms of welfare work, including the provision of gardens and recreational spaces for employees, initiated factory tours for a curious, mostly middle-class, public to witness the "human side" of industrial relations.

National Cash Register Company (NCR) in Dayton, Ohio was among the first to form a large-scale tourist programme to showcase its most recognized form of welfare work: the comprehensive garden programmes for employees, nearby residents, and children. NCR's factory tour and garden programmes (organized into three components: landscape gardening, children's gardens, specifically the Boys' Gardens, and the civic garden campaign) form the subject of this thesis. Employing the concept of the "exhibitionary complex" to factory tourism, the author contextualizes NCR's factory tour within a broader cultural practice of exposition visits in which the middle class exercised their cultural and moral authority by regulating the working class.

This thesis argues NCR's garden programmes were prescribed to working-class subjects to raise more productive and loyal workers and valued citizens while, at the same time, imparting middle-class virtues about the "respectable family" and suburban home. Gardens and tourism, together, formed a managerial strategy for controlling workers and residents. By focusing on the civic gardening campaign and the children's gardens on the factory's grounds, the author examines the gendered involvement of women and boys in NCR's garden programmes.

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Introduction

In the 1890s, American factories began to open their doors to the public by offering guided tours of their facilities and day-to-day activities to a curious public. The factory tour enabled the public to negotiate social identities and confront changes resulting from mechanized production through direct observation of working bodies and whirling machines. For the company, tours were a means to shape corporate identity and refute criticisms about factory conditions and their effects on women and children, in particular.¹ If “fright and shock were the by-products of the industrial era,” tours aimed to alleviate the tensions associated with industrialism by recuperating the image of the factory.² Tours of production facilities, grounds, and even workers’ residences served as a form of rational recreation for urban vacationers and provided educational and business opportunities for industrial experts, reformers, civic leaders, public figures, and educators, who were among the population of upper- and middle-class factory tourists.³

Because factory tours were a means to improve public relations and company image, the conditions of factories which provided tours were an exception to the conditions of labour in most factories in America at the time.⁴ Working conditions for the majority of wage earners were slow to change despite new legislation. Factory tours emphasized the positive relationship between the physical environment and the moral, physical, and spiritual well-being of workers. Workers’ amenities and the aesthetic attributes of the factory led factory tourists to believe that employees benefitted from their labour and surroundings. One historian estimated that nearly two thousand American companies experimented with some form of welfare work between 1898 and 1917, but the most recognized and extensive welfare programme at the turn of the twentieth

¹ William Littmann, “The Production of Goodwill: Origins and the Development of Factory Tours in America,” *Perspectives in Vernacular Architecture* 9 (2003): 72. In this study, Littmann writes that factory tours included tours of the “well-maintained residential quarters of the operatives” to “quell reservations about the presence of women in the industrial landscape.” See Littmann, 73.

² Barbara Young Welke quoted in Vanessa Meilke Schulman, *Work Sights: The Visual Culture of Industry in Nineteenth-Century America* (Amherst and Boston: University of Massachusetts Press, 2015), 22.

³ Cindy Aron, *Working at Play: A History of Vacations in the United States* (New York: Oxford University Press, 1999).

⁴ Melvyn Dubofsky and Foster Rhea Dulles, *Labor in America: A History, Eighth Edition* (Wheeling: Harlan Davidson, Inc., 2010), 167.

century was undertaken by the prominent welfare capitalist John H. Patterson at National Cash Register Company (NCR) in the suburbs of Dayton, Ohio.⁵ Along with The H.J. Heinz Company of Pittsburgh, Pennsylvania, NCR was the first factory to form a large-scale tourist programme.⁶

National Cash Register Company manufactured and sold cash registers. Patterson bought out his fellow investors at the National Manufacturing Company in 1884 and formed NCR. Soon after, Patterson moved the factory from its location in downtown Dayton to his family's farm estate on the fringes of the city. There, he grew his workforce from thirteen employees to nearly 2,500 (500 of which were women) in 1900.⁷ The company increased the production of registers from 2,000 machines in 1885 to 15,000 in 1892.⁸ Patterson's aggressive sales tactics, development of an innovative and elaborate sales training program, and the employment of the new factory system distinguished his business from others and helped the company to grow exponentially.⁹ Patterson's ability to see the potential in the mechanical cash register, his innovative sales and marketing techniques, and his welfare work all contributed to the national recognition of the factory, but NCR was not without labour tensions.¹⁰ In fact, this welfare work emerged from a period of labour unrest at the factory. The rapid expansion of the factory and supposed favouritism of the foreman contributed to strikes, attempted arson, and the return of a large shipment of damaged cash registers, believed to be the result of worker sabotage. In response, Patterson to institute many changes to his factory in an attempt to improve labour relations and "modify the old system of authority relationships."¹¹ These changes would spur a new marketing technique: the factory tour.

⁵ Well-known muckrakers, such as Upton Sinclair and his famous indictment of factory conditions in *The Jungle* (1906) provide another view of industrialism that welfare work aimed to combat. Eileen Boris, "'A Factory As It Might Be': Art Manufacturing and the New Feudalism," *Art and Labor: Ruskin, Morris, and the Craftsman Ideal in America* (Philadelphia: Temple University Press, 1986), 153.

⁶ Littmann, "The Production of Goodwill," 73.

⁷ *NCR: 1884-1922 Era of the Cash Register II*, n.d., 15. Wright State University Special Collections and Archives, National Cash Register (NCR) Collection (MS-373), Box 2.

⁸ Daniel Nelson, "The New Factory System and the Unions: The National Cash Register Company Dispute of 1901," *Labor History* 15, no. 2 (1974): 166.

⁹ See Walter A. Friedman, "John H. Patterson and the Sales Strategy of the National Cash Register Company, 1884 to 1922," *The Business History Review* 72, no. 4 (1998): 552–84.

¹⁰ *NCR: 1884-1922 Era of the Cash Register*, n.d., 1. Wright State University Special Collections and Archives, National Cash Register (NCR) Collection (MS-373), Box 2.

¹¹ Nelson, "The New Factory System and the Unions," 166.

NCR's factory tour coincided with the development of the company's elaborate welfare programme. These early welfare initiatives included safety devices, drinking fountains, baths, lockers, and special provisions for women employees (restrooms, shorter work hours, high-back chairs, a women's dining room, and lessons in domestic science). The factory provided workspaces filled with light and air, recreation areas for men and women on the factory grounds, libraries, a kindergarten, a theatre for Patterson's regular company lectures, many activities and clubs, and an "NCR House" which served as a clubhouse and model workman's home. The factory organized a Sunday School for neighbourhood children and sponsored official clubs for women workers, mothers, and children.¹² These provisions, brought to the public's attention through the factory tour, contributed to NCR's recognition as America's model factory in the early twentieth century, a time when the rising middle-class public was navigating the ethical dimensions of modern consumption and expressed concern for the moral and physical effects of the industrial environment on the working class.¹³

In addition to the welfare programmes and amenities provided by the factory, the most popular attraction of the NCR tour and most well-regarded of welfare initiatives at NCR was the factory's numerous garden programmes, most active from the years 1897 to 1913.¹⁴ The metrics of plant production, listed below, indicate the company's devotion to plant life in and around the factory:

The landscape department of the NCR grows an average of 50,000 plants yearly for the factory alone. All flowering plants are changed every ten days. All ornamental plants are changed every 15 days. An average of 10,000 plants are used each year for decorative purposes.¹⁵

¹² Nelson, "The New Factory System and the Unions," 167.

¹³ Daniel Nelson writes, "[t]he man who carried the idea of welfare work furthest and did the most to promote its potential as a tool of management was John H. Patterson [...] his plant was the closest thing to a 'model' factory that existed in the United States." See "The New Factory System and the Unions," 165.

¹⁴ In 1913, Dayton experienced a significant flood in which the factory responded by providing aid for all Daytonians. This year marked a transitional period from private and individual focused programmes to larger civic initiatives. After 1913, gardening programmes focused on individual labour and improvement were exchanged for large-scale municipal planning programmes, including the provision of parks and pleasure drives.

¹⁵ National Cash Register Company, "Royal Elm that Graces the Vista at NCR," *The N.C.R.* February 11, 1917.

NCR organized its garden programmes into three categories: landscape gardening, children's gardens (divided by Boys' Gardens and Girls' Gardens), and a civic garden campaign. These garden programmes educated employees, neighbourhood children, and residents who lived in the ten-block radius of the factory in "scientific gardening" and landscape following NCR's aesthetic principles.¹⁶ The garden work, mostly executed by women and children, beautified the factory and neighbourhood and positioned the factory as the leader in aesthetic and cultural standards and civic affairs. Though these efforts functioned as public advertising, the motivation was not entirely for visual ends. Gardens and other "factory beautification" efforts were believed to inspire social transformation and reflected a national interest in harnessing the perceived moral and physical benefits of nature to cultivate better citizens.¹⁷ If the factory was a place hospitable to nature, it was, too, hospitable to humans, even children.

Garden theory at the time supported the belief that gardens held moral influence and civilizing effects for all members of society, but reformers placed particular emphasis on their benefits to immigrants, urban children, the poor, and working class who were considered to be lacking in the qualities gained from guided contact with nature.¹⁸ "Starting in the 1890s," landscape architecture historian Laura Lawson explains, "three types of urban garden programmes emerged—the vacant-lot cultivation association, the children's school garden, and the civic garden campaign."¹⁹ One way reformers addressed "urban congestion, immigration,

¹⁶ The "scientific gardening" taught in the Boys' Garden included knowledge about planting according to various climate conditions and topographies and lessons in raising two crops on the same ground. These methods of scientific gardening are discussed in George A. Townsend Jr. "Boys' Gardens at the National Cash Register Co.," in *American Park and Outdoor Art Association: The School Garden Papers of The Sixth Annual Meeting* 6, no. 3 (Rochester: March 1903), 29. Also see Petr Kropotkin, *Fields, Factories and Workshops: or Industry Combined with Agriculture and Brain Work with Manual Work* (New York: G.P. Putnam's Sons, 1901), an influential political text that positions scientific gardening and intensive culture (greenhouse gardening) as a means for communities to achieve self-sufficiency. The ideas developed in Kropotkin's *Fields, Factories, and Workshops* have been cited as influential to Ebenezer Howard's book *Garden Cities of To-morrow* (1898).

¹⁷ See Mark Seltzer's chapter "The Love-Master: The Anthropology of Boys" in *Bodies and Machines* (New York and London: Routledge, 1992), 149–172, for a historical analysis of the Woodcraft Movement and the national project of reasserting the natural body in machine culture vis-à-vis the body of the adolescent boy.

¹⁸ E.W. Cook, *Betterment, Individual, Social and Industrial* (New York, 1906), 25–26.

¹⁹ Laura Lawson, *City Bountiful: A Century of Community Gardening in America* (Berkeley: University of California Press, 2005), 17.

economic instability, and environmental degradation” was with urban garden programmes, which were rooted in the philosophy of environmental determinism. Gardens provided “a venue for the moral, physical, and economic development of the poor.”²⁰ Reformers tackling poor and working-class housing problems argued people could not survive where plants could not thrive. Congestion, darkness, and poor ventilation were the cause of disease and crime.²¹ Public concerns about the degrading effects of poor working environments and labour conditions on workers’ moral and physical development in the 1880s led some American factories to institute garden programmes for their workers.

The factory tourism practices and garden programmes at the NCR, together, form the subject of this thesis. Both factory tours and factory garden programmes served to resolve anxieties about the status of the natural body in machine culture. The former by providing a controlled setting in which middle-class subjects could confront the labouring body of the factory worker. After the 1880s, manufactories relocated from the centre to the outskirts of cities. Rapid changes to and scale of manufactories in the Progressive Era meant that “work inside the factory became a mystery to many Americans, a thing apart from ordinary life.”²²

Factory garden programmes proposed gardening and gardens as a means to counteract the harmful effects of industrialization and urbanization (physical deterioration, immorality, squalid conditions, unproductive recreation like gambling and drinking) by redirecting workers’ mental and physical energies. NCR’s garden programmes were prescribed to working-class subjects to raise more productive and loyal workers while, at the same time, imparting middle-class virtues about the “respectable family” and home. While garden programmes were used to address a broad range of social issues, gender, race, and class informed their organization. As part of a history of garden programmes in the United States, this case study addresses how class and gender, in particular, impacted the programme and its desired outcomes. Race factors into the garden programmes insofar as the visual material surrounding the gardens visualize white bodies. Whiteness, as part of the “ideal American body,” is presented by NCR as part of the construction of an “ideal citizen.” My analysis, however, focuses on lines of class and gender,

²⁰ Lawson, *City Bountiful*, 21.

²¹ Simon Carter, *Rise and Shine: Sunlight, Technology and Health* (Oxford and New York: Berg, 2007), 78.

²² Littmann, “The Production of Goodwill,” 74.

because there is more material from which to draw. I seek to examine the ways factory tourism and the garden programmes structured the lives of the workers, residents, and children, and formed new social contracts that were both beneficial and restrictive. What narratives did factory tourism create? What do NCR's welfare programmes add to the history of gardens in the late-nineteenth and early-twentieth-century? How did they impact the lives of the workers, the nearby residents, and the neighbourhood children?

The "Factory Garden Movement" in Britain and America from the late nineteenth-century forward consisted of a diversity of "initiatives by industrialists to provide pleasure gardens and recreation space for factory workers."²³ To this definition, I also add vegetable gardens and extend the factory garden actors to include neighbourhood residents and employee's children. Allotments for workers were provided well before the nineteenth century, particularly in Europe, but after the 1890s, workers' gardens held multiple social agendas and aimed to do more than supply food.²⁴ Helena Chance's extensive research on factory gardens has distilled some essential characteristics of factory gardens, including their role in "place-making" to give their workforce "a sense of self-worth and loyalty," their representation of the compatibility between nature and machine culture and their combined application toward social progress, and finally, the exploitation of the image of the garden as a powerful symbol of "corporate identity and public relations strategies."²⁵ Despite notable factory gardens existing elsewhere, such as at Port Sunlight, Shredded Wheat, and Spirella Corsets, The Cadbury Chocolate factory garden in Bourneville and the National Cash Register Company's gardens in the suburbs of Dayton are leading examples within the Factory Garden Movement of how gardens were mobilized—as recreational spaces, activities, and images—to improve industrial relations and manage interactions between workers, the factory, and the neighbourhood.

This thesis draws on pre-existing scholarship on NCR from a variety of disciplines. Historian Elspeth H. Brown examines the company's documentary photography of their

²³ Helena Chance, "Consulting the Genius of the Plant': Redefining Space and Place at Work in Britain and America at the turn of the 19th Century," Conference: *Design History Society* conference 2011 in Barcelona, January 2011, 1. *Research Gate*.

²⁴ Lawson, *City Bountiful*, 4.

²⁵ Chance, "Consulting the Genius of the Plant'," 3.

industrial betterment programme in “Welfare Capitalism and Documentary Photography.”²⁶ Brown argues these images served to obscure the company’s history of labour strikes and disputes. Daniel Nelson’s “The New Factory System and the Unions: The National Cash Register Company Dispute of 1901” brings to light NCR’s transition from a heavily unionized firm to its inauguration of the NCR Labor Department, the first modern personnel department in American industry.²⁷ Labour historian Eileen Boris compares NCR’s beautification programme to the aspirations of art manufacturers’ labour relations and workplaces put forward by William Morris and John Ruskin.²⁸ Apart from historians of cultural capitalism and labour, scholars of the built environment and landscape architecture have addressed NCR in studies about company towns and the school garden movement in the United States.²⁹ Chance’s numerous publications on the Factory Garden Movement in Britain and the United States, including her most recent book *The Factory in a Garden: A History of Corporate Landscapes from the Industrial to the Digital Age* (2017), have contributed a wealth of historical context and detailed archival analysis on the role of gardens in industrial history in the United States and Britain. Not least, her identification of the “Factory Garden Movement” as a term has outlined the contours and breadth of industrial garden activities and enabled me to contextualize NCR’s garden histories within a particular movement with a broad set of aims, activities, and actors. This thesis aims to build on the formative scholarship of these scholars, to whose work I am indebted.

²⁶ Elspeth H. Brown, “Welfare Capitalism and Documentary Photography: N.C.R. and the Visual Production of a Global Model Factory,” *History of Photography* 32, no. 2 (2008): 137–151.

²⁷ Nelson, “The New Factory System and the Unions,” 176.

²⁸ Eileen Boris, “‘A Factory As It Might Be’,” 139–155.

²⁹ See Margaret Crawford, *Building the Workingman’s Paradise: The Design of American Company Towns* (London and New York: Verso, 1995); Marie Warsh, “Cultivating Citizens: The Children’s School Farm in New York City, 1902–1931,” *Building and Landscapes: Journal of the Vernacular Architectural Forum* 18, no. 1 (Spring 2011): 69–89; Brian Trelstad, “Little Machines in Their Gardens: A History of School Gardens in America, 1891 to 1920,” *Landscape Journal* 16, no. 2 (Fall 1997): 161–173; Sally Gregory Kohlstedt, “‘A Better Crop of Boys and Girls’: The School Gardening Movement, 1890–1920,” *History of Education Quarterly* 48, no. 1 (February 2008): 58–93; and the scholarship of Helena Chance, whose research has addressed the NCR in multiple publications on factory gardens. See Chance, *The Factory in a Garden: A History of Corporate Landscapes from the Industrial to the Digital Age* (Manchester: Manchester University Press, 2017); “The angel in the garden suburb: Arcadian allegory in the ‘Girls’ Grounds’ at the Cadbury factory, Bournville, England, 1880–1930,” *Studies in the History of Gardens and Designed Landscapes* 27, no. 3 (2007): 197–216.

This thesis distinguishes itself in several ways. First, it puts NCR's garden histories in dialogue with the company's factory tourism and, more broadly, a history of live displays of labour (in nineteenth-century expositions and exhibits). The inclusion of factory tourism and the public fascination with labouring bodies into studies of garden programmes is integral for addressing the public display and representation of garden labour. Factory tourism brings to light the public reception of NCR's garden programmes and how gardens and tourism worked together to form a managerial strategy for controlling workers and residents. Second, this thesis centres the involvement of women and children (mainly boys) in NCR's garden programmes. In Chapters Two and Three, I focus on the children's gardens (divided into the Boys' Garden and the Girls' Garden) and the gendered activities of the civic gardening campaign in the factory neighbourhood whose involvement comprised of mainly, if not all, women. The historical material available for the study of the Boys' Garden is immensely greater than that of the Girls' Garden and has dictated my research focus. Further, the Boys' Garden—larger and more elaborate—was considered a worthier project to NCR, and one of national attention. The project of “turning boys into men” was deemed to have greater social value because of the social advantages held by white men.³⁰ This thesis attends to this gendered focus and paralleling of boys' development and the nation's future. By undertaking “history from below,” I aim to decentre the dominant historical narrative which largely accounts for Patterson's visions and leadership as opposed to the workers, children, and residents who actively participated in the various welfare programmes. In placing the lives and agency of children at the forefront, I ask how NCR's gardening programmes impacted and shaped a working-class childhood and formed new social and gendered contracts for children. For this research, Marta Gutman's assertion that “[p]hysical spaces are not a backdrop for childhood; rather, space and childhood are mutually constitutive” and Karen Sánchez-Eppler's writings on the ways adult desires and control structure childhood provide frameworks for my analysis.³¹

³⁰ “[W]hat are we going to do with [the boys]? We make men out of them.” See *Art, Nature and the Factory: An Account of a Welfare Movement, with a Few Remarks on the Art of the Landscape Gardener* (Dayton: National Cash Register Company, 1904), Special Collections, Dayton Metro Library.

³¹ Karen Sánchez-Eppler, *Dependent States: The Child's Part in Nineteenth-Century American Culture* (Chicago: University of Chicago Press, 2005), xvii.

Gardens and landscapes are historical actors, actively shaping and informing culture, not only through their physical and experiential characteristics but through the ideas expressed by these spaces and images. James Corner writes: “Landscape reshapes the world not only because of its physical and experiential characteristics but also because of its eidetic content, its capacity to contain and express ideas and so engage the mind.”³² Charles Taylor’s term “social imaginary” is useful to the study of gardens because it describes “the way ordinary people ‘imagine’ their social surroundings [...] not expressed in theoretical terms, but carried in images, stories, and legends.”³³ The social imaginary can help us to account for the multiple social agendas and significances found within gardens and garden programmes without contradiction, and attend to the ways those actively engaged with gardens perceived them. On the subject of landscapes, W.J.T. Mitchell asserts that we should ask “not just what landscape ‘is’ or ‘means’ but what it *does*, how it works as a cultural practice.”³⁴ My research practice acknowledges gardens and landscapes as agents of power by attending to the multiple ways the cultural and social construction of gardens are carried and naturalized through images, postcards, programmes, articles, and factory brochures.

Mark Seltzer has addressed the status of the body in machine culture in his book *Bodies and Machines*. Seltzer defines the “American body-machine complex” as the shifting line between the natural and the technological that “make for the vicissitudes of agency and of individual and collective and national identity in that culture.”³⁵ The American body-machine complex does not treat bodies and persons as a given but as things *made* through human-machine assemblages. The practice of “remaking” bodies in the American-body machine complex outlined by Seltzer is useful because it addresses the broader social concerns about the integrity of the body in machine culture and the desire to reinsert the natural into the industrial environment. Seltzer’s work has framed my formulation of NCR’s garden programmes as practices of “remaking bodies” into more productive workers and valued citizens.

³² James Corner, “Introduction,” 1–25, in *Contemporary Landscape Architecture*, ed. James Corner (New York: Princeton Architectural Press, 1999), 1.

³³ Charles Taylor, “Modern Social Imaginaries,” *Public Culture* 14, no. 1 (2002): 106.

³⁴ W.J.T. Mitchell, *Landscape and Power* (Chicago and London: The University of Chicago Press, 1994), 1.

³⁵ Mark Seltzer, *Bodies and Machines*, 4.

Geographer and theorist David Harvey, cultural theorist Tony Bennett, performance and Jewish Studies scholar Barbara Kirshenblatt-Gimblett inform the ways that I am thinking through the social significances of bodies. Harvey's concept of the "Body as an Accumulation Strategy" addresses how "different social processes 'produce' (both materially and representationally) radically different types of bodies."³⁶ In *Destination Culture*, Kirshenblatt-Gimblett addresses the semiotics of the body in her analysis of live exhibits, writing that bodies function as both signifier and sign. Bodies, viewed as "natural," are particularly potent signifiers of identity because they naturalize these identifications and perform an authenticating function for social differences.³⁷ I employ Bennett's concept of the exhibitionary complex, discussed in Chapter One, to articulate the visibility and maintenance of power in museum displays as it extends to the public displays of labour in factory tourism.

