BROADACRE CITY: AMERICAN FABLE AND TECHNOLOGICAL SOCIETY

by

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In the 1930s Frank Lloyd Wright began working on a plan to remake the architectural fabric of the United States. Based on the principle of decentralization, Wright advocated for the abandonment of the industrialized city in favor of an agrarian landscape where each individual would have access to his or her own acre of land. Wright's vision, which he called Broadacre City, was to be the fruit of modern technology directed towards its proper end – human freedom. Envisioning a society that would be technologically advanced in practice but agrarian in organization and values, Wright developed a proposal that embodied the conceptual polarity between nature and culture. This thesis critically examines Wright's resolution of this dichotomy in light of the cultural and intellectual currents prevalent in America of his time.

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CHAPTER I

INTRODUCTION

In late spring of 1930, during a lecture at Princeton University, Frank Lloyd Wright gave voice to certain of his long-simmering, anti-urban sentiments. That the city of history had outlived its usefulness and justification for being was evident. Harnessing the power of the machine, the urban dissolution and decentralization for which Wright had long advocated was at hand. Describing the vision that would become his plan for Broadacre City, Wright exclaimed "the Machine, I believe… will enable all that was human in the city to go the country and grow up with it."¹ It is an evocative assertion, not least for its inscrutability. And given Wright's idiosyncratically ebullient use of language, we may be excused for not delving too deeply into it. By comparison, a sympathetic commentator has described Wright's Broadacre vision, more prosaically, as "a postscarcity society that employed technical and mechanical aids, but one which chose to live in a close relationship with nature."² While quite different in tone, these descriptions of Wright's plan broach the same issue – the re-envisioning of the city, and society beyond that, based on a reformulation of the relationship between technology and nature. And

¹ Wright, Modern Architecture, 108.

² Sargeant, 123.

while Sargent's depiction is, on its face, an accurate description of the physical conditions of Broadacre City, this dispassionate assessment fails to get at a deeper significance. In the juxtaposition of his two clauses, Sargeant suggests, but does not acknowledge, an apparent tension between technology and nature. For Wright's part, while his language is obscure, his evocation of a merging of the natural and the manmade presents the truer essence of Broadacre City as he understood it and the more profound level on which he was trying to solve the problem of the city: not as planning or social engineering but, rather, as existential integration.

Beneath the straightforwardness of Sargeant's formulation lie several layers of inter-linked ideas that warrant investigation, and the matter-of-factness of his description is helpful in laying bare some of these fundamental questions. What does it mean, for example, for a society to live in a close relationship with nature? For that matter, what is nature? Or, more important to my purpose, how does Wright think of nature? How do technical and mechanical aids assist or hinder the close relationship between society and nature? Is Wright aware of the potential contradictions and, if so, how does he attempt to resolve them? As is often the case with Wright, his idiosyncratic and expressive prose presents its own challenges. In seeking to unpack his description, however, the reader is presented with similar questions. What does Wright mean by the Machine? How is the Machine to assist the city going to the country, and what is the relationship between the two? These specific questions, in turn, suggest a larger one: What is the cultural and intellectual framework out of which these questions arise? More specifically, what is the root of the sense of incommensurability between nature and technology, and from

whence comes Wright's apparent dream of integration? It is this nexus of questions that has provided the impetus for my exploration.

Beginning with the larger question I would note, simply, that the conceptual framework denoted by the terms culture and nature constitute one of the oldest and most enduring of western philosophy. As Leo Marx points out, this framework has been of particular concern in America, and this concern is deeply imbedded in both historical and contemporary conceptions of the New World in general, and America in particular. It is these conceptions and their role in American literature that Marx explores in his landmark work The Machine in the Garden. Marx's chief concern is with what he calls the "pastoral design" in nineteenth century American literature. Marx labels as pastorals, "those works... whose controlling theme is a variant of the conflict between art and nature." The unifying motif of the works that Marx examines is the idyllic image of America as an Edenic garden which, he argues, has been a key aspect of the perception of America since the age of discovery, confronted by the realities of the process of industrialization. The works in question, Marx contends, are attempts to mediate this confrontation and arrive at a resolution of what he calls the "two kingdoms of force." The pursuit of such a resolution, I will argue, is a fundamental aspect of Wright's Broadacre City vision. Further, I believe that this vision may be interpreted – and thus illuminated – as a variant of the pastoral form that Marx describes. Just as Marx sheds light on the role of this pastoral ideal in American literature and the interpretation of American experience