My analysis of how industrial tourism produces certain types of bodies through performances and representations of labour emphasises how social practices shape bodies. Displays of working bodies at the turn of the twentieth century thematize the working body within specific discourses and circulations of representations, yet the body always exceeds and threatens the stability of these identifications by occupying multiple and contradictory positionalities. I follow Elizabeth Grosz' model of the relations between bodies and cities as mutually defining and as "assemblages or collections of parts" that are fundamentally "disunified series of systems and interconnections, a series of disparate flows, energies, events or entities, and spaces brought together or drawn apart in more or less temporary alignments."³⁸ In Grosz' model, neither place nor person are passive receptacles for social forces but instead, "temporary alignments" which actively make and unmake one another.

As impermanent and transitory spaces, gardens comprise of a series of temporary alignments and exist in a continuous process of making and unmaking, but they continue to persist as strong and salient metaphors and their values are treated as almost always self-evidently positive. In this regard, garden histories and their complex social dimensions risk being

³⁶ David Harvey, "The Body as Accumulation Strategy," *Environment and Planning D: Society and Space* 16 (1998): 402.

³⁷ Barbara Kirshenblatt-Gimblett, *Destination Culture: Tourism, Museums, and Heritage* (Berkeley: University of California Press, 1998).

³⁸ Elizabeth Grosz, "Bodies – Cities," ed. Beatriz Colomina, *Sexuality and Space* (New York: Princeton Architectural Press, 1992), 248.

taken for granted. This thesis lingers on these temporary alignments to examine how bodies and gardens come to figure in the early twentieth-century industrial environment. These temporary alignments are visible in the visual and cultural material of the NCR and held lasting effects in concepts of working-class childhood and civic affairs in Dayton, Ohio and the United States at-large. We cannot separate gardens' roles as symbols and metaphors from their lived engagements, but by attending to their social histories, we are able to draw out more complex narratives that run up against and bring to light the ways gardens' metaphorical values come to surface. By describing their relations and narrating their more or less fugitive traces, this thesis is an exercise in examining gardens as they exist *simultaneously* as image, action, and place.

Chapter 1: From Industrial Expositions to NCR's Factory Tour: Middle-class Recreation and Cultural Authority

The first glimpse he has of the factory is across an immense stretch of level, green lawn, as immaculately kept as the grounds of a gentleman's country estate. [...] Shrubbery, laid out in accordance with the most advanced ideas of landscape gardening, sets off the beauty of the wide lawn.³⁹

Landscaping and gardens were central to NCR's tourist programme and image as a model factory because they appealed to middle-class sensibilities about nature. The visitor's first impression of the factory is the "Factory Vista," described in this written account of NCR's factory tour and the subject of the company's postcards and photographs (fig. 1 and fig. 2). These supposed impressions of the factory tourist, recorded in the company's brochure, often revelled in the beauty of the factory's landscaping: "the visitor is impressed by the simple dignity and beauty of the factory in its setting of lawns, trees and shrubberies."⁴⁰ Images and lectures further dictated visitors' impressions. After a guide escorted visitors to the Historical Room, where models of early registers were displayed, they visited the lecture room for a presentation illustrated with stereopticon and moving pictures describing NCR landscape gardening and the welfare programme. Before the supposedly "real" factory tour began, the company illustrated their positive vision of workplace conditions through an illustrated lecture. Patterson's use of visual instruction presented NCR as a "global showcase for progressive business practices."⁴¹ These controlled views of the factory, framed by hundreds of stereopticon lecture slides and the landscaped factory grounds, managed visitors' experiences of the factory. NCR published lists of distinguished visitors and their praising remarks of the factory in the company publication further reaffirmed the success of the factory tour and the factory's activities.

In 1903, NCR claimed to have hosted nearly fifty thousand visitors every year. In 1898, the year the factory initiated welfare work, the first welfare director Lena Harvey Tracy estimated the company received a total of eight thousand visitors that year and more in later

³⁹ National Cash Register Company, *A trip through the factory of the National Cash Register Co. of Dayton, Ohio, U.S.A.* (Dayton, Ohio: National Cash Register Co., c. 1903), Harvard University, Collection Development Department, Widener Library, 7.

⁴⁰ *A trip through the factory*, 7.

⁴¹ Brown, "Welfare Capitalism," 137.

years.⁴² The growing popularity of factory tours after 1890 for Progressive Era America was a means to “come to terms with the *social and cultural transformations* caused by the rise of mechanized production and develop trust in the corporations that had come to dominate economic life.”⁴³ Factory tourism during this period enabled a curious public to witness how new aesthetic and spatial principles—informed by middle-class taste—were shaping industrial labour relations. It allowed companies to present an ideal image of themselves to the public and even extend management and surveillance of employees to visitors. As a cultural practice, factory tourism helped middle-class tourists construct and reaffirm their own class identity and consumer ethics. In this chapter, I examine how NCR’s tour impacted the middle class and reflected middle-class virtues through design principles. To do so, I address NCR’s tour within a broader context of industrial tourism practices to position factory tourism as a practice of knowledge-making and rational recreation aimed at middle-class subjects.

Progressive Era Politics

Factory tourism increased in popularity during the turn-of-the-twentieth-century in part due to the rise of reform movements in the United States. The Progressive Era, a period marked by Theodore Roosevelt’s presidency in 1901 and bookended by the United States’ involvement in the First World War, was a transformative time of political reform and social action that sought to grapple with the issues raised by industrialization, immigration, urban changes, and the relationship between the government and U.S. corporations. After years of turbulent labour strikes, this period brought significant change to industrial labour relations through private and public measures: federal and state legislation regulated working conditions for women and children while private corporations instituted policies including job-safety rules, ventilated and sanitary work environments, vacation time for employees, increased wages, and company housing.⁴⁴ In the spirit of Progressive Era reform, factory tourism provided a means of affirming harmonious relations between workers and management.

⁴² *A trip through the factory*, 3; Lena Harvey Tracy, *How My Heart Sang: The Story of Pioneer Industrial Welfare Work* (New York: Richard R. Smith, 1950), 153.

⁴³ Littmann, “The Production of Goodwill,” 72. Emphasis mine.

⁴⁴ Dubofsky and Dulles, *Labor in America*, 167.

Proof of a cooperative and mutually beneficial relationship appeared as self-evident through the employee welfare initiatives undertaken by private corporations. Reformers and corporate welfare workers held a common belief that the environment was a main factor in determining workers' characters, and corporate welfare work developed its own principles of design and architecture based in middle-class gendered aesthetics in response. Factory tours, like the ones at NCR, were focused on the impacts of factory design on the employees.

Social and Cultural Transformations in the Factory Tour

NCR's factory tours reflected the public's interest by mainly focusing on the social aspects of the factory over its technological processes. Patterson emphasised the impact of the factory environment and programmes on his employees and rarely discussed "the kind of machine made in the factory."⁴⁵ Visitors were interested in the conditions under which factory people worked.⁴⁶ This move away from a focus on the machinery differed significantly from earlier mid-nineteenth century factory-tourism articles and reviews of industrial exhibits which demonstrated a fascination with the mechanics of production and the formation of commodities. The connection between social progress and welfare work was affirmed in NCR's factory tour. Every aspect of the tour reinforced the belief that the factory's healthful environment transformed the worker.

The social and cultural transformations at NCR's factory were an exception to the conditions of labour in most factories in America at the time and working conditions for the majority of wage earners were slow to change in spite of new legislation.⁴⁷ NCR advertised its welfare programme as a model of voluntary corporate action (later known as "welfare capitalism") for other corporations to adopt. NCR economically rationalized the welfare programme to avoid the rhetoric of charity. The company's slogan "It Pays" fended off charges of paternalism and legitimized welfare work from a business perspective.

The success of the factory tour depended on visitors making a direct connection between the factory environment and the workers – a viewpoint known as environmental determinism, which linked morality and behaviour to poor living and working conditions. Industrial critics

⁴⁵ Tracy, *How My Heart Sang*, 152.

⁴⁶ Tracy, *How My Heart Sang*, 152.

⁴⁷ Dubofsky and Dulles, *Labor in America*, 167.

who declared that “the moral atmosphere of factory life is contaminated and bad,” portrayed the industrial environment as the root of social problems.⁴⁸ The factory tour presented a means to present an alternative to the “dark satanic mills,” vivid in the Victorian literary imagination in which workers were subjected to extreme and exhausting conditions. An 1881 news source, for example, described an imaginary factory as a living brute: “the hot breath of the factory [...] pours out from the open windows on all sides, accompanied by an infernal clangor—the shrieks of engines apparently in torment.”⁴⁹ In contrast, factory tours aimed to show the human side of industry by showcasing the social aspects of factory life and domesticated work environments.

Middle-class Domestication of the Factory

In addition to providing many modern amenities, NCR integrated elements of the middle-class domestic environment into the factory environment. Not only was the middle-class home viewed as morally superior, reformers argued that the home (especially of the working class) did not fulfil its function and it was up to institutions to fill the roles usually associated with family and the home.⁵⁰ NCR incorporated aspects of the “respectable family home” to raise better workers and stabilize labour relations. The middle-class family depended on more than financial security for stability. “[A]dherence to a code of ethics that valued discipline, hard work, thrift, and sobriety” added stability and contributed to its cultural influence.⁵¹ NCR’s welfare programme aimed to insert traditional family values into the factory as a business model and as a means to teach employees how to perform as not just loyal and cooperative workers but as exemplary American men, women, fathers, and (eventual) mothers.⁵² NCR mainly approached this mission through landscape gardening.

⁴⁸ John Spargo, *The Bitter Cry of the Children* (London: The Macmillan Company, 1916), 183.

⁴⁹ James Payn, “For Cash Only: Chapter 1 Cousins,” *Harper’s Weekly*, August 27, 1881, 586. See Isobel Armstrong, *Victorian Glassworlds: Glass Culture and the Imagination 1830–1880* (Oxford: Oxford University Press, 2008) and Tamara Ketabgian, *The Lives of Machines: The Industrial Imaginary in Victorian Literature and Culture* (Michigan: University of Michigan Press, 2011) for rich analysis on the connection between humans and machines in the Victorian literature.

⁵⁰ Nikki Mandell, *The Corporation as Family: The Gendering of Corporate Welfare, 1890 – 1930* (Chapel Hill: North Carolina Press, 2002), 30.

⁵¹ Mandell, *The Corporation as Family*, 51.

⁵² In the factory literature, fatherhood was rarely, if at all, discussed while the topic of motherhood was common when referring to the benefits of NCR’s amenities for young female

Created in the image of a “gentleman’s country estate,” NCR’s grounds were the setting for the sort of respectable recreation deemed appropriate by the middle class. Company dances were vehicles for physical fitness and to teach “middle-class standards of sexual propriety and behavior.”⁵³ Further, the prominent American landscape firm the Olmsted Brothers, who were responsible for the factory’s landscape work, believed in the civilizing effects of park leisure and aesthetic appreciation. They reflected this attitude in their design of the factory’s grounds by separating spaces of recreation from those of aesthetic appreciation and prioritizing the latter. Landscape gardening, directed mostly to women and children, was a valued form of physical fitness (as was a stroll in the park) and combined lessons of beauty and sociability.⁵⁴ The factory grounds were “the locus of employees’ recreational time” and reflected middle-class ideas about proper recreation at a time when the middle class was concerned about the “moral and political dangers” of leisure.⁵⁵ In short, NCR’s grounds were a space to articulate social aspirations but also enacted middle-class anxieties about their status in industrial society.

The women’s dining room and restrooms brought gendered aspects of middle-class comfort into the factory. The dining room was “set with white damask cloths, silver, and china. It had a piano and nooks with upholstered seats; the columns of the room were twined with artificial grape vines and flowers, and topped gaily with the flags of all nations” (fig. 3).⁵⁶ The company furnished the women’s restroom with a decorative rug, a bookcase, potted ferns resting on free-standing columns and hung pictures on the walls, which were constructed using sheets of fabric (fig. 4). These elements, along with the arrangements of rocking chairs, beds, pillows, and upholstered chairs, transported the gendered and spatial divisions of the middle-class domestic interior into the factory.

Allusions to domestic comfort served to expose the working class to the decorative tastes of the upper and middle class that they then were expected to apply to their domestic environments.⁵⁷ For NCR, the application of landscape gardening principles in employee’s

workers, who were expected to leave the factory upon marriage and become good wives and mothers.

⁵³ Mandell, *The Corporation as Family*, 61.

⁵⁴ Mandell, *The Corporation as Family*, 61.

⁵⁵ William Littmann, “Designing Obedience: The Architecture and Landscape of Welfare Capitalism, 1880-1930,” *International Labor and Working-Class History* 53 (Spring, 1998): 94.

⁵⁶ Tracy, *How My Heart Sang*, 143.

⁵⁷ Littmann, “Designing Obedience,” 89, 94.

private yards was highly encouraged and even enforced (see Chapter 3). Vicky Long, on the domestication of factory interiors in Britain, writes that the “guise of domesticity” was implemented to “facilitate management rather than to offer workers any of the physical typically associated with the concept of the domestic interior.”⁵⁸ The link between design and character bolstered a moral superiority to upper- and middle-class design that the factory tour presented as self-evident. The provision of domestic elements in the factory as a form of welfare work was primarily geared towards women employees and helped to construct an image of NCR’s female workforce as “high-class employees” (fig. 5):

The factory has drawn to itself the best element of working people in the city. Nowhere in America is there such another body of factory girls. Nine out of ten are high school graduates. They are serious-minded, well-bred, well-dressed, self-respecting, and profoundly respected.⁵⁹

On the subject of his women employees, Patterson boasted “[n]othing about the building will strike the visitor from factory communities as more noticeable than the high character of the young women employed throughout the entire building.”⁶⁰ NCR employed a relatively high number of women and took special measures to ensure the public that their femininity and reproductive health was preserved in spite of their industrial labour (fig. 6).⁶¹ Women were prescribed daily calisthenics along with advice on nutrition (fig. 7). They were also offered scientific training in household tasks and cooking, and some have reported that these cooking classes were mandatory for NCR executive’s wives.⁶² On the benefits of domestic science training at the factory, NCR stated:

⁵⁸ Vicky Long, “Industrial Homes, Domestic Factories: The Convergence of Public and Private Space in Interwar Britain,” *Journal of British Studies* 50, no. 2 (April 2011): 436.

⁵⁹ *A trip through the factory*, 23.

⁶⁰ John H. Patterson, “A Modern Factory Organization: The History of the Development of a Unique System.” *The Anglo-American Magazine* (January 1899): 41.

⁶¹ By 1905, the factory employed approximately 500 women with a total workforce of approximately 2000. National Cash Register Company, *NCR: 1884-1922 Era of the Cash Register*. n.d. Wright State University Special Collections and Archives, National Cash Register Collection (MS-373), Box 2.

⁶² Roy Wilder Johnson, *The sales strategy of John H. Patterson, founder of the National Cash Register Company* (Chicago: The Dartnell Corp. 1932), 300. A staff member of NCR’s public relations rejected this assertion. See Cynthia Noles, “Mandatory Or Not: Wives Learned Together With Patterson’s Help,” *Dayton Journal Herald*, November 16, 1962.

[domestic science] means more intelligent home-makers and a better preparation in childhood [...] it means as far as possible the perfection of human character. [...] we are teaching the young women to live as close to Nature as possible. [...] [T]o be like Nature is to be like God.⁶³

Working women posed a threat to the middle-class “respectable family” through their individual wage-earning and the supposed defeminizing effects of industrial labour.⁶⁴ Factory tours aimed to alleviate public concern by emphasizing the feminine aspects of working women and their compatibility with patriarchal values. It is also true that women workers were subjects of public unease and believed to require greater protection in the workplace. Emphasis on the presence of women in the industrial landscape was also a focus of previous factory tours. Lowell Mills toured women’s residential quarters to “quell reservations” about women wage earners.⁶⁵ The women at the factory were young and unmarried and thus did not pose a threat to the concept of the male breadwinner. Instead, the factory promised to form women workers into desirable wives by teaching them to uphold middle-class gender constructs and lessons in scientific household management and landscape gardening.

Factory Tourism as a Form of Rational Recreation

For upper- and middle-class vacationers, the factory tour served as a form of productive leisure at a time when the middle class strongly felt the moral and political dangers of idleness: “Leisure presented not only moral or political dangers but real economic risks to a middle class that operated without an economic safety net.”⁶⁶ Sociologist Dean MacCannell describes this tourist practice as a form of “alienated leisure” because it is a return to the workplace.⁶⁷ Aron describes work site visits as a means to “elide tensions produced by the idleness of vacationing.”⁶⁸

Following Thorstein Veblen’s 1899 condemnation of the “idle rich” in *The Theory of the Leisure Class*, the middle class was pressed to “avoid the leisure associated with the rich” and “the

⁶³ National Cash Register Co., “Domestic Science,” *Sunday School Bulletin*, n.d., Dayton Metro Library Special Collection.

⁶⁴ Emily Faithfull addresses charges of unfeminine labour in *Three Visits to America* (New York: Fowler & Wells Co., 1884), 342. Also see Long, “Industrial Homes, Domestic Factories,” 437.

⁶⁵ Littmann, “The Production of Goodwill,” 73.

⁶⁶ Aron, “Working at Play,” 9.

⁶⁷ Dean MacCannell, *The Tourist: A New Theory of the Leisure Class* (Berkeley: University of California Press, 2013), 57.

⁶⁸ Aron, “Working at Play,” 7–8.

disruptive tendencies of the poor.”⁶⁹ Within this context, worksites presented a form of respectable leisure for middle-class Americans.

At the same time such tourism allowed middle-class tourists to measure the gulf between themselves and those whom they observed at work, marking their difference from the working class even while affirming the centrality of work to middle-class life.⁷⁰

Work could be a form of entertainment and leisure for the middle-class because the bourgeois body was *not* a labouring body, but still, the ethics of hard work were valued by the middle class. “Work displays corrected the moral atrophy associated with bourgeois privilege,” explains cultural geographer Sarah Jaquette Ray, “[T]hey fulfilled a Puritan work ethic through bodily toil.”⁷¹ The performance of working-class labour and the experience of its dangers could connect middle-class tourists to working-class lives, but it was primarily a novel experience that sold the experience of work as a form of play and pleasure. During a visit to a mine in Virginia, for example, the visitor dug ore and felt the extreme temperatures endured by the workers, only to complete the tour with a shower and champagne.⁷² Similarly, Margaret Byington, a social worker who studied the conditions of immigrant life in the mill town Homestead wrote: “The onlooker, fascinated by the picturesqueness of it all, sees in the great dim sheds a wonderful revelation of the creative powers of man. [...] To the worker this fascination is gone: heat and grime, noise and effort are his part in the play.”⁷³ Workers on display marked a difference in classes where labour excites and entertains one class and is a daily necessity for another. Factory tourism instructed the middle-class tourist in working-class lives, but it also was useful in defining a middle-class society, particularly in the age of reform when middle-class aesthetics became a solution to social issues impacting the lower and working classes.⁷⁴

⁶⁹ Aron, “Working at Play,” 7–8.

⁷⁰ Aron, “Working at Play,” 145.

⁷¹ Sarah Jaquette Ray, *The Ecological Other: Environmental Exclusion in American Culture* (Tucson: The University of Arizona Press, 2013), 59.

⁷² Aron, *Working at Play*, 146.

⁷³ Margaret Byington, *Homestead: The Households of a Mill Town* (Pittsburgh: University of Pittsburgh Press, 1974 [1910]), 172.

⁷⁴ See Robert M. Vanderbeck, “Inner-city children, country summers: narrating American childhood and the geographies of whiteness,” *Environment and Planning A* 40 (2008): 1132–1150.

Engaging in rational recreation was a means of forming a collective self-identity for the middle class – who were the assumed leaders of the industrial economy. “The new realities of the industrial world demanded a more active and visible morality,” Joseph De Sapio observes. “Such a downtrodden and uneducated population, went the thinking of the time, required only the most responsible and morally fit leaders to guide it; and what better way to demonstrate one’s fitness than partaking in respectable and rational recreation?”⁷⁵ Factory tourism helped middle-class subjects to envision themselves as part of a new modern world where work is part of society but no longer the centre of it. Worksites, writes MacCannell, permit the tourist “to reflect upon his own condition [as an industrial subject] and *transcend* it.”⁷⁶ Everything, including work, is available as a spectacle for and consumption by the middle class.

NCR’s tour, which emphasized the moral, social, and physical benefits of the industrial environment, permitted middle-class visitors to exercise moral judgement on the quality of NCR’s social and cultural features. Patterson’s favoured method of visual instruction, employed in his lectures, was the “before-and-after” image (further discussed in Chapter 2 and 3) which depicted the neighbourhood before the factory’s garden programmes, the factory before welfare work, and their successful transformations (fig. 8a and fig. 8b). These images enabled viewers to occupy a privileged view of the organization and rationalization of the welfare work. Vanessa Meikle Schulman examines the visual techniques employed in pictorial journalism of factory processes which positioned the viewer as manager or reformer.⁷⁷ The social implications of the visual technique, highlighted by Schulman, was the imagined control wherein the viewer took on a managerial position, and labour hierarchies are extended into the broader social realm. While Schulman examines different visual techniques, the before-and-after method also enabled visual access, taught viewers to think like reformers, and allied the viewer with the factory management. Not only were middle-class NCR tourists able to see their cultural values privileged as part of the company’s business model and sold as moral correctives, they were able to perform their own cultural authority as modern tourists by turning labour into a form of

⁷⁵ Joseph De Sapio, *Modernity and meaning in Victorian London: Tourist Views of the Imperial Capital* (Basingstoke: Palgrave Macmillan, 2014), 6.

⁷⁶ Dean MacCannell, *The Tourist*, 58. Emphasis mine.

⁷⁷ Schulman, “Managing Visions of Industry: The Managerial Eye,” *Work Sights*, 155–192.

entertainment and exercising their judgement of the worker's experiences against their own middle-class ethics.