I will argue that the pastoral ideal and the American fable which derives from it are central to Wright's own experience and underpin his Broadacre City proposal.³

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Marx's inquiry covers the period of American literature from the mid-nineteenth century through the early twentieth century. It is a period that encompasses Wright's birth in 1867⁴ and his unveiling of his Broadace City proposal at the 1935 Industrial Arts Exposition, and focuses on many writers and thinkers with whom Wright was well familiar, some of whom he credited directly with influencing his thought.⁵ Marx opens his exploration in 1844 with an event that he takes as archetypal to the literature of that period. The event is recorded in the notebooks of Nathaniel Hawthorne while "[o]n the morning of July 27, 1844 [he] sat down in the woods outside Concord Massachusetts, to await (as he put it) 'such little events as may happen."⁶ In the midst of recording observations of his natural surroundings, which include the sounds of daily life emanating from nearby Concord, he records an event that dominates these observations. This event, which disrupts the otherwise harmonious scene that Hawthorne had been describing, is the whistle of a distant locomotive – "the long shriek, harsh, above all

³ Marx, *Machine in the Garden*. This summary of Marx's argument is drawn, primarily, from Chapter I. The phrase "pastoral design" appears throughout the work, see the index, page 390, for complete listing. Marx's definition of pastoral appears on page 25. The phrase "two kingdoms of force" appears as the title of Chapter V, as well as elsewhere.

⁴ Fishman notes that Wright often claimed to have been born in 1969, but cites research by Thomas S. Hines as definitively establishing his year of birth to be 1867 (Fishman, 289, note 2).

⁵ In several locations Wright gives eclectic lists of thinkers to whom he is indebted. See, for example, Wright, *A Testament*, 206. By way of an index for his autobiography Wright includes another such list (Wright, *An Autobiography*, 561).

⁶ Marx, 11.

harshness, for the space of a mile cannot mollify it into harmony."⁷ A similar event would, of course, be recorded by Thoreau, as the train and train tracks make numerous appearances in the woods around Walden Pond.

In fact, Marx finds such occurrences to be ubiquitous in the literature of the time and, to thus, constitute something of a zeitgeist within American culture. In the course of his study, Marx examines such canonical works as *Moby-Dick* and *The Adventures of Huckleberry Finn*, as well as the writings of Emerson, and finds a similar theme at work in all. According to Marx, the attempt to reconcile the deeply held view of America as an unspoiled garden with the growing reality of industrialization becomes increasingly tenuous and he closes the book in 1925 with the dissolution and despair of the *The Great Gatsby*. Despite the starkness of the reality to which *Gatsby*'s narrator, Nick Carraway, finally resigns himself, "the old dream," Marx notes, "retains its power to stir the imagination."⁸

In looking at Wright's writings, especially those associated with Broadacre City, it is apparent that the old dream, more than stirring his imagination, is central to his consciousness. I maintain that his efforts represent an extension of the pastoral project that had engaged American writers back to Hawthorne, with one crucial difference. This difference lies in the conclusions that are drawn. While the protagonists of American literature, according to Marx, adopt attitudes of capitulation, resignation or willful ignorance in the face of technology's onslaught, which has created a "hideous, man-made

⁷ Quoted in ibid., 13.

⁸ Ibid., 358-9.

wilderness,"⁹ Wright retains his vision of pastoral fulfillment. In his final analysis, Marx notes the unsatisfactory resolution of American pastoral fables. Unable to return to what Fitzgerald called "the green breast of the new world"¹⁰ encountered by European explorers, which has been defiled and destroyed by the counterforce of the machine, in the service of greed, the heroes of these stories end up "either dead or totally alienated from society, alone and powerless."¹¹ When Nick Carraway, vows to forsake the decadence of eastern society and return to the purity of the undefiled west, this repudiation conveys more a sense of nostalgia than of hopefulness. The frontier, after all, is closed and, as Marx notes, "the novel makes plain that the old distinction between East and West has all but disappeared."¹² A decade after the publication of *The Great Gatsby*, however, indicating his continued commitment to the pastoral ideal, Wright would declare: "America begins *West* of Buffalo."¹³

It is with Wright's commitment to the pastoral ideal and his attempt to reconcile the opposed forces of nature and the machine, I contend, that we arrive at a largely unexamined aspect of Broadacre City, philosophically, culturally and architecturally.¹⁴ In

¹¹ Ibid., 364.

¹² Ibid., 364.

⁹ Ibid., 356.

¹⁰ Quoted in ibid., 356.

¹³ Wright, Organic Architecture, 26. Italics in original.

¹⁴ Kenneth Frampton has noted the connection between Wright and Marx's subject matter, writing that "Wright was correct in predicting that the automobile, as the new 'machine in the garden,' would effectively eliminate the time-honored split between town and country" (Frampton, "Modernization and Mediation, 76). Zellner has also referred to Wright's attempt to merge town and county (Zellner, 169). The context and implications of this merging or juxtaposition, however, have not been explored.

contrast to the vision of the garden overrun by the machine, Wright offers an alternative view characterized by the reconciliation of Marx's two kingdoms of force. In Broadacre City we encounter a vision of the machine brought to heel, serving the needs of humankind. Nature, as well, has been bent to human purposes - tamed and shaped yet still 'natural.' The conceptual polarities nature and culture co-exist as an integrated whole. Marx designates such depictions of harmonious coexistence as middle landscapes.¹⁵ This landscape, in its characteristic incarnation, is located "somewhere 'between,' yet in transcendent relation to, the opposing forces of civilization and nature."¹⁶ That is, in mediating between the poles, the middle landscape transcends the apparent dichotomy. In reaching this state of perfection, contradiction and ambiguity melt away. A similar sense is evident in Wright's claim that "Broadacre is everywhere and nowhere."¹⁷ Though Wrightian in its ambiguity, there is a sense in this formulation that Broadacre City was meant to transcend the conceptual framework of city and country, technology and nature. Proceeding from an apprehension of this transcendent nature of his proposal, it seems reasonable to assume that Wright intended his solution to consist of more than merely the formal and physical arrangement of buildings, transportation systems and other functions. In fact, Wright was adamant that the large wood model of a portion of Broadacre City produced at Taliesin was not meant to be taken as a proposal

¹⁵ Marx, Machine in the Garden. See index, page 389, for occurrences.

¹⁶ Ibid., 23.

¹⁷ Quoted in March, 199.

for any actual buildings or arrangement of buildings – indicating that his point lay somewhere deeper.

Given the collective pessimism of his literary predecessors regarding the prospects of the pastoral ideal, the hopefulness of Wright's vision is decidedly at odds with the received wisdom. Faced with this divergence, one wonders at its cause. One possible answer is that Wright was simply naïve and overly optimistic regarding certain aspects of technology: guilty of a strain of technological triumphalism characteristic of the first half of the twentieth century. And in fact, Marx's analysis suggests such a possibility. In setting up his argument Marx indicates the existence of two varieties of pastoralism: the lesser of the two being popular and sentimental, while the other is imaginative and complex, and provides the heart of the literature he surveys.¹⁸ Indeed, Marx's description of sentimental pastoralism has certain parallels to Wright's thinking. Particularly striking in this context is the Naturmensch, a term drawn by Marx from Ortega y Gasset to describe the individual who "wants his motor-car, and enjoys it, but he believes it is the spontaneous fruit of an Edenic tree... In the depths of his soul he is unaware of the artificial, almost incredible, character of civilization, and does not extend his enthusiasm for the instruments to the principles which make them possible."¹⁹

This perspective, or lack of it, is personified by Nick Carraway: in the thrall of Gatsby's magnificent automobile, only too late does he realize its true cost in destruction and exploitation. Similarly, Wright's ecstatic pronouncements regarding the automobile

¹⁸ Marx, *Machine in the Garden*, 5.