Early Forms of Factory Tourism

Before industrial tourism became routinized in factory settings at the turn of the twentieth century, industrial expositions served as the primary site for the public to witness industrial processes and bodies. Industrial expositions informed the tenets of factory tourism. It provided a model that factories with tourist practices would serve to follow, both in design and experience.

Factory tourism began in the latter half of the nineteenth century in the United States (and started several decades earlier in Britain) in the form of “factory-tourism articles” published in American newspapers like *Scientific American* and *Harper's Weekly*. The writer described their experience of the factory tour (often in the first-person plural as though the reader was part of the journey) through detailed description and illustrations depicting factory processes.⁷⁸ Factory tourism in the United States only emerged as a form of mass public leisure in the 1890s when Progressive Era values raised public concern and responsibility for the welfare of factory employees. Mass culture material such as Lewis Hine's documentary photographs of industrial labour conditions and Upton Sinclair's book *The Jungle* (1906) revealed the brutal and dehumanizing effects of industrial capitalism to a curious public increasingly separated from the sites of production due to the suburbanization of manufactories.

Importantly, factory tourism was, too, no more authentic than the industrial exhibit: it was a fictionalised and constructed encounter with the labouring body and the conditions of its labour. The display of live actors in expositions encompassed both the exhibition of industrial labour and manufacturing processes through what is referred to as “live demonstrations” and the colonial display of Indigenous and non-white peoples in “live exhibits.” These displays—both the live exhibits and live demonstrations—were frequently praised as the most popular aspects of expositions.⁷⁹ Live exhibits of non-white peoples articulated racial and cultural superiority and helped white middle-class tourists envision themselves, as Rebecca Graff writes, “as modern

⁷⁸For an excellent analysis of visual representations of factory processes in newspaper articles, see Schulman, “Managing Visions of Industry: The Managerial Eye,” *Work Sights*, 155–192.

⁷⁹ See, for example, Joshua Rose, “Watch-Making at the Centennial,” *Scientific American* 2, July, 29, 1876, 484–485, doi:10.1038/scientificamerican07291876-484supp.

subjects through touristic consumption.”⁸⁰ The display of labouring bodies and their spatial and aesthetic organization created visible hierarchies. For example, the Louisiana Purchase Exposition (1904) featured a “U.S. Indian Industrial Exhibit” divided by “pre-civilization” labour and labour “after civilization.” On one end of the building, the exhibit displayed Native arts and crafts such as Navajo blanket weaving in contrast to the other side where Indigenous girls were at work using modern laundry appliances: “[T]hey were seen engaged in thoroughly up-to-date cooking, and lastly, there was a very dainty dining room set out with its china and glass, the table and furniture of which were made by the Chilocco Indians.”⁸¹

Exhibitionary Complex

The display of objects and bodies in museum displays, world’s fairs, and expositions was an exercise of ordering and making these orders visible to the public. Tony Bennett’s concept of the “exhibitionary complex” articulates the visibility and maintenance of power in exhibits and museums. Departing from Foucault’s assertion that power remains *invisible* to the objects of power, the exhibitionary complex operates by making power visible:

Instead, through the provision of object lessons in power – the power to command and arrange things and bodies for public display – they sought to allow the people, and *en masse* rather than individually, to know rather than be known, to become the subjects rather than the objects of knowledge.⁸²

The exhibitionary complex, writes Bennet, simultaneously “[ordered] objects for public inspection and [ordered] the public that inspected.”⁸³ To be a viewing subject—and to be seen to do so—was to be on the side of power and constituted what Bennet terms “specular dominance.” The modern subject beholds the world through their gaze—not unlike the experience of the Crystal Palace which proposed a world in miniature where everyone and everything availed itself to spectacle: that is, “everyone could see, and there were also vantage points from which

⁸⁰ Rebecca Graff, “Being Toured While Digging Tourism: Excavating the Familiar at Chicago’s 1893 World’s Columbian Exposition,” *International Journal of Historical Archaeology* 15, no. 2 (June 2011): 224.

⁸¹ “The Racial Exhibit at the St. Louis Fair,” *Scientific American* 91, no. 24, December 10, 1904, 414.

⁸² Tony Bennett, “The Exhibitionary Complex,” *new formations* 4 (Spring 1988), 76.

⁸³ Bennett, “The Exhibitionary Complex,” 74.

everyone could be seen, thus combining the functions of spectacle and surveillance.”⁸⁴ The desire to make the world available and “lay it before a controlling vision” expanded access to the city where tourists and sightseers were encouraged to visit work sites like slaughterhouses, morgues, and factories.”⁸⁵ This expansion of vision was specific to the middle-class public, to whom museums and expositions chiefly appealed but, as Bennett notes, expositions served as a meeting space for working- *and* middle-class subjects for the former to be “tutored into forms of behaviour.” As training grounds for the working class, expositions provided “new instruments for the moral and cultural regulation of the working classes,” and in turn, validated the cultural and moral authority of the middle class.⁸⁶

Displays of Women’s Industrial Labour in Expositions

The paraphernalia of production was set in motion by operatives who were employed to work at the exposition. Emily Faithfull, reporting on the working conditions of women in Britain and the United States in the 1880s wrote:

Visitors to recent exhibitions have had opportunities of seeing women working at various machines, and can therefore judge in some measure without going over our factories of the effects of this labor on the physical condition of the workers. At the Crystal Palace I was watching, not very long since, some bright, specimens of Lancashire operatives, who were busily employed making that beautiful fabric, nonpareil velveteen, which even rivals the productions of the Lyons looms.⁸⁷

According to Faithfull, the live exhibits of industrial labour offered some truth to the reality of labour conditions in the factory. The physical effects of labour on the body, for Faithfull, were discernable to the viewing subject. In her visit to the United States, the popular display of a “comely maid” operating the steam engine caught Faithfull’s attention. The woman engineer operated the steam engine in the Women’s Pavilion of the 1876 Philadelphia Exposition, “amid

⁸⁴ Bennett, “The Exhibitionary Complex,” 78.

⁸⁵ Bennett, “The Exhibitionary Complex,” 79; Dean MacCannell, “The Paris Case: Origins of Alienated Leisure,” *The Tourist: A New Theory of the Leisure Class* (Berkeley: University of California Press, 2013), 57–76.

⁸⁶ Bennett, “The Exhibitionary Complex,” 86. For further research on exhibitions and cultural authority see Annie E. Coombes, “Museums and the Formation of National and Cultural Identities,” *Oxford Art Journal* 11, no. 2 (1988): 57–68.

⁸⁷ Faithfull, *Three Visits to America*, 326.

the heat, dust, smoke, and noise, preserved her neatness, and yet did all the work from starting the fire in the morning to blowing off the steam at night.”⁸⁸ This spectacular figure, widely written about in newspapers at the time, was Emma Allison, a young woman from Grimbsy, Ontario who learned to engineer from her brother. On the subject, one news source reported: “Perhaps the most interesting *object* [...] in the woman's edifice is the lady engineer.”⁸⁹ Emma Allison’s performance was an uncommon sight precisely because of gendered expectations about women’s labour and its visibility. Despite the uniqueness of her presentation, the logic of display captured her body as part of an arrangement of objects – and bodies-as-objects – posed as elements for public inspection.

A broad set of aims motivated displays of labouring women in expositions.⁹⁰ The women’s exhibit at the World’s Columbian Exposition (1893) reduced women’s industrial work to a series of charts and statistics in favour of supporting organized (read: middle-class) women’s work.⁹¹ Women organizers of both the World's Columbian Exposition (1893) and the Dutch National Exhibition of Women’s Labour (1898) faced difficulty persuading manufactories to contribute their women employees to perform as “live actors.”⁹² Some companies believed the inclusion of women employees would attract attention from consumers and encourage more women to work with them while others feared it would harm sales.⁹³ Exhibits of working women also served as “training grounds for female supervisors.”⁹⁴ The display of working women was intended to motivate visiting women to assume supervisory positions in the factory—a new realm of professional labour for white middle-class women. Woman workers required supposedly particular and segregated attention that could only be managed by a moral woman

⁸⁸ Faithfull, *Three Visits to America*, 306-307.

⁸⁹ “The Centennial Exposition,” *Scientific American* 34 (June 24, 1876), 401. Emphasis mine.

⁹⁰ See Janice Helland, “Working Bodies, Celtic Textiles, and the Donegal Industrial Fund 1883–1890,” *Textile* 2, no. 2 (2004): 134–155; Kristina Huneault, “‘Living tableaux of misery and oppression’: visualizing sweated labour,” chap. 5 in *Difficult Subjects: Working Women and Visual Culture, Britain (1880–1914)* (Burlington: Ashgate Publishing Ltd., 2002).

⁹¹ Gayle Gullet, “‘Our Great Opportunity’: Organized Women Advance Women's Work at the World's Columbian Exposition of 1893,” *Illinois Historical Journal* 87, no. 4 (Winter 1994): 259-276.

⁹² Jeanne Madeline Weimann, *The Fair Women* (Chicago: Academy Chicago, 1981), 381.

⁹³ Maria Grever and Berteke Waaldijk, *Transforming the Public Sphere: The Dutch National Exhibition of Women’s Labor in 1898*, trans. Mischa F. C. Hoyinck, Robert E. Chesal (Durham: Duke University Press, 2004), 77.

⁹⁴ Grever and Waaldijk, *Transforming the Public Sphere*, 97.

leader with middle-class ethics. Displays of labour in expositions were a combination of ideal constructions and the realities of labour and motivated by a range of class, gender, and race dynamics that informed power relations at the time.⁹⁵ Exhibitions of labouring bodies marked social difference, constructing specific narratives about working-class identity, and the effects of industrial labour on the working-class subject.

Progressive Era factories who offered factory tours did not share the hesitation from manufactories to present their women employees to the public in expositions and industrial exhibits. Instead, women workers were features of the tour. Welfare work for women “sought to inculcate middle-class habits that would make women more industrious and loyal workers” and “teach female workers to be good housewives and mothers.”⁹⁶ Women were a focal point of the NCR factory tour because they did not disrupt the image of “middle-class respectability,” they upheld it. They came from “good homes,” had a high school education, and only left work at the NCR to marry. By teaching women employees how to be good mothers and wives, welfare businessmen like Patterson believed they would go on to support their husband’s work and, in turn, create a more stable, loyal, and productive men workers.⁹⁷

Factory tourism was part of a broader middle-class viewing practice where knowledge was constructed through the power dynamics in display and vision. In the formation of the exhibitionary complex, as applied to factory tourism, the middle-class factory tourist was able to witness their cultural authority reflected in the “moral and cultural training” of the NCR employees, particularly the women and neighbourhood children. In factory tourism, the middle class displayed their cultural authority, aligning themselves with both reformers and factory management who were able to judge the moral correctness of the factory environment. Instead of bridging the gap between labourers and consumers, factory tourism served to harden class lines that informed this gap.

⁹⁵ Grever and Waaldijk, *Transforming the Public Sphere*, 85.

⁹⁶ Mandell, *The Corporation as Family*, 53.

⁹⁷ Mandell, *The Corporation as Family*, 53.

Chapter Two: Manufacturing Model Citizens in NCR's Boys' Garden

Children's social roles and significance drastically shifted in the United States in the 1890s and early 1900s as a result of "industrialization, migration from countryside to city, rising average incomes, and shrinking family sizes."⁹⁸ As individual wage-earners replaced a family economy, childhood became defined and idealized as a life phase separate from the realms of paid labour.⁹⁹ This shift was more of an ideal than a reality for poor, working-class, and rural families that still relied on children's contributions. The middle class defined childhood in terms of a sheltered upbringing in which children were thought of as "a precious gift to be nurtured and protected."¹⁰⁰ The white middle-class concept of childhood was central to the formation of a "respectable family:" "the mother would rear the children, the father would provide the income, and the children themselves would play, attend school, and remain fully dependent."¹⁰¹

Children who did not fit within this race and class-based definition of childhood were the objects of national anxieties about the nation's future, and poor and immigrant parents were often blamed for the blight of children.¹⁰² Institutions took action by concerning themselves with the children's development. In John Spargo's *The Bitter Cry of Children* (1916), he recalls an event where a ladies' guild gathered 10,000 children from the tenements of New York City. Each child was given a potted plant "in the hope that its presence would brighten the home, and its care 'refine' and 'spiritualize' the child."¹⁰³ A year later, the children were expected to return with the plant for an exhibition; the children whose plants were in the most healthful conditions would be awarded. However, the year passed and the children, just like the plants, had withered and faded – and some had not returned at all, prompting Spargo to write: "As the plant is, so is the life of a child."¹⁰⁴ The comparison between children and plants was not uncommon amongst twentieth-century reformers who believed children needed to be nurtured and protected. Space where plants could not thrive was no space for a child. Urban congestion and poverty, for some

⁹⁸ David I. Macleod, *The Age of the Child: Children in America, 1890–1920* (New York: Twayne Publishers, 1998), 1.

⁹⁹ MacLeod, *The Age of the Child*, 1.

¹⁰⁰ Brian Gratton and Jon Moen, "Immigration, Culture, and Child Labor in the United States, 1880–1920," *Journal of Interdisciplinary History* xxxiv, no. 3 (Winter 2004): 356.

¹⁰¹ MacLeod, *The Age of the Child*, 1.

¹⁰² Macleod, *The Age of the Child*, 24.

¹⁰³ John Spargo, *The Bitter Cry of Children* (New York: Macmillan Company, 1916), 264.

¹⁰⁴ Spargo, *The Bitter Cry of Children*, 5.

reformers like Spargo, could be resolved by creating programmes which brought children in contact with nature:

To bring blossoms and babies together where both can thrive. To restore the child-sense of kinship with Nature, that to every child may come the joy of understanding Nature's eternal harmonies. To bring the freedom and beauty and companionship of beast and bird, flower and tree, mountain and ocean, stream and star, into the life of every child.¹⁰⁵

A lack of contact with nature among urban children, it was thought, created “undeveloped capacities” and “ignorance.”¹⁰⁶ Guided by the belief that the proper environment could overcome hereditary traits, nature-study, gardens, and country vacation programmes for urban youth arose across the United States in the 1890s, seeking to prevent criminal and immoral behaviour, qualities that were thought to be developed in childhood, and instil virtues that contributed to productive citizenship. Children were viewed as threats to moral order, a stable social structure, and religious purity.¹⁰⁷ While humanitarianism played a role in the reform movement, the fear that children would grow up to become “ineffectual citizens” and possibly harm the future of the nation was a significant influence.¹⁰⁸

The issue of child labour was particularly charged in the rhetoric of ineffectual citizenship and legitimized through physical evidence. In 1903, for example, a statute brought by City of New York prohibited companies from hiring children under fourteen years of age during the school term in order to “enforce education” and “elevate citizenship.”¹⁰⁹ When a company breached the statute in 1904, reportage on the event emphasized the relationship between children and the future:

She showed the effects in her mal-development and stunted growth. She was a living picture of the results of child labor in a factory at a delicate age, when womanhood and manhood are in a stage of development. Impelled solely by principles conservation of the supreme welfare, the law should be upheld, thus making it impossible to enfeeble and *deteriorate the future citizenship of the state.*¹¹⁰

¹⁰⁵ Spargo, *The Bitter Cry of Children*, 268.

¹⁰⁶ Harold W. Fairbanks, *The Nature-Study Review* 1, 1905, 6.

¹⁰⁷ Harry Hendrick has observed the narrative of threat/victim in historical framings of children in *Child Welfare: Historical Dimensions, Contemporary Debate* (Bristol: The Policy Press, 2003), 7-11.

¹⁰⁸ Hendrick, *Child Welfare*, 8.

¹⁰⁹ “Upholds School Law Against Child Labor,” *The Brooklyn Daily Eagle* 65, no. 23, March 24, 1901, 1. *Newspapers.com*.

¹¹⁰ “Upholds School Law Against Child Labor,” 2. Emphasis mine.

Anti-child labour activists stressed the lifelong effects of child labour regarding both physical and mental wellbeing. Harry Hendrick writes: “social scientists, philanthropists, doctors, and educationalists and reformers looked at children in the period, [. . .] they saw ‘bodies’.”¹¹¹ The focus on bodies was not because mind and body were viewed as separate, instead, the body was a means towards identifying the child’s mind. A healthy body indicated a healthy mind.¹¹² Images of children’s “defective” bodies during this period were powerful signifiers of morality and identifying the character of the child.

The twentieth-century reformer Lewis Hine famously depicted the defective body of the child labourer. Hine’s photographic work for the National Child Labor Committee from 1908 to 1924 documented the lives and work of children (and adults) across the United States, depicting the exploitation of children and the so-called loss of childhood as a result of machine labour and capitalist production. He did so by emphasizing the physical impact of labour on children’s bodies (fig. 9). The body of the working child is depicted as a product of its industrial surroundings: deformed, shaped, and in some cases mutilated, by the processes of labour. In this particular image caption written by Hine, work robs children of childhood; they have no concept of play. Hine’s photographs illustrate an effort to contain the boundaries of childhood and speak to a desire for a “singular, stable and authentic identity, located in the figure of the child.”¹¹³ Patricia Pace observes: “In Hine’s photograph, the figure is an isolated child-adult who radically disturbs the image of childhood from which we trace the beginnings of our identity.”¹¹⁴

It is within this visual culture of children’s defective bodies and the context of children’s degradation in industrial society that NCR established one of the first children’s gardens in the United States on the factory grounds for the children of employees and neighbourhood residents. Given the concern about the impacts of the factory environment on children’s moral, physical, and social development, NCR’s children’s gardens were remarkable because they *positively* linked the factory to children’s development. The success of the programme depended on visualizing the children’s healthy bodies at work in healthful surroundings. NCR’s factory tour and the extensive visual material on the gardens enabled the public to witness for themselves the

¹¹¹ Hendrick, *Child Welfare*, 2-3.

¹¹² Hendrick, *Child Welfare*, 3.

¹¹³ Patricia Pace, “Staging Childhood: Lewis Hine’s Photographs of Child Labor,” *The Lion and the Unicorn* 26, no. 3 (September 2002): 347.

¹¹⁴ Pace, “Staging Childhood,” 345.

effects of garden work—and the factory—on children’s character. Though NCR, as far we know, did not hire children to work in the factories until they became of legal working age, the children’s garden programmes enabled a positive image of children labouring on the factory grounds (a drastic difference from concurrent portraits of children in industrial environments) while grooming boy gardeners for future work at the factory.¹¹⁵

In this chapter, I address the activities and visual culture of NCR’s children’s gardens with a particular focus on their Boys’ Garden which began more than a decade before the establishment of NCR Girls’ Garden in 1912. The gendered garden programmes prioritized the importance of the Boys’ Garden because uncontrolled “street boys” posed a more significant problem for reformers, and the values and citizens believed to be developed in the programme aligned with future visions of the nation as masculine and industrious.¹¹⁶ The nation valued a white masculinity that aligned with nature, industriousness, individuality, and civic duty that were purportedly cultivated through garden education and work. Race factored into the Boys’ Garden programme insofar as the programme presented the ideal bodies of future citizens as white and male.¹¹⁷ NCR’s gardening practices were influential in the United States’ school garden movement and a broader movement of gardens used as flexible instruments for social and urban reform. These garden programmes impacted children in ways that were both beneficial and restrictive. I aim to highlight how, in this case study, the Boys’ Gardens expanded boys’ social contracts—and spaces—at the turn of the twentieth century. The gardening activities at NCR were central to the construction of a working-class childhood, delineating a healthy and protective space in which childhood could exist alongside industrialism. Thus, gardens played an

¹¹⁵ The age limit for employment in factories in Ohio was fourteen years old. It was illegal for children under the age of sixteen to be employed in occupations involving “job or cylindrical printing presses operated by power other than foot; dipping, dyeing or packing matches; manufacturing, packing or storing powder, dynamite, nitroglycerine, compounds, fuzes or other explosives. For girls under 16, assorting, manufacturing or packing tobacco. Josephine Goldmark, “Child Labor Legislation. Schedules of Existing Statutes and the Standard Child Labor Law Embodying the Best Provisions of the Most Effective Measures Now in Force,” *The Annals of the American Academy of Political and Social Science* 31, no. 21 (May 1908): 6.

¹¹⁶ Macleod, *The Age of the Child*, 126.

¹¹⁷ The factory workforce was majority white. Black workers were hired as janitors at NCR, according to images of the NCR plant, but do not appear to occupy other positions in the factory. Based on photographs of the Boys’ and Girls’ Garden, the children in the images all appear to be white. Census report research on ten of the boy gardeners also confirm that they were all white boys of American or German-born parents.

integral role in the construction of childhoods in the machine age, and their history is entangled in the hardening of class lines, gender, and racial divisions that informed children's experiences at the turn of the century.

Boys' Garden: Early Years and Activities

Between 1897 and 1898, NCR established one of the first children's gardening programmes in the United States for the local neighbourhood boys of Slidertown.¹¹⁸ Slidertown, the original name of the neighbourhood where the factory resided, was reportedly notorious for unsanitary living conditions and immoral activity (fig. 10). Referred to as a "dumping place," the town earned the slogan "Everything bad in Dayton slides into Slidertown."¹¹⁹ If the environment shaped human behaviour, children—as pliable and impressionable young people—were even more susceptible to its harmful or positive effects, and it was the town in which the factory resided that proved most toxic to children's development.¹²⁰ The Slidertown boys, as written accounts frequently called them, were framed as victims to the vices associated with idleness, uncleanliness, and unregulated play. The introduction of street lights and asphalt ushered in a brief era of "street play" in the United States, but in the efforts to delineate the boundaries and practices for childhood, reformers saw this unregulated play in the urban environment as grounds for immoral and criminal behaviour.¹²¹ Peter Baldwin has noted that urban concerns of the period stressed the dangers of moral corruption over physical safety.¹²² In 1909, for example, Jane Addams, reflecting on adolescence in the city remarked, "the newly awakened senses are appealed to by all that is gaudy and sensual."¹²³

¹¹⁸ Small kindergarten window gardens were established earlier in 1894, but the Boys' Garden was the first large-scale children's gardening endeavour on company property.

¹¹⁹ Tracy, *How My Heart Sang*, 113.

¹²⁰ After 1900, increasingly secular, defining value was rationality, not religion. With this, emphasis shifted from the "moral condition of the individual" to "improving the social and environment conditions that produced the individual." See Crawford, *Building a Workingman's Paradise*, 47.

¹²¹ Macleod, *The Age of the Child*, 65-66.

¹²² Peter C. Baldwin, "'Nocturnal Habits and Dark Wisdom': The American Response to Children in the Streets at Night, 1880-1930," *Journal of Social History* 35, no. 3 (Spring 2002), 600.

¹²³ Jane Addams, *The Spirit of Youth and the City Streets* (New York, 1909), 27.

The neighbourhood boys, who had greater mobility and independence than girls, were blamed as the source of the neighbourhood's problems and the reason Patterson's employees did not live close to the factory. For NCR, "unregulated play" created an obstacle for the factory welfare initiatives—it encumbered Patterson's goal to motivate his workers to move closer to the factory, and he feared damage to the factory's landscaped grounds and expansive glass windows, built by the architect Frank A. Mills. Social reformer and writer Jacob A. Riis' belief that "boy's energy and love of organization—not his badness—that made him join a street gang" was shared by NCR, and it was "that energy and love of organization are just the characteristics to make the best members of a boys' club."¹²⁴ The idea of a Boys' Garden emerged as a way to protect NCR's property and improve the image of the neighbourhood by channelling the boys' misplaced energy toward something productive: the cultivation and maintenance of a vegetable garden.

Under the direction of NCR's first welfare director Lena Harvey Tracy, NCR cleared company-owned land to the south of the factory for forty vegetable gardens and later increased to seventy-one plots (fig. 11).¹²⁵ The boys, aged eight to sixteen, worked for several hours in the morning and again in the afternoon and at the end of the two-year programme, they received a diploma, reportedly of high value should they consider future employment in the factory (a consideration they were highly encouraged to follow).¹²⁶ In addition to seeds and bulbs, the company supplied them all with the necessary equipment.¹²⁷ An expert gardener taught the boys methods of "scientific gardening" and cultivated the demonstration garden:

The instructing gardener teaches the boys the proper methods of planting in dry or wet climate; whether they should hill the beans during drouth, or allow them to remain on the level [...] The boys sow beats with onions. They raise two crops on the same ground [...] Every inch of space is utilized to get the best possible results with the widest variety of vegetables.¹²⁸

¹²⁴ Winifred Buck, "An Experiment in Citizen Training," *Popular Science Monthly* vol. 52 (November 1897–April 1898), New York: D. Appleton and Company, 1898, 111.

¹²⁵ Townsend, "Boys' Gardens," 28; Cook observes 100 gardens in *Betterment*, 223.

¹²⁶ Cook, *Betterment*, 224.

¹²⁷ Cook, *Betterment*, 223.

¹²⁸ Townsend, "Boys' Gardens," 29.

Each was responsible for their plot to, as one proponent of the children's garden movement stated, fix "personal responsibility" and individual interest, and made evaluation time easier for the Company-elected judges.¹²⁹ The boy gardeners brought home their harvest and were encouraged to sell the remainder and use the money as they pleased. Instead of emphasizing family contributions, the programme stimulated competition between boys (fig. 12). The best gardeners were awarded prizes and dinners were held at the prodigious Officers Club.¹³⁰ The highest achievement of a student of the boys' garden, as outlined in a presentation on school gardens hosted in Boston at the time, "is a boy who provided for his family all season with additional money leftover (\$5), won first prize for his work and earned position at the factory once he became of age. In employment, he quickly received an advance for his industriousness and usefulness – all this attributed to his years at the garden."¹³¹ To teach the boys "to combine pleasure with profit," the Boys' Garden was incorporated under the laws of Ohio. They acted as shareholders of the garden, elected officers and boards of directors, and held regular meetings in the House of Usefulness as a way of learning business and economic management and preparing them to be future NCR workers (fig. 13).¹³² Proponents of school gardens and boys' clubs emphasized citizen training in which the boys "became willing law-keepers" and removed the need of barriers and fences because the children were "their own police force."¹³³

Defining Gender in Working-class Childhoods

The vegetable garden, and other children's club spaces afforded to the children by NCR, delineated a distinctively working-class and gender-specific childhood. Unlike a middle-class childhood, defined by privacy, play, and remove from the spaces of work, NCR defined a childhood that necessitated work (to prevent idleness and mischief) and publicity instead of

¹²⁹ D.J. Crosby, "The School Garden Movement," *American Park and Outdoor Art Association: The School Garden Papers of The Sixth Annual Meeting* 6, no. 3 (Rochester: March 1903), 10.

¹³⁰ Townsend, "Boys' Gardens," 28.

¹³¹ Townsend, "Boys' Garden," 29.

¹³² "The boy gardeners and box furniture makers are organized into corporations under the laws of Ohio. They elect officers and boards of directors, and declare cash dividends. The boys learn business methods as well as the value of work. Many of our most valuable employees were boy gardeners in the years gone by." National Cash Register Company, *Welfare Work* (Dayton: National Cash Register Co., 1920).

¹³³ Buck, "An Experiment in Citizen Training," 114; Crosby, "The School Garden Movement," 9–16.

privacy. Fear of the harm children could wreak on the factory neighbourhood and business motivated the childhood outlined by NCR, and its popularity was a reflection of broader national concerns about the societal dangers of children's mal-development. While middle-class children enjoyed the benefits of play, working-class childhood formulated play "as preparation for work."¹³⁴

Childhood as a period exempt from work meant that it was "recognized as a sign of class status."¹³⁵ The concept of childhood for many children and families was an unreachable ideal that was informed by race, gender, and class rather than a period of biological development. The childhood formulated in the Boys' Garden was distinctively working-class. The neighbourhood boys were not expected to receive the moral benefits of a sheltered and domestic upbringing as would middle-class children. The working-class home could not be trusted with such responsibility. As the then YMCA director of physical education declared: "we are living in a new environment in which the home plays but a feeble part. The children must find their recreation outside the home."¹³⁶ NCR asserted itself as a substitute for and model of proper domestic life. The factory even replicated aspects of the middle-class interior by adding potted palms, rugs, and pictures to women's restrooms and arranging the tables of the women's dining room in damask cloth and china (see Chapter 1) and the company activities reinforced the gendered ideals of the middle-class family.¹³⁷

Despite the apparent differences between NCR's working-class childhood and the middle-class ideal, the children's gardens for the girls and boys were influenced by middle-class desires to preserve Victorian gender roles and trained children in them. The Boys' Garden sustained Victorian gender ideologies of the male power as natural and inevitable while the

¹³⁴ Marta A. Gutman, *A City for Children: Women, Architecture, and the Charitable Landscapes of Oakland, 1850–1950* (Chicago: University of Chicago Press, 2014), 126.

¹³⁵ Karen Sánchez-Eppler, *Dependent States*, 152; Priscilla Ferguson Clement, *Growing Pains: Children in the Industrial Age, 1850-1890* (New York: Twayne Publishers, 1997).

¹³⁶ "But we are living in a new environment in which the home plays but a feeble part. The children must find their recreation outside the home at the public recreation centers." Dr. T. H. McCurdy, director of physical education of the International Young Men's Christian Association College, Springfield, Massachusetts quoted in Boyers, Clements J., "Recreational Institute for the New England States," *The Playground* 5, no. 1, Playground and Recreation Association of America (April 1912): 6.

¹³⁷ Mandell writes extensively about the transplant of the Victorian family structure into the welfare factory in *The Corporation as Family*.

activities of the Girls' Garden were distinctly feminine and directed towards maternal care.¹³⁸ In justifying gardens for manual training, E.W. Cook, in his 1906 study of industrial betterment programs, declared "it is essential in our capacity-culture to develop the young in an all-round way. We need a nation of handy men."¹³⁹ At a prize distribution ceremony, NCR's reverend delivered a speech in which he asserted, "the best things in the home, in the city and in the country, should be given to boys because they [are] the material from which [is] to come the future manhood of the nation."¹⁴⁰ Addressing the boys, the Reverend stated:

Boys, the strength of future generations, and the permanent welfare of South Park in this beautiful city of Dayton, rests upon your shoulders. You are not here to exist in idleness. Upon your efforts, your good character and your conduct, the strength of the community depends. The opportunity given you here will teach you the dignity of labor and the greatness of manhood. We all want to know how to make life worth living. Idleness breeds degradation. As you plant the seeds of vegetation in the soil of the earth, you are at the same time planting the seeds of usefulness and strength. As you proceed with your work let me urge you to persevere and to stand fast by the principles of integrity and industry.¹⁴¹

The boy gardeners took on expanded social contracts as civic leaders in South Park. Patterson valued children "because he saw in them great possibilities for later years in the city's history."¹⁴² The future of the city and the nation was distinctively male, and thus depended on a proper boyhood to ensure a future nation of productive, vigorous, and virile working men.

Reflecting on South Park, another source wrote:

City beautiful, home beautiful, garden beautiful, became the new watchword. Every man was a self-contained and self-constituted guardian now, for the gardens of all the rest. Boys vie with men and men vie with boys in attractive homes and gardens [. . .] The

¹³⁸ Gail Bederman, *Manliness and Civilization: A Cultural History of Gender and Race in the United States, 1880–1917* (Chicago: University of Chicago Press, 1995).

¹³⁹ Cook, *Betterment*, 29. The Boys' Garden emphasized the association between masculinity, nationhood, and nature. In an article published by *Camp and Plant* magazine, the author advocated: "in the open air and sunshine of a country life that the largest inspiration is drunk and the vital energies of manhood are best conserved." See The Colorado Iron and Fuel Company, *Camp and Plant* 1, no. 29, June 28, 1902, 559.

¹⁴⁰ "Advance Department: Distribution of Garden Prizes," *The N.C.R.* 15, December 15, 1902, 1004.

¹⁴¹ "Distribution of Prizes to Boy Gardeners," *The N.C.R.*, 1903, 719.

¹⁴² "N.C.R. Is Ever Concerned with Progress of Dayton: One of the Guiding Principles of Great Manufacturing Institution." *Dayton Journal*, July 8, 1928.

spirit grew and grew, and is growing still. It is spurring men on to new endeavors, success and wealth.¹⁴³

The girls were not raised in the “habits of industry” to prepare them for future work at the factory. The gardens, along with cooking and sewing lessons, were training grounds to become good mothers and wives. In addition to the maintenance of a small vegetable garden, girls grew flowers to decorate the women’s dining room and compiled care packages to send to neighbourhood residents. The girls did earn income through their vegetable garden but it was meagre in comparison to the boys’ earnings, and their work was not framed in monetary terms or understood as a means of providing for their families.¹⁴⁴ The middle-class concept of the “respectable family” guided the lessons learned in the children garden programmes: the boys were taught to act as providers and value their earnings while the girls learned to be charitable and to apply gardening toward domestic improvement.

Factory postcards depicting the Boys’ and Girls’ Gardens further reflect these gendered divisions. The Girls’ Garden postcard portrays the girls spaced in neat rows with straight and upright bodies, not unlike photographs of “neat and orderly” factory girls circulating at the time (fig. 14 and 15). These images functioned in accordance with a “working-class female habitus,” defined by Carol Wolkowitz, “as clean against dirty, light as against heavy, physically constrained rather than mobile.”¹⁴⁵ The exaggeration of restricted movement and the constrained occupation of movement found in images of working women—and here anticipated by the Girls’ Gardens—is an embodiment of women’s “constrained social position.”¹⁴⁶ Further, the smokestack in the Girls’ Garden appears inactive while in the postcard of the Boys’ Garden, painted billowing smoke is a sign of industry and production (fig. 16). In these postcards, the boys’ bodies appear active and dynamic. The camera’s off-centred perspective softens the gridded layout of the Boys’ Garden and gives the impression that the boys are in a field. The Boys’ Garden imagines a more open space and natural slackening of the body while the girls’

¹⁴³ Felix J. Koch, “A Fairyland of Bungalows and How They Grew,” *Keith’s Magazine* 41, no. 6, June 1919, 305.

¹⁴⁴ In “Royal Elm that Graces the Vista at NCR,” February 11, 1917, NCR reported that the girls raised \$300 on the Girls’ Garden’s half-acre, whereas the boys raised \$1800 worth of produce on their two and one-quarter acres.

¹⁴⁵ Carol Wolkowitz, *Bodies at Work* (London: Sage Publications, 2006), 67.

¹⁴⁶ Wolkowitz, *Bodies at Work*, 67.

postcard suggests order and containment. Though subtle, these embodied differences and visual vocabularies participated in the gendered structure of the garden programmes at NCR.

Patterson: “America’s Froebel”

Patterson’s plans for the Boys’ Garden were not a complete departure from his European counterparts who began children’s gardening programmes decades earlier. He even enjoyed the title of “America’s Froebel” as testified in one of the company’s tourist pamphlets.¹⁴⁷ Patterson believed in the spiritual and physical benefits of gardening insofar as he valued these qualities in his workers. The citizen-building capacity of garden work eclipsed the spiritual connection between children and nature. The Boys’ Garden capitalized on the “mythical geography of childhood as a more natural place,” illustrated by John Spargo at the beginning of this chapter, but sought to prepare youth for a future in industrial work, specifically at NCR.¹⁴⁸ According to historian Susan Herrington, the United States’ garden movement re-directed play to complement industrial life. Patterson, like Froebel, believed in the potential for gardens – arranged as individual plots – to cultivate personal responsibility and self-regulation; gardens instilled order through the laws of nature and obedience to those laws. Unlike Froebel’s gardens, viewed as idealized spaces separate from the current social and political climate existing in Germany, the Boys’ Garden was a form of early industrial training in which Herrington writes: “the hidden nature of a child [was] secondary to shaping their characters to fit American standards.”¹⁴⁹ The capacity for individual plots to “issue blame or praise towards a child” was a significant motivation for the introduction of school gardens in the United States.¹⁵⁰

The School Garden Movement: From Nature-Study to Wage Economy

NCR frequently acknowledged itself as the forerunner to the school garden movement in North America, but pursuits in garden education were taking place before and in parallel with NCR’s Boys’ Garden. Their motivations and strategies, however, varied greatly based on the resources

¹⁴⁷ *A trip through the factory*, 14.

¹⁴⁸ Warsh, “Cultivating Citizens,” 67.

¹⁴⁹ Susan Herrington, “Kindergarten: Garden Pedagogy from Romanticism to Reform,” *Landscape Journal* 20, no. 1 (2001): 37.

¹⁵⁰ Susan Herrington, “The garden in Fröbel’s kindergarten: beyond the metaphor,” *Studies in the History of Gardens & Designed Landscapes* 18, no. 4 (1998): 333.

and were modified to suit urban or rural areas and address the class, race, and gender of the children. The first known American school garden was the George Putnam Grammar School in Roxbury, Massachusetts headed by Henry L. Clapp. The garden, established in 1891, was first an experiment in nature study dealing exclusively with ferns and wildflowers but later expanded to include a kitchen garden.¹⁵¹ Early school garden education focused on “natural phenomena, life processes, and awareness of the natural and cultivated circumstances in which plants flourished.”¹⁵²

School gardens in the United States departed from the spiritualism found in the George Putnam school garden and other European counterparts by adapting garden education to tackle America’s social issues.¹⁵³ The “Junior Republic,” formed in 1895 by upstate New York businessman William George, for example, was an elaborate social experiment in democracy in which children worked on farms within a system of self-government, created legislation, developed a judicial system, and instituted a prison.¹⁵⁴ Patterson was aware of the project and even cited it as inspiration.¹⁵⁵ The Children’s School Farm led by Fannie Griscom Parsons in New York City aimed to socialize immigrants and help shape children into well-formed urban citizens; related garden programmes such as the Country-Life Movement aimed at decongesting urban centres and encouraging families to stay in agricultural work. Other programmes like the Watts Growing Project in Los Angeles focused on immigrants with agricultural skills to “transition to urban economies.”¹⁵⁶ The benefits of gardens went beyond ideas of individual growth and sympathy with plants (found in the Nature-Study Movement) and were adapted to address the diversity of America’s pressing social issues at the turn of the twentieth century, including managing urban and rural populations. While some children’s gardens were used as a

¹⁵¹ Crosby, “The School Garden Movement,” 10-11; Kohlstedt, “‘A Better Crop of Boys and Girls,’” 62-63; Lawson, *City Bountiful*, 60-62.

¹⁵² Kohlstedt, “‘A Better Crop of Boys and Girls,’” 92.

¹⁵³ Trelstad, “Little Machines in Their Gardens,” 161-173; Herrington, “Garden Pedagogy.” Warsh has made similar conclusions: “the kindergarten’s ideas about individual growth were eclipsed as some school gardens were used for agricultural training and to prepare children for work in industrial society.” See Warsh, “Cultivating Citizens,” 64-89.

¹⁵⁴ William R. George, *The Junior Republic: Its History and Ideals*, New York and London: D. Appleton and Company, 1910.

¹⁵⁵ “To Make the City Great: Mr. John H. Patterson’s Address on “The Dayton of the Future,” *The Evening News*, Dayton, Ohio, March 26, 1896, 25.

¹⁵⁶ Lawson, *City Bountiful*, 7.

form of agricultural training to keep families in agriculture, NCR's gardens upheld the values of agriculture and rural life only for their application to an industrial economy. Agriculture in the United States came to signify a hard work ethic that was well suited to an industrial society. The importance of "the farm and the farmer in the formation of American identity" contributed to the romanticized values of gardens and agriculture to children's development.¹⁵⁷ "Agrarianism was not viewed as solely a profession," writes Lawson, "it was considered the bedrock of American citizenship."¹⁵⁸ Further, "the characteristics associated with agriculture—independence, hard work, honesty, and so on—were pertinent not only to the farmer but to the businessman as well."¹⁵⁹

For Patterson and other advocates of garden work for children, agricultural work was considered the best form of not just industrial training but education more broadly. Patterson attributed his success in business to his early years spent on the farm.¹⁶⁰ In the factory's publication, he wrote: "Much of the success of America is due to the fact that most of our inhabitants are born on farms, and are reared to habits of industry."¹⁶¹ Agricultural work was valued as a form of manual training because it developed the faculties of the mind and was thought to offer transposable benefits. In later years, the company presented a lecture series for farmers from the Miami Valley to "[t]each farmers to improve the appearance of their land, and how to plant."¹⁶² The gardens were believed to bring out "what is best in the children" by teaching them "to work with their heads as well as their hands" and "gives full play to all the motor activities; broadens his mind and deepens his thinking."¹⁶³

Children's programs like the Fresh Air Fund proposed agricultural work as a means to address America's problems with urban youth. Established for poor families in New York City, the Fresh Air Fund sent poor children (who mostly identified as Latino or black) to take a break

¹⁵⁷ Warsh, "Cultivating Citizens," 67.

¹⁵⁸ Lawson, *City Bountiful*, 59.

¹⁵⁹ Lawson, *City Bountiful*, 59.

¹⁶⁰ Townsend, "Boys' Garden," 30.

¹⁶¹ John Patterson, *The N.C.R.* 25, no. 15, August 1, 1902, 456.

¹⁶² "Royal Elm that Graces the Vista at NCR," *The N.C.R.*, February 11, 1917.

¹⁶³ Townsend, "Boys' Gardens," 30. Warsh and Kohstedt respectively argue that gardens appealed to twentieth-century reformers because of their flexibility. Warsh, "Cultivating Citizens," 66; Kohstedt, "A Better Crop of Boys and Girls," 60.

from the city and spend their summers living with host families in suburban and rural areas.¹⁶⁴ In Gutman's examination of the Children's Aid Society programme in which orphan children were sent to live and work on Christian families' farms, she writes: "Doing a hard day's work on a farm, rather than idling at night on a city street, would form the kind of citizen needed in a democracy: manly, courteous, white, and rooted in virtuous nature."¹⁶⁵

Model Citizens through Garden Work

NCR believed that "[d]elightful association with nature and enthusiastic devotion to work are among the most powerful influences that go to develop strong and intelligent citizens."¹⁶⁶ The main lesson for the Boys' Garden, as stated by Tracy, was to learn to develop loyalty to the company and one another.¹⁶⁷ The garden followed NCR's principle of "system in everything." NCR boasted: "A careful card record is kept of what each boy accomplishes, how much time and work he expends on his plot of ground, how much material is furnished him, and what product he wins from the soil. Failure to keep up his work results in a boy's losing his garden."¹⁶⁸ NCR and proponents of the gardens measured the project's impacts through other effects, including property value. Cook writes: "The effect on the morale of the boys, and indeed the whole neighbourhood, is such that property has increased 300 per cent in value."¹⁶⁹ Quantitative measures also backed the programme. Cook reported that NCR boys developed "thirty per cent more rapidly in moral, mental, and physical power than if they were confined strictly to their school work."¹⁷⁰ NCR's gardens affirmed gardening as both a phase of industrial work and childhood education.

The boys in the garden programme took on an expanded social contract as, what Cook termed, "apprentice citizens." They were expected to be responsible for managing their crops and their earnings, they held positions in office and as stakeholders of their company, and finally,

¹⁶⁴ Vanderbeck, "Inner-city children, country summers," 1132–1150.

¹⁶⁵ Gutman, *A City for Children*, 126.

¹⁶⁶ Townsend, "Boys' Gardens," 30.

¹⁶⁷ Tracy, *How My Heart Sang*, 130.

¹⁶⁸ National Cash Register Company, *A Day at the N.C.R.: An Account of an Effort to Make Work in A Factory Safe, Pleasant and Healthful* (Dayton, Ohio: National Cash Register Company, 1905), 60.

¹⁶⁹ Cook, *Betterment*, 224; Also see Townsend, "Boys' Gardens," 30.

¹⁷⁰ Townsend, "Boys' Gardens," 31.

they were expected to act as model citizens, imparting the lessons of the Boys' garden to their parents, neighbours, and friends. The boys took their lessons home and transformed the neighbourhood into a garden suburb – the subject of the next chapter. A 1906 issue of *Gardening* reported: “The success of the boys is emulated by the house-holders” and “very wonderful changes have been wrought in the outdoor appearance of the town.”¹⁷¹ The company believed that in order to raise their workers, they must “raise all those among whom they dwell,” not least because “one untrained child may be a veritable plague spot, and infect not only a community but coming generations.”¹⁷² Similar to the residential gardens, discussed in the following chapter, children offered a means of further accessing and managing employees' lives.

Imagining Alternative Outcomes for the Boys' Gardens

Proponents of garden schools such as Cook emphasized economies of energy, insisting that “too much focus on play makes work a drudgery” and instead play should be directed to “more profitable channels.”¹⁷³ Gardens provided “entrepreneurial training under the auspices of education without the risk of exploitation.”¹⁷⁴ Vacant-lot cultivation enabled children from low-income families to earn income “without the negative connotations of children's wage labour in factories and industry.”¹⁷⁵ Dayton had its share of vacant-lot cultivation, to which one resident responded:

Who can doubt that this vacant lot garden movement pays real dividends to the community in civic comeliness, health, thrift, and even perhaps in the way of a slap at the common enemy, the high cost of living?¹⁷⁶

¹⁷¹ “Horticulture Society of Chicago: Miss Susan B. Sipe's Address,” *Gardening* vol. 14, Chicago, January 15, 1906, 140.