¹⁹ Quoted in ibid., 7-8.

suggest a grain of truth in this assessment. The automobile, as Wright's favorite machine, represents the essential promise of technology; liberation, seemingly, without consequence.²⁰

A similar incongruence in Wright's pastoralism has, in fact, been noted by Kenneth Frampton. In an article assessing the impact of technology on Wright's work over the course of his career, Frampton ends with an observation on one of the aerial perspectives published in The Living City. In this image a smooth ribbon of highway runs left to right across the foreground. The road features street lighting imbedded in the curbing and is populated by futuristic-looking automobiles. Overhead multiple small, round flying vehicles ply the skies. Amidst this display of apparent technological mastery, the large middle ground is occupied by a recently harvested field where stand, anachronistically, as Frampton notes, shocks of grain, the combine harvester apparently finding no place in this world.²¹ Frampton, whose assessment of Broadacre City is particularly harsh, attributes this contradiction to a sort of fuzzy thinking on Wright's part. In truth, the vignettes representing Broadacre City do possess a surreal quality in their mixture of bucolic and technological imagery: and the apparent contradictions contained in the depictions of Broadacre City lay bare the central issue with which I am, here, concerned. As is made plain by the renderings, Broadacre City is about technology and nature and how they come together.

²⁰ Beyond enabling Broadacre City, the automobile was also the enemy of the city. In 1956, addressing a meeting of the American Municipal Association in St Louis, Wright asserted that the city as it existed and the automobile were incompatible, asking the audience, "which do you want? Do you want to keep your cars or do you want to keep your city practically how it is?" (Printed in Meehan, *Frank Lloyd Wright*, 5).

²¹ Frampton, "Modernization and Mediation," 77.

In addition to lying at the heart of his Broadacre vision, the topics of technology and nature are ones with which Wright was actively engaged throughout his career and his life. While Wright's dedication to the ways of nature, and his concept of the organic, is well known, he was also among the first architects to offer a specific endorsement of technology; which he did in his Hull House lecture on March 1, 1901.²² The fact that Wright spent so many years writing, speaking and thinking about nature and technology – for which he usually uses the metaphorical phrase "the Machine" – warns against snap judgements regarding Wright's naivete and intellectual confusion. While assessing Wright's proposal in retrospect we are certain to be able to point out a level of naivete and, indeed, sentimentalism in both his assumptions and his conclusions. Those judgements, however, shed no light on the content of his thought. In attempting to illuminate this area it is necessary to seek after a more precise understanding of Wright's thinking regarding nature and technology and the relationship between them.

At the heart of Wright's vision, and my exploration of it, lay a pair of related philosophical issues that bear directly on Wright's larger architectural vision. The first of these concerns the relationship of culture to nature – the 'man-made' to the 'natural' – which has been a subject of philosophical inquiry dating back to ancient Greece. Regarding this first issue, and its importance to this discussion, it should be noted that the practice of dividing the world into the opposing categories technological (or mechanical)

²² The talk is titled "The Art and Craft of the Machine." Printed in Meehan, *Truth Against the World*. See page 87, note 1, for the dating of this talk and its publication history.

and organic (or natural) occurs as early as the Renaissance.²³ The question of what is natural and what is not – and, by extension, what are the relative values of each and their appropriate relationship to each other – is, at its root, a question of worldview. It asks: what is the fundamental character of the universe? Expanding on the cultural significance of the question, David Channell notes that:

the perceived tensions between technology and organic life has been a tension between opposing world views. Each world view determines, among other things, the models that people use to understand technological developments and organic processes. Throughout much of Western history a tension has existed between two world views – one that can be labeled mechanical and the other organic... Each world view established its own ideas concerning the relationship between technology and organic life.²⁴

An apt example of this bi-polarity of worldviews, and an illustration of Channell's point, is the way that Wright, himself, describes the city on separate occasions. During his Hull House lecture, extolling the potential of technology, Wright refers to the city as the first great machine.²⁵ Years later, in arguing the need for a new approach, the city becomes, for Wright, a fibrous tumor.²⁶ These remarks are interesting in that they indicate, both, that Wright is prone to thinking in terms of such mechanical and organic analogies and that he conceives of the traditional city in relationship to both. Further, while Wright's sympathies lie, as I will explore, with the organic, it is through a mechanical metaphor that he exalts the city, and an organic one through which he

²³ Channell, 4.