¹⁷² Cook, *Betterment*, 222.

¹⁷³ Cook, *Betterment*, 32.

¹⁷⁴ Lawson, *City Bountiful*, 57.

¹⁷⁵ Lawson, *City Bountiful*, 36. The Detroit Bureau of Government Research reported that “Dayton had 3,109 children's home gardens, 29 model school gardens in which 900 children were engaged and 2,250 vacant lot gardens cared for by adults.” See, The Detroit Bureau of Government Research, “Report on the Home and School Garden Movement and the Recreation Commission,” April 1918, 7.

¹⁷⁶ Harold Howland, “The Little Boss and the Big Manager,” *Metropolitan magazine*, November 1916, <http://www.daytonhistorybooks.com/page/page/1590364.htm>.

These details suggest that industrialism did not eliminate the family as an economic unit, rather, children and families were forced to be more creative and resourceful with their labour while trying to uphold new cultural, class-based conceptions of childhood as distinct from the realms of work. Gardens could be sources of income and education for children without unsettling childhood as a phase separate from adult life.

The national attention on children at the turn of the century was a concern for the future of the nation. Lower fertility rates amongst white middle-class women in addition to increased immigration and urban congestion, and anxieties around fostering “proper” integration directed focus onto children’s upbringing.¹⁷⁷ Public discourse framed children as either “blessing or curse” when addressing social conflicts.¹⁷⁸ Cook conceived of society as a “growing organism” where the poor health of one risks the health of all. He advised that it would “be good economy to put a cordon of care around all new arrivals into the world, as we do with arrivals from other countries, to prevent the importation of infectious disease.”¹⁷⁹ Reformers, like Cook, believed that a proper environment could overcome what was referred to as hereditary “degeneracy,” but it depended on the philanthropy and guidance of the most civilized to uplift those of the “lower strata.” Gardens at the-turn-of-the-century were viewed as a means of resolving America’s social conflicts, often rooted in fears of racialized bodies, economic instability, and desires to uphold Victorian gender constructs.¹⁸⁰

Children’s perceptions of their experiences are lost in the history of the Boys’ Garden. This is the challenge of writing about childhood and children as historical actors. As one historian notes, “[A]ll accounts of childhood are structured by the impossibility of ever fully separating children from adult desires and control.”¹⁸¹ Similarly, it is unclear whether these programmes provided “immigrants and lower-class children with vocational skills” or existed as

¹⁷⁷ Between 1885 and 1913, the United States passed 52 acts concerning child welfare. See Jane Read, “Gutter to Garden: Historical Discourses of Risk in Interventions in Working Class Children’s Street play,” *Children & Society* 25 (2011): 423.

¹⁷⁸ Horace Cleveland, “The Influence of Parks on the Character of Children,” *Park and Cemetery* 8, no. 5, July 1898, 95.

¹⁷⁹ Cook, *Betterment*, 25–26.

¹⁸⁰ Community gardens were established to help immigrants gain agricultural skills to “transition to urban economies” while The Playground Association of America advocated group play like the cooperative urban school gardens for “to counter delinquent individualism and to Americanize immigrants.” See Lawson, *City Bountiful*, 7 and Macleod, *The Age of the Child*, 66.

¹⁸¹ Sánchez-Eppler, *Dependent States*, xvii.

“means of social control that reflected class dominance in an emerging capitalist economic order.”¹⁸² As new social spaces within urban environments for children and new immigrants, gardens enabled greater participation in their neighbourhood that may have increased feelings of belonging. For the boys, it may have also engendered a homosocial environment that differed from the individualistic teaching methods in school education and even strengthened their value within their own families by bringing home their harvest and earnings.

The Boys’ Garden was a project of turning boys into men—men who embodied a preferred masculinity, possessing the qualities of industriousness, discipline, self-reliance, and the ability to provide for their families. The children of NCR’s garden *actively* participated in economic, community and industrial relations despite their title as “apprentice citizens.” The garden was not just a project of preparing children for adult life; the childhood carved out in the garden was a model for working-class identity. In this regard, neither gardens nor childhood existed as spaces and periods of innocence and seclusion, instead, children and gardens influenced and formed new social dynamics and labour relations in a period of economic insecurity and social transformation in America.

¹⁸² Trelstad, “Little Machines in their Gardens,” 165; Samuel Bowles and Herbert Gintis, *Schooling in Capitalist America: Educational Reform and the Contradictions of Economic Life* (New York: Basic Books, Inc., 1976).

Chapter 3: Employees' Homes and the Civic Garden Campaign

One feature of this model factory would have converted John Ruskin to the hated modern mill; this is the ambitious attempt to convert the workers' homes into floral bowers.
- *The N.C.R.*, August 1, 1902

In October 1898, a partner of America's preeminent landscape architecture firm referred to K Street, the small strip of working-class houses adjacent to the NCR, as the most beautiful street in America (fig. 17).¹⁸³ John C. Olmsted of Olmsted Brothers was hired in 1897 by Patterson to landscape the factory grounds as part of the company's industrial betterment initiatives. Olmsted also instructed the planting of a "few model yards of cottages adjoining the factory" and in doing so, "influenced the people to discard the ugly red fences, and he showed by 'precept and example' what could be done to make small properties beautiful."¹⁸⁴ The lessons were successful; The neighbourhood applied Olmsted's principles of landscape design to their private residences and fulfilled NCR's own desire to "encourage the best living—mental, moral and physical—among employes [sic] and the entire neighborhood."¹⁸⁵ These lessons in "best living," set forth by the company through landscape gardening initiatives, were tied to national anxieties about working-class neighbourhood activity. NCR's transformation of the working-class neighbourhood into an American model suburb suggested that, under the right management and conditions, working-class communities could become ideal citizens who reflected the gendered virtues of the middle-class American suburb.

This chapter examines the impact of the landscaping gardening initiatives, set forth by NCR from 1897 to 1913, in the surrounding neighbourhood.¹⁸⁶ As we have seen in the previous chapter, vegetable gardens, viewed as social curatives for the effects of industrialization and

¹⁸³ *A Day at the N.C.R.*, 34–35; William Howe Tolman, "Landscape Gardening for Factory Homes," *The American Monthly Review of Reviews* 19 (1899): 444.

¹⁸⁴ Tracy, *How My Heart Sang*, 119–120. Olmsted visited the factory twice in the late 1890s; he supervised both the planting of the factory grounds and some of the model yards of workers' cottages in the neighbourhood now known as 'South Park'. Brown, "Welfare Capitalism," 150.

¹⁸⁵ National Cash Register Company, *Sunday School Bulletin*, June 1899. The factory's move from Dayton's downtown area to the city's fringes and Dayton's historical flood in 1913 bracketed this period.

¹⁸⁶ Landscape initiatives continued after the flood through large-scale park planning projects, described at brief in this chapter. The neighbourhood residents' activities and private spaces define my scope.

urban congestion on children's development, were reforming agents for the improvement of physical and mental health and moral character and redirected idle bodies towards productive recreation while instilling aesthetic values. In this chapter, we redirect our focus to the aesthetic and social agendas for ornamental gardens and yards in the industrial suburbs of South Park. The residential landscape design in South Park fulfilled multiple roles: it was an experiment in civic planning on aesthetic and political fronts, it served as a means of managing the working class, and for the workers and residents, it strengthened community participation in civic life. Ultimately, South Park reinforced the aesthetic ideals of the middle-class suburban home and implied that middle-class domestic virtues could morally and spiritually benefit working-class residents.

This chapter addresses the civic improvement programmes of the neighbourhood and examines them alongside Patterson's visions of an ideal city. It also examines how the neighbourhood activities put forth gendered middle-class virtues as ideal blueprints for working-class homes. NCR's extensive photography of employee's yards and homes expressed these ideals. I seek to expose the various ways the industrial garden—as image, setting, and design activity—served to manage the working-class neighbourhood and help to establish the factory as a model for cultural standards and aesthetic principles, particularly in regard to domestic spaces.

On the transformation of the neighbourhood and its residents, American publication *Keith's Magazine on Homebuilding* wrote: Slidertown, once a neighbourhood of “[d]isreputable, tumble—down houses, with saloons and homes of iniquity interspersing,” has been transformed into “a bower of woods and flowers without duplicate in all the land.”¹⁸⁷ The immoral town was “converted to city-beautiful, home beautiful ideas.”¹⁸⁸ The suburb's renaming to South Park completed the transformation. Despite the magazine's attributions, the civic improvement programmes for South Park do not neatly fall under the City Beautiful Movement proper (its programmes preceded it) or any formal urban planning movement at the time.¹⁸⁹ The

¹⁸⁷ Koch, “A Fairyland of Bungalows,” 302.

¹⁸⁸ Koch, “A Fairyland of Bungalows,” 305.

¹⁸⁹ The phrase City Beautiful was likely first used in the 1900 improvement campaign in Harrisburg, Pennsylvania, a few years after Slidertown's betterment initiatives. See William H. Wilson, *The City Beautiful Movement* (Baltimore and London: The Johns Hopkins University Press, 1989), 128. In chapter six, Wilson writes that the City Beautiful Movement's woman frontrunner Mira Lloyd Dock used Dayton as an example of an attractive community to encourage her Harrisburg audience to take up City Beautiful ideas. See *City Beautiful*, 131.

transformation of South Park was attributed to NCR's welfare programme and was a product of Patterson's visions of an ideal city. Patterson amalgamated tenets from various urban planning movements across Europe and North America, including City Beautiful ideas, into his vision for South Park and the future city of Dayton. Unlike company towns that rented housing to their employees, South Park was primarily made up of homeowners and comprised of working-class citizens employed in a variety of professions, not just NCR employees.¹⁹⁰ NCR did not own residential property.¹⁹¹ NCR initiated a civic improvement campaign in 1897 that differed from company town planning and formal urban planning movements because it addressed pre-existing conditions and focused on private and family-oriented landscape gardening initiatives rather than the landscaping of public spaces and the construction of boulevards and civic monuments. Unlike some company towns that operated through total authority and coercion, South Park's civic improvement campaign relied on the willingness and cooperation of residents to take up the factory's domestic ideals and thus relied on a rhetoric of self-help and individual interest to motivate residents and minimize criticisms of control and paternalism.¹⁹²

¹⁹⁰ Archival research found that the neighbourhood in 1905 was populated with residents employed as woodworkers, machine hands, tailors, assemblers, dressmakers, and polishers, among others.

¹⁹¹ See Crawford's chapter "The Company Town in An Era of Industrial Expansion," in *Building the Workingman's Paradise*, 29-45, for a detailed look at the social organization of the United States' company towns.

¹⁹² Crawford provides an extensive account of the abuses and total authority exercised by some company towns on their employees. Workers were subject to hefty fines for breaking arbitrary rules, paid in store-company credit rather than real wages, and the imposition of social customs and restrictive payment techniques. See *Building the Workingman's Paradise*, 29-30. Those willing to undertake garden labour, writes Lawson, were viewed as more deserving of charity because gardens, among other reasons, were considered a means of self-help with lasting effects. See Lawson, *City Bountiful*, 25. This rhetoric of self-help and equating work with wellbeing is found in earlier texts by Scottish author and reformer Samuel Smiles and Thomas Carlyle's "Gospel of Work," though Carlyle's viewpoints are part of a growing attention to secular vocation and religious skepticism that is beyond the scope of this thesis.

American Suburbs

Extensive urban development motivated manufactories to develop on the fringes of city borders and led to significant working-class suburbanization.¹⁹³ Decades earlier, middle-class families also began to exit the city in search of “more delicate amenities than noisy urban centres could offer” and settled on the margins of cities.¹⁹⁴ Industrialism and rapid urban congestion characterized the city in negative terms. Closer contact with nature was seen as a cure for the ill effects of urbanization, evidenced by the school garden movement and a renewed interest in agriculture and rural life.¹⁹⁵ New definitions of the ideal home incorporated elements urban life lacked such as seclusion and nature: “The idealization of the home as a kind of Edenic retreat, a place of repose where the family could focus inward upon itself, led naturally to an emphasis on the garden and lawn.”¹⁹⁶ Though many classes lived on the ‘borderlands’, Dolores Hayden’s term to describe the middle space between the urban and rural, the middle class developed their own *suburban* material culture through literature and illustrated how-to manuals that featured practical advice on garden planting and arrangements.¹⁹⁷

By 1890, the American suburban image was distinct and defined by middle-class material culture.¹⁹⁸ Andrew Jackson Davis’ *Rural Residencies*, Catharine Esther Beecher’s *Treatise on Domestic Economy for Use of Young Ladies at Home and at School* (1842), Andrew Jackson

¹⁹³ Robert Lewis, “Running Rings Around the City: North American Industrial Suburbs 1850–1950,” in *Changing Suburbs: Foundation, Form and Function*, eds. Richard Harris and Peter J. Larkham (New York: E & FN Spon, 2004), *Taylor & Francis e-Library*, 147, 157.

¹⁹⁴ Dolores Hayden, *Building Suburbia: Green Fields and Urban Growth, 1820–2000* (New York: Vintage Books/Random House) 2003, 24. Hayden dates the exodus of middle-class families from port cities such as Boston and New York to as early as the 1820s. Before working-class suburbanization, the suburbs were already being defined in terms of middle-class domesticity by popular literature such as Andrew Jackson Downing’s *Cottage Residencies* (1842) and Catharine Beecher’s *Treatise on Domestic Economy for Use of Young Ladies at Home and at School* (1842). See Hayden, *Building Suburbia*, 25–44.

¹⁹⁵ It was believed that social and economic wellness in the United States was dependent on the right relations between industry and agriculture. Theodore Roosevelt’s 1909 Country Life Commission and the countless other programmes geared at population management between rural and urban areas indicated a desire to achieve this balance.

¹⁹⁶ Kenneth T. Jackson, *Crabgrass Frontier: The Suburbanization of the United States* (New York and Oxford: Oxford University Press, 1985), 59. Also, see page 69 where Jackson examines the negative perceptions of the city in the American cultural imaginary.

¹⁹⁷ Hayden, *Building Suburbia*, 22.

¹⁹⁸ Jackson, *Crabgrass Frontier*, 46.

Downing's *Cottage Residencies* (1842), and Calvert Vaux's *Villas and Cottages* (1857) were influential in shaping American attitudes about the suburban home and yard.¹⁹⁹ Unlike European or Asian formal garden design, American suburban yards "followed a naturalistic or romantic approach [...] The style sought to use the existing terrain, with gently curving paths, irregular groupings of trees and shrubs, and rustic pavilions."²⁰⁰ The designs for industrial suburbs were influenced by these earlier middle-class endeavours and civic improvement efforts found in English garden traditions (as Fukuo Akimoto examines in their study of California suburbs) and the picturesque, concisely defined by Dolores Hayden as "a style emulating wild or natural beauty with irregular and broken lines," an aesthetic promoted by Andrew J. Downing and Frederick Law Olmsted as well-suited to the United States' topography.²⁰¹ Landscape designers contributed to the aesthetic development of suburban yards and other small residential plots.²⁰² Frederick Law Olmsted fervently believed well-planned suburbs were "the most attractive, the most refined and the most soundly wholesome forms of domestic life, and the best application of the arts of civilization to which mankind has yet attained."²⁰³ The aesthetics of the American suburban ideal (discussed further in this chapter) set the guidelines for NCR's landscape garden initiatives because they appealed to Patterson's faith in the virtues of agrarian life (highlighted in Chapter 2) and promised to refine and morally uplift the entire neighbourhood.

NCR's Residential Landscape Gardening

Patterson's desire to attract his growing team of employees to move closer to the factory to cultivate personal relationships with them motivated the landscape gardening initiatives at NCR. The improvement of the factory grounds hoped to encourage the surrounding neighbourhood to improve their "barren" and "rubbish-filled yards" and cure the neighbourhood of its "stealing

¹⁹⁹ Jackson, *Crabgrass Frontier*, 61–27; Hayden, *Building Suburbia*, 25–44.

²⁰⁰ Jackson, *Crabgrass Frontier*, 58.

²⁰¹ See Fukuo Akimoto, "'California Garden Suburbs': St. Francis Wood and Palos Verdes Estates," *Journal of Urban Design* 12, no. 1 (February 2007): 43; Dolores Hayden, *Building Suburbia*, 26.

²⁰² Wilson, *The City Beautiful Movement*, 39. Hayden also writes landscape designers, real estate people, bankers, and the transportation industry were early promoters of suburban development. See *Building Suburbia*, 21.

²⁰³ Olmsted, Vaux and Company, *Preliminary Report on the Proposed Suburban Village at Riverside, New Chicago*, New York, 1868, 7. Quoted in Jackson, *Crabgrass Frontier*, 81.

and selfishness.”²⁰⁴ The transformation of Slidertown into a garden suburb implied that the residents had also transformed through the civilizing effects of gardening. Instead of partaking in the evils associated with idleness, citizens of South Park were busy planting gardens and beautifying their yards.

The company initially distributed seeds packages to neighbourhood children in the factory Sunday School and gave prize incentives in the areas of best-kept back yards, window-boxes, ornamental flowers, and vegetable gardens.²⁰⁵ NCR extended its garden program to the neighbourhood men and women; They received seeds and bulbs sold for a nominal charge, the consultation of a factory-hired landscape gardener, and later the company provided them with a community garden.²⁰⁶ If homeowners did not willingly undertake home landscaping, the company would do it for them, free of cost, with the expectation that the residents would keep it in order.²⁰⁷ As in the children’s garden work, the owners of the best home gardens were awarded cash prizes but the factory insisted that even without cash prizes, the gardeners benefited from the spiritual and physical effects of garden labour.²⁰⁸ The prize winners were listed as mainly, if not all, women, all of whom were married. A willingness to improve physical surroundings indicated not only a willingness to improve him or herself but also signified worker’s loyalty to and cooperation with the company—qualities extremely valued by NCR in the wake of an intense period of labour disputes in the 1880s and the infamous 1894 Pullman Strike.²⁰⁹ Because NCR enforced the moral and spiritual values of residential gardens, failure to meet the standards

²⁰⁴ Townsend, “Boys’ Garden,” 30

²⁰⁵ Tolman, “Landscape Gardening for Factory Homes,” 442. In an address to the American Park and Outdoor Art Association, Patterson defended his reasons for educating children in landscape gardening: “The children are quicker to grasp these ideas than their parents, and in many cases do the entire planting of the yards, watering and caring for the plants. See John H. Patterson and Edward L. Shuey, “The Improvement of Grounds About Factories and Employees’ Homes,” *Fourth Volume of the American Park and Outdoor Art Association*, 45.

²⁰⁵ Tolman, “Landscape Gardening for Factory Homes,” 444.

²⁰⁶ Helena Chance notes that “male blue-collar workers [at NCR] had their own allotments and an Officers’ Club garden supplied produce for the officers’ dining room.” See *The Factory in a Garden*, 111.

²⁰⁷ Cook, *Betterment*, 225.

²⁰⁸ National Cash Register Company, “Distribution of Garden Prizes,” *The N.C.R.* 15, December 15, 1902, 1001. Prizes were awarded to women in the categories of window and box porches, back gardens, front gardens, and vine planting. See “Distribution of Garden Prizes,” 1003–1004.

²⁰⁹ See “Homestead and Pullman” in *Labor in America, A History*, 149–165.

set by the company likely meant that the gardeners' abilities as workers and capacities as contributing citizens were called into question. This extended to the NCR men employees' wives, who were the most probable residents to undertake home garden work (unmarried women, who made up NCR's women employee population, could not own property). Patterson emphasized that "behind the success of every man, there is usually a woman" and that the wives were "just as much members of the great N. C. R. family as their husbands."²¹⁰ Thus, residential gardens were reflective of both the cooperation and loyalty of workingman and his family. Even though landscape garden activities were taken up by the woman of the household, it was a reflection on the man's character because it was believed that contentment in the home created a better worker.²¹¹

While married women were likely to head the residential landscape gardening, NCR's women employees were involved in the neighbourhood improvement work and the home landscape gardening initiatives. NCR first presented improvement work in the neighbourhood (such as the improvement of streets and the establishment of gardens in vacant lots) to women, many of whom were NCR employees because, according to Patterson, "women were not afraid [...] of antagonizing politicians, or of injuring their business."²¹² "The future betterment of conditions in this country depends largely upon what the women will do," Patterson asserted. "Women are fearless in support of their ideals and have the time to devote."²¹³ Women, excluded from political and professional spheres, were thought to have greater autonomy when it came to civic affairs. The factory reported that women-focused clubs such as the "NCR Extension Improvement Association and the Mothers' Club and the Girls' Club have all worked together to the common end of neighbourhood improvement."²¹⁴ The community women organized to form the Women's Outdoor Art Association who, Patterson wrote,

[have] done much to improve conditions and to increase property valuations, by effecting the removal of unsightly fences, billboards, etc. insisting upon clean, well paved streets, and prevailing upon the residents to beautify the gardens.²¹⁵

²¹⁰ Johnson, *The sales strategy of John H. Patterson*, 301.

²¹¹ Bureau of Labor, *Workers' Housing*, 1904, 1215.

²¹² Patterson and Shuey, "The Improvement of Grounds About Factories and Employees' Homes," 46.

²¹³ John H. Patterson, "Practical Suggestions for Women's Clubs," *The Dayton Daily News*, March 30, 1901.

²¹⁴ *A Day at the N.C.R.*, 40–41.

²¹⁵ Patterson, "Practical Suggestions for Women's Clubs."

He urged other Women's Clubs in the country to adopt the programmes taking place in South Park. Patterson's acknowledgement of women's roles in civic improvement is contrasted by his contemporary urban planning theorist Charles Mulford Robinson, who shared Patterson's belief that civic work should be carried out under the device and direction of professionals but adamantly rejected feminine labour in his influential text *Modern Civic Art, or the City Made Beautiful* (1903):

[C]ivic art is not a fad. It is not merely a bit of aestheticism. There is nothing effeminate and sentimental about it,—like tying tidies on telegraph poles and putting doilies on the cross-walks, — it is vigorous, virile, sane.²¹⁶

Civic improvement efforts at the turn-of-the-twentieth-century, distinguished the masculine project of organizing and aestheticizing public space (landscape architecture) from the “traditionally feminine task of arranging and beautifying private space (housekeeping).”²¹⁷ Women and men participated “differently and separately” in civic improvement despite implied collaboration.²¹⁸ Women worked at the local level while male professionals, like Patterson and his collaborators, coordinated the grander schemes. Historian Bonj Szczygiel has addressed the gendered structure of The City Beautiful Movement, in which men co-opted women's civic labour (women were doing this work much earlier) into male-suited professions. These efforts read as attempts to further erase and denigrate women's work. Yet, we know that civic improvement at NCR depended on women's participation. Though there are some mentions of women's involvement in South Park's civic improvement, mentioned here, the effects of a well-landscaped home on the *workingman* and the ingenuity and determination of Patterson's initiatives within archival and written histories obscure women's contributions.

Although local involvement was substantial, the movement relied on professionals to provide expertise. In addition to the Olmsted firm, Patterson sought the expertise of Liberty

²¹⁶ Charles Mumford Robinson, *Modern Civic Art or The City Made Beautiful* (New York: G.P. Putnam's Sons/The Knickerbocker Press, 1904), 28.

²¹⁷ Margaret E. Farrar, “Making the City Beautiful in Embodied Utopias: Aesthetic Reform and the (Dis)placement of Bodies” in *Embodied Utopias: Gender, Social Change and the Modern Metropolis*, eds. Amy Bingaman, Lise Sanders and Rebecca Zorach (London and New York: Routledge, 2002), 42.

²¹⁸ Bonj Szczygiel, “‘City Beautiful’ Revisited: An Analysis of Nineteenth-Century Civic Improvement Efforts,” *Journal of Urban History* 29, no. 2 (December 2003): 110.

Hyde Bailey—a botanist and horticulturalist in the Agricultural Department at Cornell who publicly supported nature study for children and would later be known for his involvement in the Country-Life Movement. Patterson was in the company of those who fervently believed that contact with nature was necessary for human well-being. It was from Bailey’s *Garden-Making: Suggestions for the Utilizing of Home Gardens* (1898) that NCR developed its principles in home yard landscaping that would serve as the basis for their instructional programmes for workers and residents. These principles were: first, leave open spaces; second, plant in masses; and third, avoid straight lines.²¹⁹ He instructed home gardeners to embellish grounds “in such a way that they will have a nature-like or landscape effect,” an aesthetic shared by the Olmsted Brothers but directed to the design of small, private yards (fig. 18).²²⁰

The Landscape as Image

Patterson used photographs and lantern slides as a means of educating visitors, employees, the neighbourhood, and a global public (he toured abroad to teach on and exhibit NCR’s landscaping methods) about the principles and benefits of landscape gardening.²²¹ Public relations material regularly exploited this method of visual instruction, referred to as “teaching through the eye” to ensure that the company’s version of themselves was dominant. Further, the NCR’s method of landscape gardening centred on the picture-value of landscaping. *Garden-Making* reinforced the relationship between photography and landscape gardening, concisely summarized in the following statement: “[e]very yard should be a picture.” A well-organized garden was one “with every feature contributing its part to one strong and homogeneous effect.”²²² Patterson shared Bailey’s treatment of landscape gardening as a pictorial process in his lectures and frequently drew analogies between the landscape gardener and the painter.²²³ The factory publication *Art,*

²¹⁹ National Cash Register Company, *Art, Nature, and the Factory: An Account of a Welfare Movement, with a Few Remarks on the Art of the Landscape Gardener* (Dayton: National Cash Register Company, 1904).

²²⁰ Liberty Hyde Bailey, *Garden-Making: Suggestions for the Utilizing of Home Grounds* (New York: The Macmillan Company, 1898), 158.

²²¹ He lectured on the benefits of landscape gardening through stereopticon slides during factory visits, at the NCR Sunday School (a weekly programme for the neighbourhood children), and even held a class in landscape gardening for the employees.

²²² Bailey, *Garden-Making*, 121.

²²³ See “The Art of the Gardener” in *Art, Nature and the Factory*, n.p.

Nature and the Factory instructed homeowners on how to best manage their yard by treating it as a “whole picture” with the home as the central “keynote.” Every aspect of landscape design was meant to contribute to the image of the home. Landscape designer Frank J. Scott shared this sentiment, writing in 1870: a house should be “considered as ‘the central interest of a picture’ and the suburb as a sequence of separate ‘pictures’ that could be admired while passing along a street.” This perspective toward landscape design reflected values of independence and privacy that were central to the American suburban ideal at the turn of the century.²²⁴

The focus on photography and conceiving of landscape gardening as a picture availed peoples’ private spaces to public inspection. The emphasis on photography in the production of gardens at NCR raises the question of whether NCR’s programme was a practice of place-making or image-making. While Patterson believed the right kind of home produced the right kind of people, photographs of working-class homes as ideal garden suburban homes were a powerful means of alleviating middle-class anxieties about the social evils associated with poor and working-class neighbourhoods. Since the development of the daguerreotype, photography was a means to reveal “visual truths” about persons and produce subjectivities rooted in social hierarchies. Shawn Michelle Smith has examined the cultural power of photography as it relates to middle-class identity, addressing how the concept of interiority, namely feminine interiority, was central to middle-class identity and required the protection of the private sphere.²²⁵ Both the photograph and the home operated as signs of inner essence. Taken together, images of homes taken by NCR provided “visual truths” about its inhabitants and revealed deviations from NCR’s aesthetic ideals. Frequently, NCR’s images of homes and gardens included images of women partaking in respectable recreation as a way of further reaffirming the working-class home was a protective and morally sound place in line with middle-class values (fig. 19, 20, 21). Feminine interiority, as Smith observes, “[anchored] a middle-class ‘private’ sphere.”²²⁶ Images taken by NCR reaffirmed the middle-class logic of the “private” sphere as a feminine space and necessary to protect feminine virtues of piety, purity, and submissiveness. These images also affirmed that

²²⁴ Clifford Edward Clark, Jr., *The American Family Home, 1800–1960* (Chapel Hill and London: The University of North Carolina Press, 1986), 99.

²²⁵ Shawn Michelle Smith, *American Archives: Gender, Race, and Class in Visual Culture* (Princeton: Princeton University Press, 1999).

²²⁶ Smith, *American Archives*, 11.

working-class domesticity required surveillance and management and could thus only allude to middle-class domestic privacy.

Before-and-After Images

Lecture slides consisted of contrasting pairs known as “before-and-after” images. Referred to as the “name-and-shame” by Chance, these images publicly exposed residents’ homes and created a narrative of transformation—not only of the neighbourhood yards but the residents, too (fig. 22a and fig. 22b).²²⁷ The before-and-after images created a simplified narrative of social progress, one who linked the visual paradigm of middle-class domesticity to the image of an ideal citizen.²²⁸ Brown, in her study of NCR’s history of documentary photography, has addressed how this logic of NCR’s imaging pairing “works to close off alternative readings of history, including those that contested managerial authority.”²²⁹ Brown argues that images of gardens and other company materials from NCR served to effectively mask the company’s history of strikes and workers’ resistance.²³⁰ NCR’s before-and-after images put forth that managerial authority was unanimously accepted and necessary for the wellbeing of every individual (worker or not) and the neighbourhood. The transformation of a plain and fenced yard into one vine-clad, open, and properly managed doubled as portraits of the homeowners, many of whom were company employees, in that the garden represented their capacities as labourers *and* as citizens (fig. 23a and fig. 23b). The belief that the “environment has much to do with the mental, moral, and physical development of the human race” spurred Patterson’s welfare programme.²³¹ Through the subjective power of the photograph and the naturalizing function of the landscape, these

²²⁷ Helena Chance, *The Factory in a Garden*, 110.

²²⁸ Shawn Michelle Smith, *American Archives: Gender, Race, and Class in Visual Culture* (Princeton: Princeton University Press, 1999). Elspeth H. Brown, in her study of NCR documentary photography, uses Smith’s work to frame NCR’s documentary photography within narratives of American social progress. See Brown, “Welfare Capitalism,” 46.

²²⁹ Brown, “Welfare Capitalism,” 146.

²³⁰ The factory was set on fire three times in 1883 and, a year later, employees responded to poor working conditions by damaging 50,000 worth of cash registers. Labour unrest occurred again in 1901 when union divides spurred a ten-month lockout. The damaged cash registers became a permanent exhibit and part of the factory tour as a testament to the success of the factory’s welfare initiatives. Brown, “Welfare Capitalism,” 147.

²³¹ Patterson and Shuey, “The Improvement of Grounds About Factories and Employees’ Homes,” 43.

images reinforced the belief that the environment shaped human behaviour and cemented the impression that the factory, by promoting the right kinds of spaces, produced valuable and productive citizens. The South Park beautification programme was an exercise “in making the *body* beautiful: isolating and reifying the virtues associated with the proper citizen body to communicate a univocal representation of the body politic.”²³² According to Patterson, it provided “opportunities for self-culture,” which meant “better citizens and higher ambitions.”²³³ The visual culture of the neighbourhood landscape gardening initiatives formed a cohesive image of the “the body politic.” Any garden (read: resident) who deviated from the ideal image set forth by NCR was subject to company surveillance and intervention.

Family, Home, Yard

The success of the garden programme legitimized factory management’s intervention into the private lives of employees and residents. While publications on home décor reflected the shared belief that the home expressed the inner character of the residents, a well-landscaped home was believed to provide greater “home contentment” and decrease the possibility of the workingman to act in a way that would “imperil it or impair its integrity.”²³⁴ In the 1899 article “Landscape Gardening for Factory Homes,” William Howe Tolman emphasizes the positive effects of landscape gardening on the working-class family:

When the factory staff go to their homes after their day's work the influence follows them. The fathers are refreshed by the coolness and fragrance of the vines and flowers about their homes. They forget their weariness as the children climb on their knees to tell them the delightful stories they heard in the kindergarten, the wonderful things they made, and the songs they sang.²³⁵

Tolman promoted landscape gardening as a means to renew men workers’ capacity for labour while also strengthening their roles as fathers. Gardens impacted men’s capacities as fathers, Christians, and husbands. On the subject of gardens and fathers, Tuisco Greiner wrote “[t]he man who willfully and needlessly deprives his family of the privileges of a good vegetable garden fails in one of his foremost duties. He cannot possibly be a good husband, nor a good father, *and*

²³² Farrar, “Making the City Beautiful,” 42. Emphasis mine.

²³³ *A Trip Through the Factory*, 36.

²³⁴ Tolman, “Landscape Gardening for Factory Homes,” 444.

²³⁵ Tolman, “Landscape Gardening for Factory Homes,” 443.

he certainly is not a good Christian!"²³⁶ Illustrations in *Fruit Recorder and Cottage Gardener* compares a husband who respects a home garden from one who does not (fig. 24). The garden served to uplift the worker *and* his family. Patterson employed other methods to strengthen worker loyalty vis-à-vis the family. Though debated, sources have said that Patterson instituted mandatory cooking classes according to "newly imported principles" for the wives and mothers of his male executive employees.²³⁷ He was known to give prizes to NCR salespersons that were both geared toward the employees' wives and beyond their social standing. In doing so, he hoped wives would take a greater interest in their husbands' successes and, in turn, the husbands would perform better work.²³⁸

Homeownership and low-density living were central aspects of America's suburban dream and promoted by the factory.²³⁹ *NCR News* quoted Herbert Hoover in 1925, who advised, "You must remember [...] that borrowing money to buy a home is no disgrace. Money borrowed to pay on a home is an investment. The home is the basis of civilization; the foundation of wealth. Most homeowners borrow."²⁴⁰ The company promoted homeownership by publishing images of employees' homes as a feature in publications.²⁴¹ Patterson boasted that "the residencies in the suburbs are largely owned by those who live in them, and are the evidence of the careful saving of the working people."²⁴² Not only did homeownership suggest Progressive Era ideals of personal independence and just wages, but it was also highly respected. In promoting the advantages of homeownership, Indian Hill Company wrote: "None will deny that the most respected citizens of a community are those who own property. [...] You are rated as a solid, substantial citizen whose acquaintance is worth cultivating. [...] The man who has acquired a home of his own has attained certain degree of success. He knows it and his neighbors

²³⁶ Tuisco Greiner, *How To Make the Garden Pay* (Philadelphia: W.M. Henry Maule, 1894): 15.

²³⁷ Johnson, *The sales strategy of John H. Patterson*, 300. A staff member of NCR's public relations rejected this assertion. See Cynthia Noles, "Mandatory Or Not: Wives Learned Together With Patterson's Help," *Dayton Journal Herald*, November 16, 1962.

²³⁸ The source also notes "Patterson knew that behind the success of every man, there is usually a woman." See Johnson, *The sales strategy of John H. Patterson*, 301–302.

²³⁹ Richard Harris, "The Making of American Suburbs," in Harris and Larkham, *Changing Suburbs*, 95.

²⁴⁰ NCR, *The Accounting Machine Era*. n.d. Wright State University Special Collections and Archives, National Cash Register Collection (MS-373), box 2: 14–15.

²⁴¹ NCR, *The Accounting Machine Era*, 14.

²⁴² Patterson, "A Modern Factory Organization," 39.

know it.”²⁴³ Homeownership was a “proxy for success” and “conferred moral rectitude.” Russell Conwell declared, “A man is not really a true man until he owns his own home.”²⁴⁴ Lizbeth Cohen has written about homeownership as a strategy for “directing worker ambition along acceptable middle-class.”²⁴⁵ These cultural values of homeownership and gendered middle-class virtues informed the perceived success of South Park, even though, as some historians have acknowledged, home ownership programmes aimed to reduced workers’ mobility and independence through greater economic responsibility.²⁴⁶

While most if not all of NCR women employees were unmarried, NCR’s women workforce made a concerted effort to demonstrate that their employment at the factory was not in conflict with patriarchal values. In *Woman’s Welfare*, the publication by NCR’s women employees, one author asserted that the wage-earning women would make for a better wife “because through work she has learned what a haven is matrimony [...] [S]he garners a knowledge of man as he really is.”²⁴⁷ They were also careful to demonstrate that despite their employment, wage-earning women believed “that the greatest and most beautiful work a woman can do is to marry, and make happy the home of the man she loves.”²⁴⁸ NCR’s home for unmarried women, the Rubicon House, educated working-class women, who were thought to be lacking domestic skills, in home management. The home and family were central to NCR’s landscape gardening programme, and although both married and unmarried women took part in landscape gardening activities, married women’s work received more detailed attention because it conformed with middle-class family virtues.

Middle-class domesticity is depicted in the photograph of employee residences taken by the photographer William Henry Jackson (fig. 25). In the photograph, a woman stands in the middle of a backyard holding her baby. Another woman rests on the house’s porch some distance back. The perspective of the camera, positioned at the back of the yard, foregrounds the plants and emphasizes the expansive and undifferentiated turf. Despite being a portrait of a canonical

²⁴³ Crawford, *Building the Workingman’s Paradise*, 118.

²⁴⁴ Russell H. Conwell, *Acres of Diamonds* (New York: Harper & Brothers, 1915), 19.

²⁴⁵ Lizbeth Cohen, “Embellishing a Life of Labor: An Interpretation of the Material Culture of American Working-Class Homes, 1885–1915,” *The Journal of American Culture* (Winter 1980): 762.

²⁴⁶ Crawford, *Building a Workingman’s Paradise*, 56.

²⁴⁷ National Cash Register Company, *Women’s Welfare* 3, no.1, April 1905, 14.

²⁴⁸ *Women’s Welfare* 3, no.1, April 1905, 15.

subject (mother and child), the photography gives equal or more attention to the yard and gardens. The factory dramatically fills the background. Already a powerful image because of its subjects, the photograph of mother and child alludes to the yard as a place to nurture children at a time when middle-class families valued sheltered upbringings. At the same time, the factory's overarching presence and the expansive turf creates a rupture in the semblance of privacy. The photograph visualizes the dual narratives of complete exposure and the illusions of domestic privacy that pervaded NCR's programme. In either narrative, the factory remains a central figure (perhaps even doubles as the father figure here) both visibly and metaphorically in the lives of the neighbourhood residents.

Other photographs taken by NCR's Photography Department are shot from inside the steel-and-beam factory (referred to as a "crystal palace") as a visual reinforcement of the factory's participation in community life (fig. 26). For the employees, the view of their homes from the factory floor might have served as a reminder that their work at the factory was never complete. In other industrial garden programmes such as at Port Sunlight, the model village of Lever Brothers, landscaping was used to increase "the feeling of privacy which as its moral value so long as it is not allowed to destroy the social spirit."²⁴⁹ Port Sunlight officials were able to visit any house in the village at any time to evaluate its order and cleanliness.²⁵⁰ Restrooms and creeper-clad homes alluded to privacy but rarely was it actualized (fig. 27).²⁵¹

The neighbourhood gardens served as a means of promoting good behaviour and domestic virtues, but it was too another discipline of organized bodily movement that extended to non-work hours. Mark Seltzer, writing on more overt forms of visible bodily management like time-motion studies and the military corps, states: "[t]he disciplines of organized bodily movement that make up systematic management are made visible [...] more generally, in the

²⁴⁹ *Labour and Housing*, 71.

²⁵⁰ Rule 8 in tenant rules, *Labour and Housing*.

²⁵¹ See Littmann "Designing Obedience," 99 for discussion on the lack of privacy found in factory restroom design. In her study of nineteenth-century baby shows, Susan Pearson writes "being in public and on display marked one as degraded and different, the ability to maintain one's privacy was a mark of class- and gender-inflected respectability." See Pearson, "'Infantile Specimens': Showing Babies in Nineteenth-Century America," *Journal of Social History* 42, no. 2 (Winter 2008): 342. Vicky Long discusses the "guise of domesticity" in factory environments as a means of facilitating management "management rather than to offer workers any of the physical or emotional privacy typically associated with the concept of the domestic interior." See Long, "Industrial Homes, Domestic Factories," 436.

identification of the life process and the work process with the imperative of *keeping things and bodies in directed motion*.”²⁵² Following Seltzer, NCR gardens were not incompatible with an industrial management system aimed at continuous (organized) movement. NCR’s “system in everything” transposed to garden labour, where productive measures determined the value of working-class recreation. Gardens also functioned as a representation and record of labour; workers and residents could be monitored and assessed without their presence or ever entering their house – although Patterson took more direct measures. He was known to visit worker’s homes, as one worker remarked, to “have a look at how you lived,” much to the resident’s disliking and relocate his employees when the factory expanded, “he moved the workmen father away, again at his own expense; [one employee] was moved three times.”²⁵³

Patterson’s Civic Ideals

The factory was a leader in virtually all civic affairs up until the late 1930s. Patterson immersed himself in civic affairs from the outset; in 1896 he delivered a speech, “What Dayton Should Do to Become a Model City.” The transcribed speech looks ahead one thousand years to the future of Dayton as a modern city, equipped to resolve the then-current issues caused by industrialization and urban living. In “Dayton of the Future,” the article’s title, Dayton’s business life animated the city centre while homes were situated in garden suburbs:

Beauty of homes and communities will be fostered, a general plan of harmonious and architectural painting will be followed, ornamental trees, shrubs, vines and fountains will grace our city, and our homes, churches and public buildings will be clothed in green. The sidewalks on Main street will be narrowed, and park of trees and flowers carried through the centre [...] We shall have parks on four sides of the city. A forester will be placed in charge to encourage the care of trees and public grounds. The Miami river will form a lake and the river banks will be turned into parks. We shall have a Zoological garden and botanical garden, and free concerts will be given by the city on Saturday afternoons during the summer.²⁵⁴

In Patterson’s ideal city, vacant lots would be revitalized into children’s playgrounds and gardens, or “leased gratis to the poor for vegetable gardens, as in Detroit and New York city.” In

²⁵² Seltzer, *Bodies and Machines*, 166.

²⁵³ Charles Wertenbaker, “Patterson’s Marvelous Money Box,” *Saturday Evening Post* 226, no. 12 (1953), 125. *Benjamin Franklin Literary and Medical Society*.

²⁵⁴ “To Make the City Great: Mr. John H. Patterson’s Address on “The Dayton of the Future,” *The Evening News*, Dayton, Ohio: March 26, 1896, 25.

addition to green infrastructure, Patterson envisioned illuminated streets paved with asphalt and vehicles with pneumatic tires to reduce city noise. Pipes and wires would be installed beneath the streets. He emphasized a city governed by hygienic principles inspired by other urban and suburban plans and aspects of English garden suburbs. Dayton would have public lavatories and water closets like the greatest European cities and municipal hospitals like the ones found in Glasgow; the streets would be cleaned every night as practiced at the World's Fairs and the sidewalk would be equipped with iron boxes to hold street debris; NCR would institute its own force of janitors modelled after New York's street-cleaning department.²⁵⁵ Areas such as Buda Pesth in Chicago's East or Berlin's famous street Unter den Linden inspired Patterson's civic goals while the George Junior Republic for children of New York, discussed in Chapter Two, encouraged Patterson's ideas on children's civic upbringing. Aspects of Patterson's civic ideals, evident in the neighbourhood garden campaigns, would be further pursued in later years.

The reception of NCR's programme was not without criticism. The publicising of these landscape initiatives led some led factory inspectors like Dorothea Proud to question factory design's true motivators, believing that some factory gardens "have an obtrusiveness which suggests that they concern the public more nearly than the employees."²⁵⁶ Gertrude Beeks, a welfare secretary, visited NCR in 1901 and announced the entire welfare programme to be "overdone."²⁵⁷ Reformers, critical of how industrialists were using beauty to suggest social reform and worker wellbeing, argued for a design that was first and foremost socially engaged. Patterson, among other industrialists, most famously George Pullman, whose aesthetic control factored into one of the largest strikes in US history, believed in the educational potential of beauty.²⁵⁸ One source noted at the time, "aesthetic features are admired by visitors but have little money value to employees, especially when they lack bread."²⁵⁹ Many were wary of aesthetic experiments organized by industrialists at the turn-of-the-century. Where Proud critiqued the

²⁵⁵ Patterson, "A Modern Factory Organization," 3.

²⁵⁶ E. Dorothea Proud, *Welfare Work: Employers' Experiments for Improving Working Conditions in Factories* (London: G. Bell and Sons, Ltd, 1916), 109.

²⁵⁷ Gertrude Beeks quoted in Nelson, "The Factory System and the Unions," 168.

²⁵⁸ Crawford also notes that after the Pullman strike, industrialists were discouraged from performing grand social experiments and instead sought professional experts. This effect bolstered the growth of emerging professions such as urban planners and social secretaries. See Crawford, *Building the Workingman's Paradise*.

²⁵⁹ Crawford, *Building the Workingman's Paradise*, 8.

extravagant and unnecessary aspects of factory welfare design, factory inspector Ida Tarbell praised the gardening initiatives at the NCR: “Gardening has become a cult among ten thousand employés [sic] of this enterprise, and their continual spur and teacher is the factory itself.”²⁶⁰ The civic garden campaign positioned the factory as a model for aesthetic and domestic affairs for workers and residents to achieve “the best of living.” One factory visitor announced: “there is no person employed in the whole of their establishment [...] who is not linked on to the brain, and becomes himself, part of the brain of the machine.”²⁶¹ Landscape gardening was, too, a form of discipline wherein well-landscaped homes were markers of cooperation and loyalty with the company and a form of working-class training in aesthetic standards. The working-class home, though aesthetically resembled the middle-class suburban ideal, suggested compliance instead of security, was subject to exposure instead of privacy, and instead of a private retreat, the home was another worksite connected to the factory.

²⁶⁰ Ida M. Tarbell, *New Ideals in Business: An Account of Their Practice and Their Effects Upon Men and Profit* (New York: Macmillan Company, 1916), 23.

²⁶¹ *A Trip Through the Factory*, 36.

Conclusion

NCR's involvement in Dayton's landscape gardening grew to large-scale initiatives starting in the 1910s when Patterson participated in the approval of Olmsted's proposed park system, submitted to the city of Dayton in 1911 (fig. 28). The report proposed to increase the city's park space to twenty per cent of the city and create a relationship of 78 people per acre of park space instead of 5948 per acre. The execution of the proposal would give Dayton the benefit of national recognition by exceeding Olmsted's ideal formula of 100 people per acre and place Dayton among the top cities in the United States with the most green spaces.²⁶² The report detailed a pleasure drive of which Patterson played a formative role in securing. This major construction project helped Patterson and the Olmsted Brothers achieve their shared vision of South Park (and Dayton at large) as a garden suburb designed in accordance with Olmsted's principles: "respect for the local topography and flora;" "park or public space element" as "the central focus of the suburb;" "reservation of public spaces as an essential part of a suburban residence;" "separation of transportation modes;" "non-grid street pattern;" and "parkway, conceived as both a connector and a pleasure drive, which linked the suburb with the nearby city."²⁶³ Patterson continued to collaborate with the Olmsted Brothers Firm, hiring them for landscaping projects on his estate (fig. 29 and fig. 30). In 1918, he donated his 325-acre Hills and Dales estate to the municipality to become a public park and, in 1939, seventeen years after Patterson's death, another 137-acres was turned into park area for employees and families of NCR to swim, picnic, and canoe.²⁶⁴

These larger scale initiatives obscure the grassroots initiatives of the Women's Outdoor Art Association and the individual home landscape gardening programmes of earlier years. Similar to the City Beautiful Movement, in which men and women contributed differently with women working at the local end and men coordinating the larger schemes of park systems, the

²⁶² Olmsted Brothers Firm, "Report on Proposed Park System for the City of Dayton, Ohio," Brookline, April 12, 1911.

²⁶³ Darlene R. Roth, "Frederick Law Olmsted's first and last suburbs: Riverside and Druid Hills," (Bethesda: National Association for Olmsted Parks, 1993), 11. Roth is also quoted in Akimoto, "California Garden Suburbs," 44.

²⁶⁴ *NCR: 1884-1922 Era of the Cash Register*.

structure of the beautification goals taking place in South Park, and Dayton more broadly, were determined by gender and by age, as children held distinct roles in the movement.²⁶⁵

Gender informed the visibility and histories of civic gardening initiatives. Lena Harvey Tracy, former Deaconess and NCR's first factory welfare director, was a lead organizer in the Boys' Garden – though focus on Patterson's ingenuity and benevolence superseded her role.²⁶⁶ Tracy also hosted other boys' and girls' clubs for the neighbourhood children in the House of Usefulness, a company-owned home that served as her residence and the site for children's programming. Her role in organizing NCR's programmes and clubs is seldom recognized in the abundance of company material on the subject but recent studies in Progressive Era reform have brought to light the ways in which women like Tracy extended their domestic roles to create new professions for women.²⁶⁷ Marie Warsh's research on women's educational and settlement work in New York City reveals the extent to which the creation of these new professions "made it possible for [women] to transform the physical environment of the city and educate and care for its children." Further, "women played a central role in realizing a new vision of the city and defining childhood within it."²⁶⁸ Despite Tracy's role as the leader of the Boys' Garden, histories of NCR narrate the garden through a lens of male exceptionalism in which Patterson is celebrated as the lead figure (feted as "America's Froebel") while Tracy is positioned as a minor actor.

Despite Patterson's contested role in the city, history has monumentalized his leadership and community involvement. Patterson's imprint on the city is felt today – a monument depicting the industrialist on horseback, no less, was erected in 1928; street signs and parks bear his family name, and the Patterson homestead exists today as heritage site open to public visits (fig. 31). The city reflects a positive vision of Patterson and his civic contributions though, in years previous, not all citizens share this viewpoint. During the period of industrialist economic

²⁶⁵ The gendered organization of civic improvement activities in (and in the lead up to) the City Beautiful Movement is discussed by Farrar, "Making the City Beautiful," 37–54; Szczygiel, "'City Beautiful' Revisited," 107–132; Wilson, *The City Beautiful Movement*, 44.

²⁶⁶ Additionally, NCR fired Tracy for unknown reasons in 1901 and replaced her with a man welfare director.

²⁶⁷ See Warsh, "Cultivating Citizens," 64–89; Gutman, *A City for Children*; Mandell, *The Corporation as Family*, 16; Linda Gordon, "Black and White Visions of Welfare: Women's Welfare Activism, 1890-1945" *Journal of American History* 78, no. 2 (Sept. 1991): 572.

²⁶⁸ Warsh, "Cultivating Citizens," 70.

expansion, NCR was a leader in civic affairs. In a 1928 article from *Dayton Journal*, the reporter states: “but through the welfare and civic interests of the industry and its owners, the city of Dayton, the state, nation, and even the world has felt the helpful influence of this Dayton institution which has often been called the world’s model factory.”²⁶⁹ More than offering a vision for Dayton’s future, Patterson instituted many changes that reflected both his civic vision and the methods employed at the factory. He proposed a new municipal government organized by a hierarchy of subcommittees and without sole executive authority. According to Patterson, “municipal affairs would be placed upon a strict business basis and directed, not by partisans, either Republican or Democrat, but by men who are skilled in business management and social science.”²⁷⁰ Patterson’s nonpartisan, city-manager system was adopted by Dayton after the flood in 1913 and became the second city—but first large city—to employ this system.²⁷¹ This municipal plan was a direct continuation of his factory committee.²⁷²

Responses to the new city manager, a trained engineer, resounded NCR’s rationale: “It pays even a city to “manage.”²⁷³ Proof of city management, for some, was materialized in the “tidy streets,” “flourishing vegetable gardens” and “rows of flowers,” while others criticized the failure of a “factory government” run by private businesses whose sole interest was profit.²⁷⁴ One critic disparaged: the city manager “was the salaried political employe [sic] of capitalists, bankers, manufacturers and merchants, the very class who owned and controlled the public utility companies and other industrial and commercial interests that require special privileges for city government and fatten upon them.” Dayton citizens contested the role of NCR in civic affairs, and this came to a head in the years of the company’s gradual departure from Dayton. Beginning in the 1970s, the company laid off hundreds of workers. It eventually announced the closure of the Dayton plant in 2010. Local news articles closely followed the changing morphology of South Park as NCR’s buildings were knocked down, one by one. NCR’s

²⁶⁹ “N.C.R. Is Ever Concerned with Progress of Dayton: One of the Guiding Principles of Great Manufacturing Institution,” *Dayton Journal*, Dayton, Ohio, July 8, 1928.

²⁷⁰ “To Make the City Great: Mr. John H. Patterson’s Address on ‘The Dayton of the Future,’” *The Evening News*, Dayton, Ohio, March 26, 1896, 25.

²⁷¹ “John H.’s Crystal Ball on Dayton,” July 2, 1973, Wright State University Archives.

²⁷² Patterson, “A Modern Factory Organization,” 34.

²⁷³ Howland, “The Little Boss and the Big Manager.”

²⁷⁴ Joseph W. Sharts, “Biography of Dayton: An Economic Interpretation of Local History,” (Dayton: The Miami Valley Socialist, 1922), www.daytonhistorybooks.com/page/page/5360717.

departure, for some, meant freedom from the “centralized” and “paternalistic leadership of Dayton,” allowing room for more voices: “A city dominated by one company is never as good as one with a broader base of leadership.”²⁷⁵

The history of NCR’s involvement in the lives of its employees, the neighbourhood residents, and children is complex. The company both positively contributed to the neighbourhood through the provision of schools, community programmes, playgrounds, and parks while, too, exercising social control and authority over peoples’ private lives that was felt, until the beginning of the company’s departure from Dayton in the 1970s. In the spring of 2018, I visited South Park and the former NCR factory grounds where a university now stands in place of the factory buildings. K Street – once considered by John C. Olmsted to be the most beautiful street in the world – is now university housing for students and faculty (fig. 32). The single and semi-detached homes that, at one time, belonged to NCR employees are maintained but their gardens have since disappeared (fig. 33). In place of the children’s gardens are parking lots and the university’s sports field (fig. 34 and fig. 35). Their once well-regarded and prominent presence has left no visible traces on the physical landscape.

Despite the ephemerality of the gardens, Dayton has recently revisited NCR’s models for civic garden participation. After the Great Dayton Flood in 1913, the city followed NCR’s reward system to encourage beautification effort and instituted a City Beautiful prize. A 1916 certification displays a medallion with the NCR’s principles of landscape design: (1) “Avoid straight lines; (2) Plant in masses; and (3) Leave open spaces (fig. 36). While this programme ended in the 1980s, it was revived by the city in 2017. The annual award relies on nominations of institutions, businesses, homeowners, or renters who are undertaking beautification efforts that align with the Dayton City Beautiful Award criteria, as stated on the website:

aesthetic appeal; landscaping—design, color, balance; architectural design and placement; maintenance of landscape or building; treatment of parking areas; preservation of trees and natural amenities; awareness of City codes and ordinances; appropriate placement/design of new construction; use of paint or other materials to complement buildings; enhancement of the area or neighborhood; or removal of blight.²⁷⁶

²⁷⁵ Quoting NCR Chairman and President William S. Anderson in Steve Sidlo, “City leadership broadened as NCR lost dominant role,” *Dayton Daily News*, July 8, 1978, 1.

²⁷⁶ Dayton, Ohio Government Website, “Dayton City Beautiful Award,” Accessed June 10, 2018. <https://www.daytonohio.gov/formcenter/planning-community-development-7/dayton-city-beautiful-award-67>.

NCR's work continues to impact the landscape gardening activities in Dayton and citizens continue to take up beautification efforts in the city. Rewards for hard work, public responsibility, and aesthetic criteria still shape civic gardening initiatives. New models have also emerged, including an active Facebook group for Dayton gardeners to share their gardening efforts with a community.

Garden programmes and corporate landscapes have shifted due to new economic pressures and urban density, but still, reflect many of the imagined benefits of urban garden developed in the nineteenth century. The Olmsted Brothers envisioned parks and gardens as means to provide city dwellers with a relief from the “nervous strain due to the excessive artificiality of city life” and provide opportunities for dwellers to enjoy beautiful scenery.²⁷⁷ In the city of Montreal, from where I am writing, community gardens have emerged to make use of vacant lots and under-used public spaces, particularly in post-industrial areas. Montreal has established new zoning laws to designate spaces as “community gardens” to “allow citizens of all ages to garden in a community context where they may improve their quality of life as well as their natural environment.”²⁷⁸ The desire for green space and the lack of ideal space to support it has motivated the “greening” of existing infrastructure and the engineering of more creative forms of green urban infrastructure including rooftop gardens and green walls. The variety of urban gardening programmes today have entered public policy and responded to a wide range of contemporary issues from environmental justice to social justice and food security. Urban gardening models based on communal sharing, reciprocity, and community care provide alternative economies and land management to existing capitalist structures but present unique challenges as recent studies have shown how urban gardens are implicated in the gentrification of neighbourhoods. Recent articles on house buying trends acknowledge the appeal of the food growing lifestyle for middle-class homebuyers: “One of the signs of a so-called ‘quality’ neighborhood is open space and green space.”²⁷⁹ This, too, was an effect of the landscape

²⁷⁷ John C. Olmsted, “The True Purpose of a Large Public Park,” *The First Report of the American Park and Outdoor Art Association* (Louisville, 1897), 12.

²⁷⁸ Jardins Communaires, Ville de Montreal, “Montreal’s Community Garden Program,” *World Urban Forum* (Vancouver, 2006), 5.

²⁷⁹ Quoting Gopal Dayaneni, a member of Movement Generation in Lauren Markham, “Gentrification and the Urban Farm,” *The New Yorker*, May 21, 2014, <https://www.newyorker.com/business/currency/gentrification-and-the-urban-garden>,

garden work undertaken by the employees, which was reported to have increased the value of the homes in South Park by three-hundred percent.²⁸⁰

Factory tourism materials indicate that landscape gardening initiatives positively impacted the company's corporate image. Whether they were useful in forming compliant and loyal workers is less clear considering the company's extensive welfare programme did not keep workers from striking. In the summer of 1901, the company experienced a mass strike reportedly set in motion by a tyrannical foreman. Though Nelson's review of the disputes confirmed welfare work was not a factor of the strike, Chance advises that the pressures of welfare work at NCR could have contributed to labour tensions.²⁸¹ Remarks from factory inspectors such as Proud and Beeks who indicated that gardens and beautiful workspaces did not equate to just and safe working conditions strengthen Chance's speculation. Other studies have shown worker's responses to welfare amenities were diverse and did not always align with a company's intentions. Littmann's research on workers' experiences of welfare design has brought to light how the same elements applied to welfare design to improve worker contentment and behaviour also functioned to delineate a managerial territory and alienate workers from these spaces.²⁸²

Factory gardens, and the residential yards that were created in the image of them, "helped ease the consciences of white-collar Americans about industrial labor and allowed them to embrace the consumer ethic with less doubt and contrition."²⁸³ In today's post-industrial and globalized economy, sites of production are divorced from the realms of consumption. American brands are produced overseas, devoid of their production histories, and unlike the turn of the twentieth century corporate image, company branding now seeks universality over place-making. The company landscape as we know it today is all image and devoid of context. The factory garden, an idealized space that impacted real bodies, poses interesting questions about the importance of worksites in today's global consumer culture and the values prescribed to gardens.

The impermanent nature of gardens means that their histories are shaped mainly and interpreted by visual and textual materials rather than through their spatial configurations. These materials capture what Grosz refers to as "temporary alignments:" moments when gardens,

²⁸⁰ See Chapter 2 and Cook, *Industrial Betterment*, 224

²⁸¹ See Nelson, "The New Factory System," 168 and Chance, *The Factory in a Garden*.

²⁸² Littmann, "Designing Obedience," 89.

²⁸³ Littmann, "Designing Obedience," 109.

children, residents, employees, and the factory are momentarily brought together under managed conditions. These materials do not capture the full spectrum of relations between actors, including most evidently the perception of children and women gardeners of their experiences, but they do uncover an embodied relationship to the city and the factory, and participation in civic and industrial affairs, that deserves attention within histories of gardens and working-class material culture.

Figures



Fig. 1. Photograph of the Factory Vista. (Photograph courtesy of Harvard Art Museums/Fogg Museum, Social Museum Collection, Cambridge, Massachusetts.)

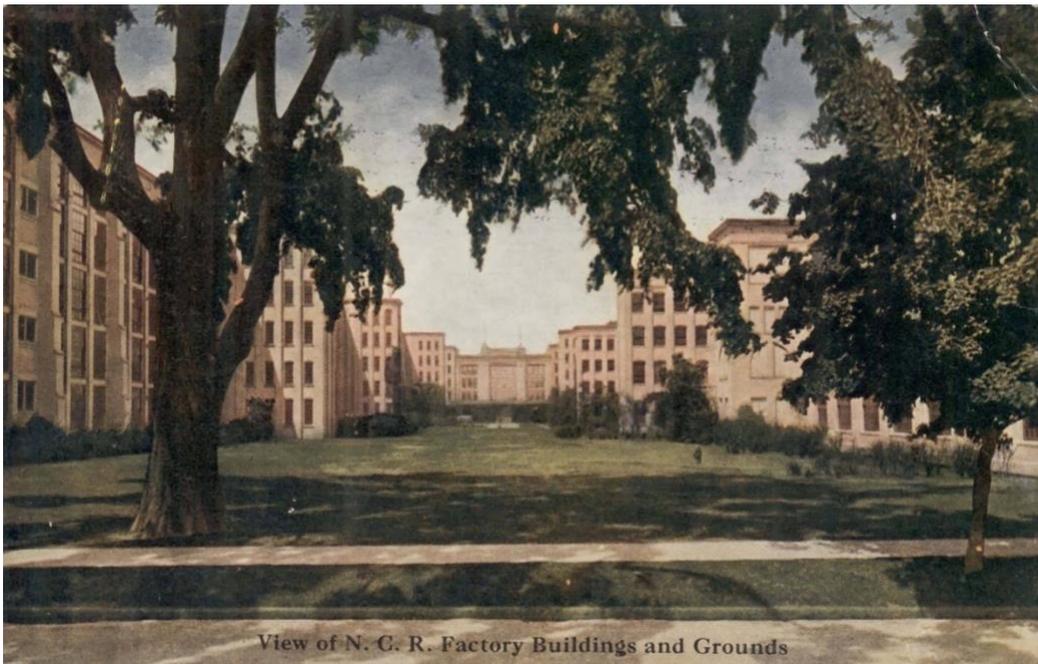


Fig. 2. "View of N.C.R. Factory Buildings and Grounds." (Courtesy of Dayton Postcard Collection, Dayton Metro Library Dayton, Ohio.)



Fig. 3. Window in girls' restaurant, National Cash Register Company, Dayton, Ohio. (Photograph by William Henry Jackson, published by Detroit Publishing Co., Dayton Ohio [1902(?)]. Courtesy of the Library of Congress Prints and Photographs Division, Washington, D.C.)



Fig. 4. "N.C.R. Women's Rest Rooms." (Photograph courtesy of Harvard Art Museums/Fogg Museum, Social Museum Collection, Cambridge, Massachusetts.)



Fig. 5. "NCR Women Employees," (Photograph courtesy of Harvard Art Museums/Fogg Museum, Social Museum Collection, Cambridge, Massachusetts.)

Welfare Institutions of the National Cash Register Company,
Dayton, Ohio.



WOMEN'S REST ROOM



RECESS IN A WOMEN'S DEPARTMENT



HIGH BACKED CHAIRS

THE 400 WOMEN EMPLOYEES WORK EIGHT HOURS A DAY. FIVE CENTS PER MEAL IS CHARGED FOR THE NOON LUNCH PROVIDED BY THE COMPANY. HIGH BACKED CHAIRS, MORNING AND AFTERNOON RECESSES, APRONS AND SLEEVES, AND REST ROOMS ARE SOME OF THE CONVENIENCES ENJOYED.



WOMEN'S DINING ROOM



WOMEN'S BATH ROOM

CONVENIENCES FOR WOMEN EMPLOYEES.

Fig. 6. "Conveniences for Women Employees." (Photograph courtesy of Harvard Art Museums/Fogg Museum, Social Museum Collection, Cambridge, Massachusetts.)



Fig. 7. Calisthenics at NCR. (Photograph courtesy of Harvard Art Museums/Fogg Museum, Social Museum Collection, Cambridge, Massachusetts.)



Fig. 8a. “Workers garden with pathway before landscaping.” (Photograph by Frances Benjamin Johnston [ca. 1896]. National Cash Register Company. Glass lantern slide. Courtesy of Library of Congress Prints and Photographs Division Washington, D.C.)



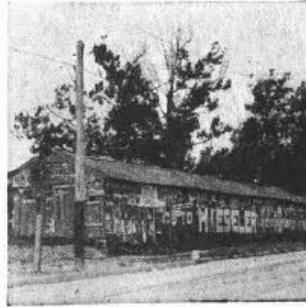
Fig. 8b. “Workers garden with pathway after landscaping.” (Photograph by Frances Benjamin Johnston [ca. 1905]. National Cash Register Company. Hand-coloured Glass lantern slide. Courtesy of Library of Congress Prints and Photographs Division Washington, D.C.)



Fig. 9. “Elizabeth Rudensky. Right dorsal curve. Scoliosis – real spinal case - bad. Showing wrong kind of occupation for this physical defect. No support for the feet. Defect would be greatly increased by this kind of occupation.” (Photograph by Lewis W. Hine. Boston, Massachusetts [1917]. Courtesy of National Child Labor Committee Collection. Courtesy of Library of Congress Prints and Photographs Division Washington, D.C.)



Not bad boys. Just boys with nothing to do.



These sheds harbored tramps and even criminals.

Fig. 10. Slidertown Boys. (Photograph from *Welfare Work*. National Cash Register Company [1904]. Courtesy of *HathiTrust Digital Library*).



Fig. 11. Boys' Garden. (National Cash Register Company [ca. 1907]. Photography courtesy of Montgomery Country Picture File, Photographic Collection vol. 1, Dayton Metro Library, Dayton, Ohio).



Fig. 12. Boys displaying their harvest. (National Cash Register Company [ca. 1907]. Photo courtesy of Montgomery Country Picture File, Photographic Collection vol. 1, Dayton Metro Library, Dayton, Ohio).

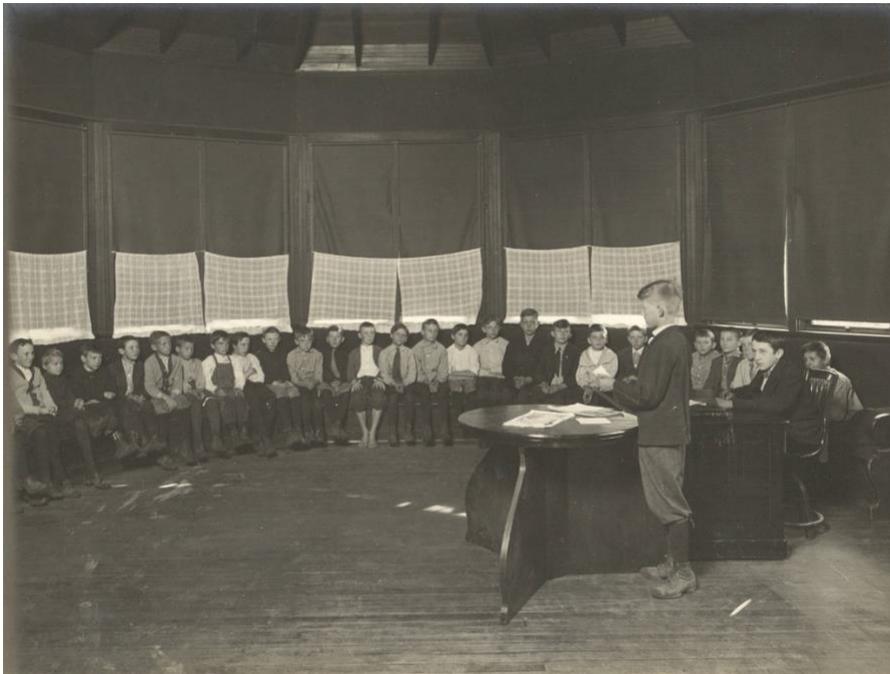


Fig. 13. A group of boys having a meeting at the National Cash Register Company.” (National Cash Register Company [ca. 1907]. Photo courtesy of Montgomery Country Picture File, Photographic Collection vol. 1, Dayton Metro Library, Dayton, Ohio).



Fig. 14. “Girls’ Garden.” (National Cash Register Company [ca. 1912]. Postcard courtesy of http://www.hazett.com/national/national_cash_register_postkarten.htm.)



Fig. 15. A Typical Photograph of Factory Women – Neat and Orderly. (Photograph courtesy of Harvard Art Museums/Fogg Museum, Social Museum Collection, Cambridge, Massachusetts.)



Fig. 16. "Boys' Garden." (National Cash Register Company [ca. 1912]. Postcard courtesy of http://www.thecorememory.com/html/photos___postcards.html).

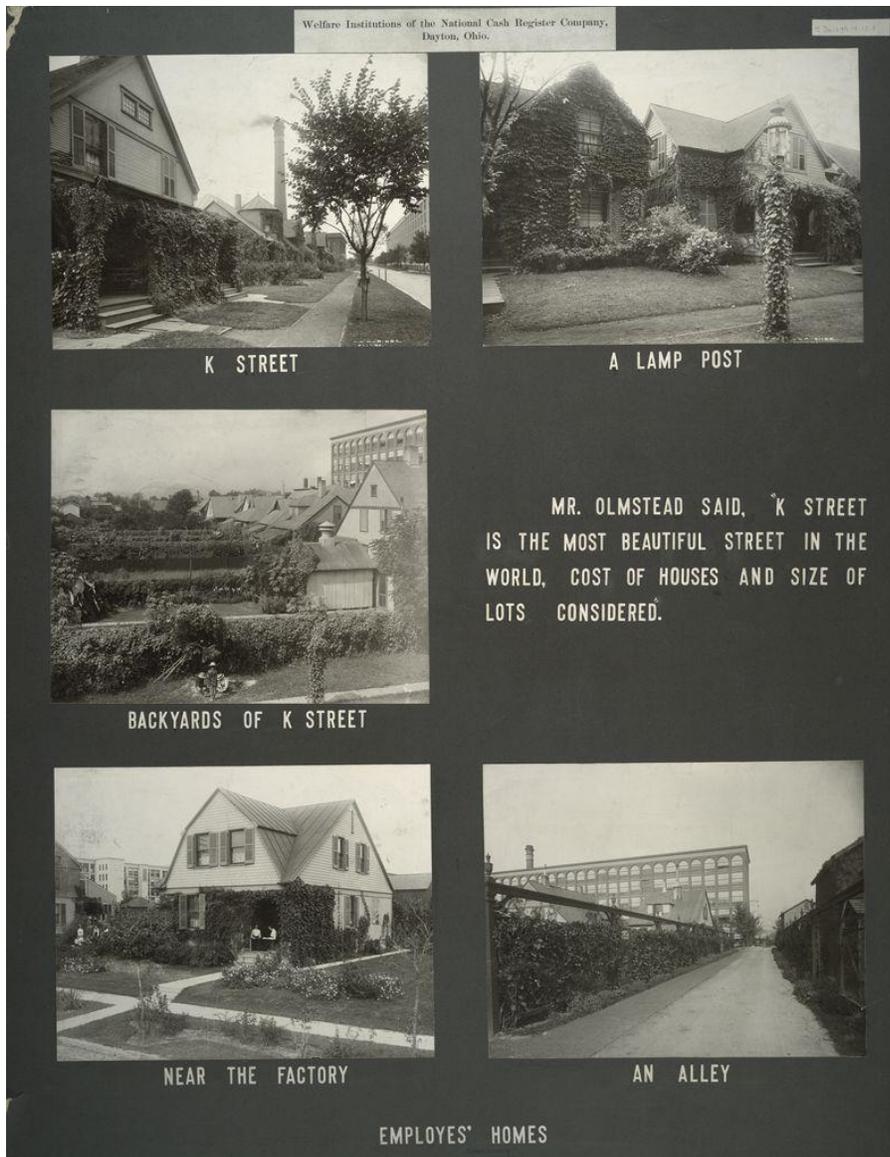


Fig. 17. K Street – the most beautiful street in the world. (Photograph courtesy of Harvard Art Museums/Fogg Museum, Social Museum Collection, Cambridge, Massachusetts.)

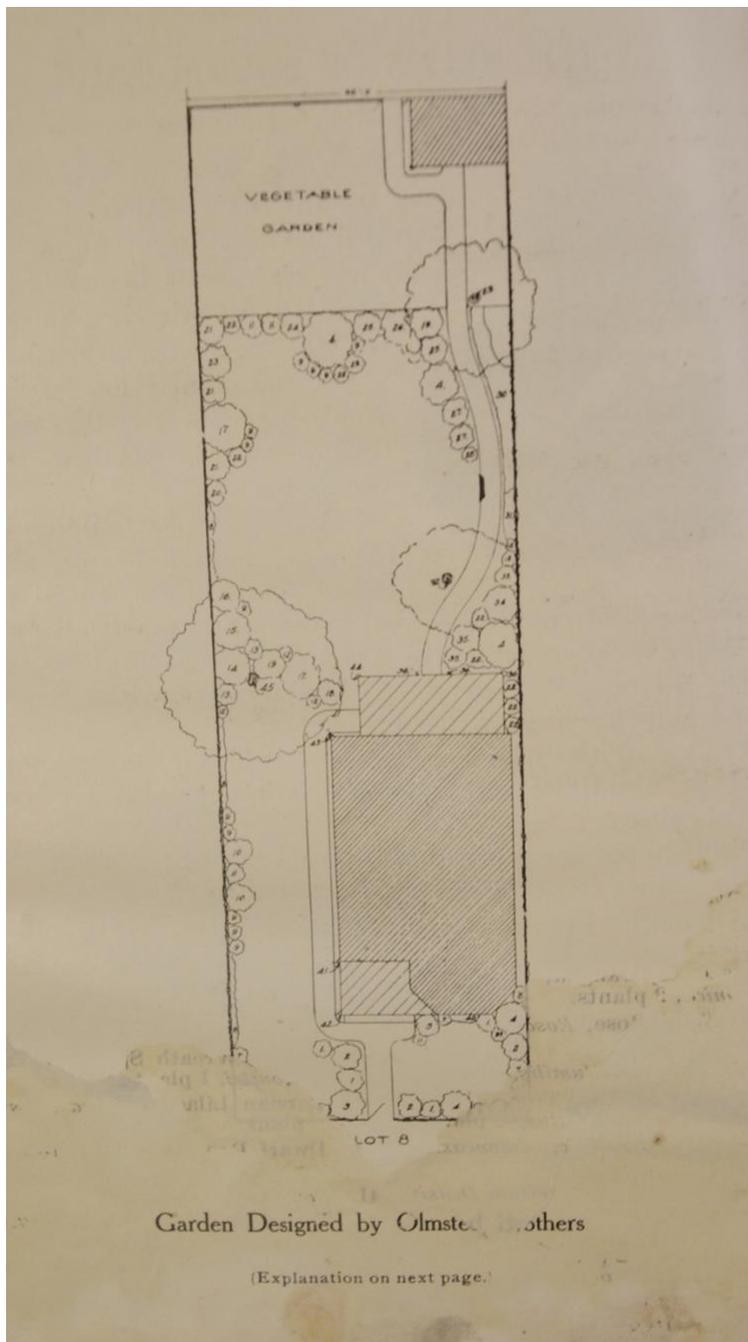


Fig. 18. "Garden Designed by Olmsted Brothers." (National Cash Register Company, *Art, Nature, and the Factory: An Account of a Welfare Movement, with a Few Remarks on the Art of the Landscape Gardener*. Dayton: National Cash Register Company, 1904. Courtesy of Special Collections, Dayton Metro Library.)



Fig. 19. "Characteristic employees' home, National Cash Register, Dayton, Ohio." (Photograph by William Henry Jackson, Detroit Publishing Co., Dayton Ohio, ca. 1902. Courtesy of the Library of Congress.)



Fig. 20. "Foliage and east window of officers' club, National Cash Register Company, Dayton, Ohio." (Photograph by William Henry Jackson, Detroit Publishing Co., Dayton Ohio, ca. 1902 [?]. Courtesy of the Library of Congress.)



Fig. 21. "Foliage and east window of officers' club, National Cash Register Company, Dayton, Ohio." (Photograph by William Henry Jackson, Detroit Publishing Co., Dayton Ohio, ca. 1902 [?]. Courtesy of the Library of Congress.)



Fig. 22a. "Worker house gardens before landscaping." (Photography by Frances Benjamin Johnston, National Cash Register, Dayton, Ohio [ca. 1896]. Glass lantern slide. Courtesy of Library of Congress Prints and Photographs Division Washington, D.C.)



Fig. 22b. "Worker house gardens after landscaping." (Photography by Frances Benjamin Johnston, National Cash Register, Dayton, Ohio [ca. 1905]. Hand-coloured glass lantern slide. Courtesy of Library of Congress Prints and Photographs Division Washington, D.C.)



Fig. 23a. "Worker houses and gardens before landscaping." (Photography by Frances Benjamin Johnston, National Cash Register, Dayton, Ohio [ca. 1896]. Glass lantern slide. Courtesy of Library of Congress Prints and Photographs Division Washington, D.C.)



Fig. 23b. "Worker house gardens after landscaping." (Photography by Frances Benjamin Johnston, National Cash Register, Dayton, Ohio [ca. 1905]. Hand-coloured glass lantern slide. Courtesy of Library of Congress Prints and Photographs Division Washington, D.C.)

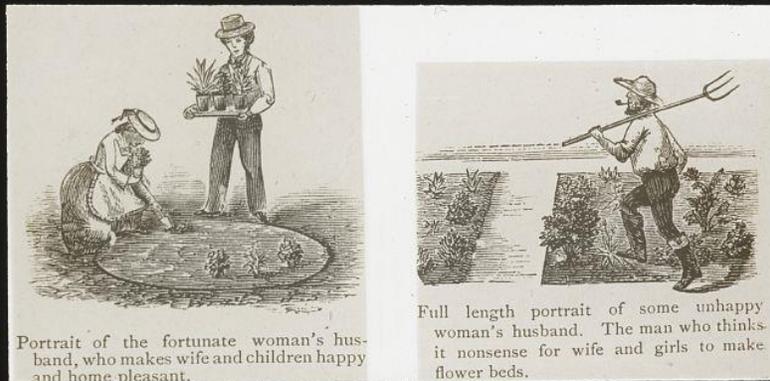


Fig. 24. "Reproduction of illustrations showing fortunate and unhappy husbands." (Photograph of illustration in *Fruit recorder and cottage gardener* 7, no. 2 (Feb. 1, 1875): 30. Frances Benjamin Johnston, lecturer [between 1915 and 1925], 1 photograph, glass lantern slide, 3.25 x 4 in. Courtesy of Garden and historic house lecture series in the Frances Benjamin Johnston Collection, Library of Congress Prints and Photographs Division Washington, D.C.).



Fig. 25. "Employees' residences." ((Photography by William Henry Jackson, National Cash Register, Dayton, Ohio [ca. 1902]. Courtesy of Library of Congress Prints and Photographs Division Washington, D.C.)



Fig. 26. View of Employees' Homes from the Factory. (Photograph courtesy of Harvard Art Museums/Fogg Museum, Social Museum Collection, Cambridge, Massachusetts.)



Fig. 27. Employees' Homes. (Photograph courtesy of Harvard Art Museums/Fogg Museum, Social Museum Collection, Cambridge, Massachusetts.)

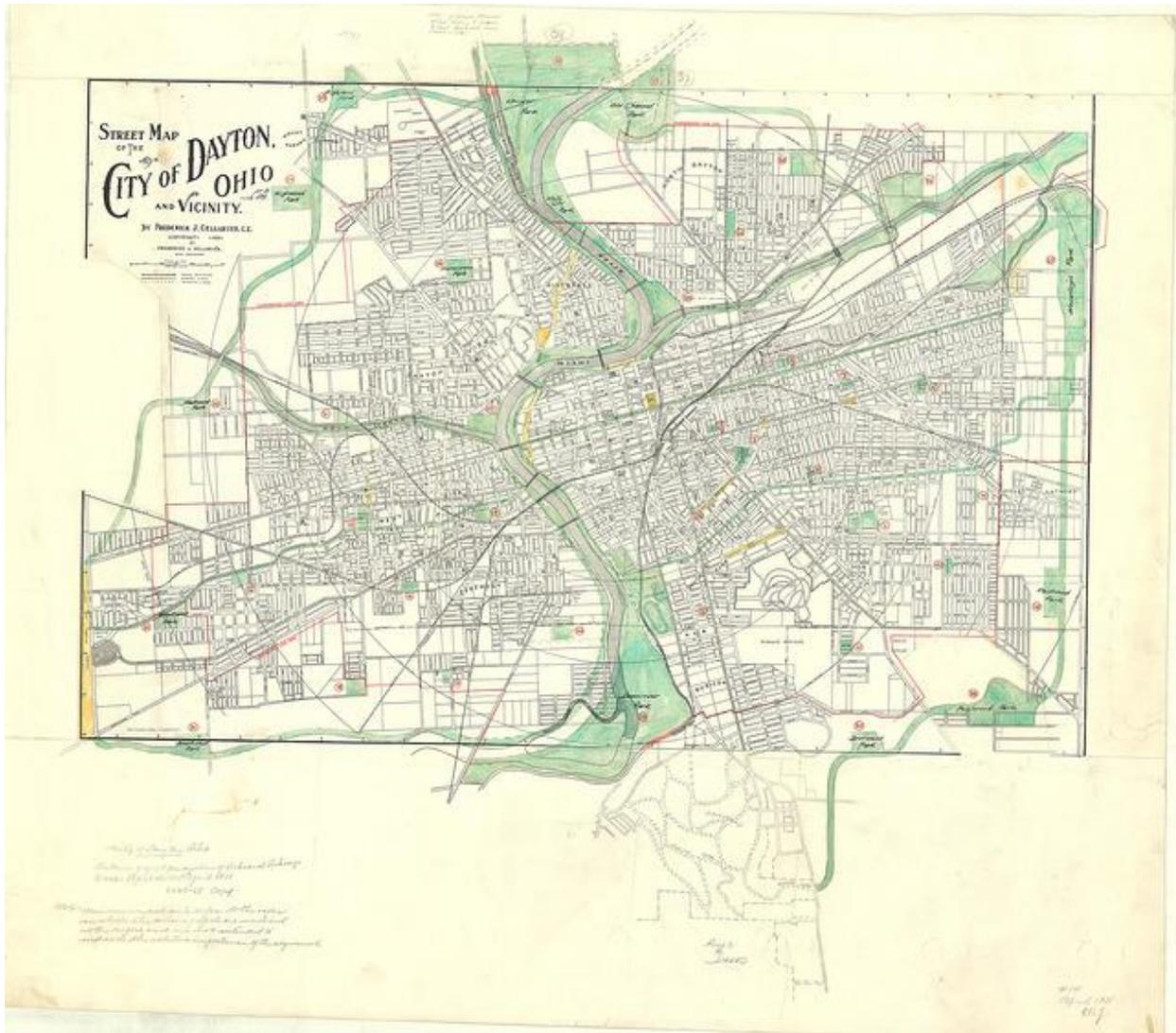


Fig. 28. "Outline Project for System of Parks and Parkways to Accompany Report APR-1911." (Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site.)

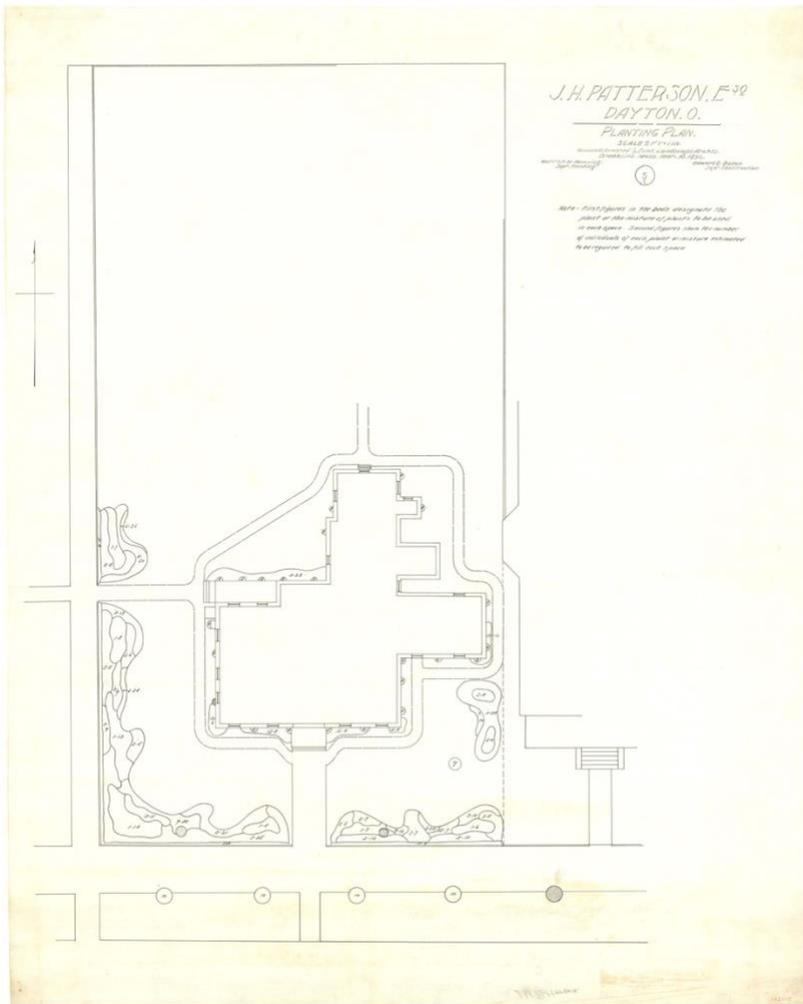


Fig. 29. Plan for the Patterson Residence. (Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site.)

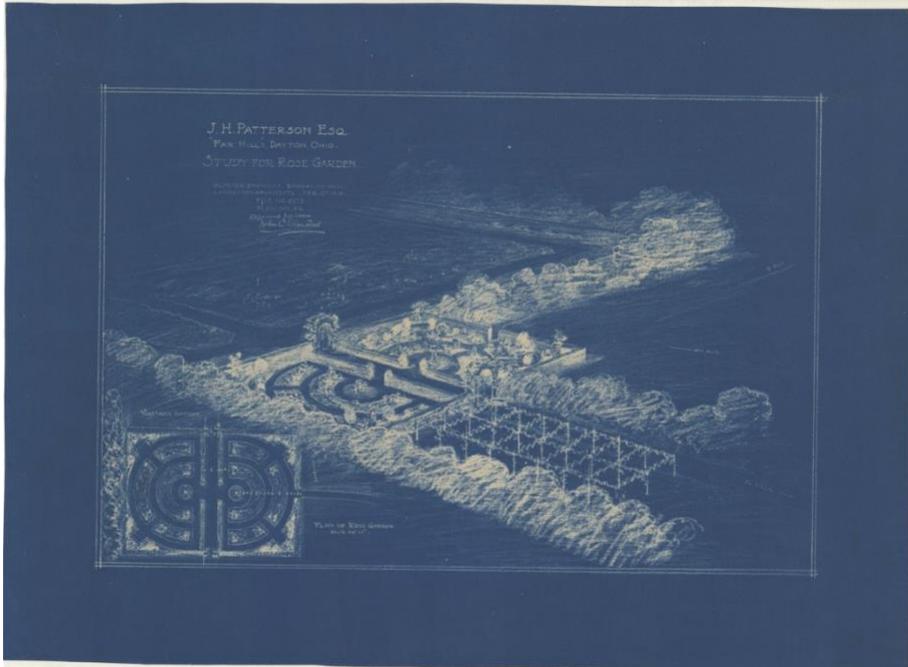


Fig. 30. Study for a Rose Garden, 1913. (Courtesy of the National Park Service, Frederick Law Olmsted National Historic Site.)



Fig. 31. Patterson Homestead. (Image taken on author's iPhone, Dayton, Ohio [April 2018]. Courtesy of the author.)



Fig. 32. K Street Today. (Image taken on author's iPhone, Dayton, Ohio [April 2018]. Courtesy of the author.)



Fig. 33. K Street Today. (Image taken on author's iPhone, Dayton, Ohio [April 2018]. Courtesy of the author.)



Fig. 34. The former site of the Boys' Garden. (Image taken on author's iPhone, Dayton, Ohio [April 2018]. Courtesy of the author.)



Fig. 35. The former site of the Boys' Garden. (Image taken on author's iPhone, Dayton, Ohio [April 2018]. Courtesy of the author.)



Fig. 36. 1916 Certificate of City Beautiful Award. (Screen capture from “Inside Dayton - City Beautiful Awards,” Dayton Ohio City Government, June 1, 2017, *YouTube*.)

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