²⁴ Ibid., 9.

²⁵ Printed in Meehan, Truth Against the World, 93.

²⁶ Wright, When Democracy Builds, 40.

condemns it. This understanding suggests the question of how Wright conceives of Broadacre City: is it an organism, a machine, or some synthesis of the two? It is this latter possibility that Wright tantalizingly suggests when he writes: "Broadacre City is the country come alive as a truly great city."²⁷ Coupled with the phrase "The Living City,"²⁸ Wright's language suggests a deliberate blurring of the line between nature and culture, organism and machine. Wright's typically rich language here evokes the image of land not lived upon, but inhabited, or better, enlivened by society, the two become one.

The second issue, which is a subset of the first and also has roots in ancient Greek thought, concerns the value of technology in particular and its proper relationship to society as understood by that society. Philosopher of technology Carl Mitcham has shown that, to a significant extent, this relationship owes its form to the particular metaphysical and epistemological assumptions of the society in question.²⁹ As a cousin of science,³⁰ attitudes toward technology are informed by attitudes toward science, which are subject to assumptions about the nature of truth and the possibility of knowledge. In exploring this nexus, Mitcham delineates what he calls "three ways of being with technology;"³¹ that is, three attitudes vis-à-vis technology that define the relationship between a society and technology, both theory and practice. The attitudes range from the

²⁷ Quoted in March, 202.

²⁸ This is the title of the third and final version of Wright's book-length argument for and explanation of Broadacre City. Wright, *The Living City*.

²⁹ Mitcham, "Philosophy and History of Technology."

 $^{^{30}}$ The relationship between science and technology is a topic of some debate within the field. While frequently understood as applied science, technology – that is the human creation of tools and artifacts – obviously predates science, even in its most rudimentary form

strong skepticism of ancient Greece to the optimistic embrace that characterized the Enlightenment. Positioned between these poles, and mediating between them, is the romantic attitude, which allows for a tempered acceptance of technology.³² While technology is central, in fact essential, to Wright's conception of Broadacre City, the application and control of technology is more important still. It is Wright's immersion in and affinity for romantic thought, I will show, that allows him to conceive of a technologically progressive society that is, nevertheless, directed by the values of nature. And, therein lies the key to Wright's ability to conceive of the reconciliation of Marx's two kingdoms of force.

Justification

Due to the sheer volume of critical attention that continues to be paid to Wright, in taking up the issue of Broadacre City it seems necessary to prepare the ground for a new approach. There is an oft-repeated slight of Broadacre City to the effect that it served as a graveyard for Wright's un-built work.³³ Indeed, of all the products of Wright's lengthy career few have been as disparaged as his plan for a decentralized, agrarian America.³⁴ Seen as proof of his overreaching egomania and radical eccentricity, the plan

³¹ Mitcham, "Three Ways of Being."

³² Mitcham, ibid.

³³ Brooks, 195.

³⁴ For a summary of critical reaction and related bibliography, see Alofsin, "Broadacre City.

is frequently considered an indulgent distraction during a period when paying clients were scarce:³⁵ this, despite the fact that Wright was continuously engaged with the proposal from its inception in the early 1930s until his death in 1959. As H. Allen Brooks points out, of all of Wright's work "none has received such adverse criticism over such an extended period of time as Broadacre City."³⁶ One of the typical points of this criticism is what can accurately be called the sheer impracticality of the proposal. Cataloguing this impracticality, Norris Kelly Smith notes that "the realization of Broadacre City… would require the abrogation of the Constitution of the United States, the elimination of thousands of governmental bodies… the confiscation of all lands by right of eminent domain… and other difficulties too numerous to mention. As a practicable program it does not even deserve discussion.³⁷

While this passage is cited as a damning judgement by one commentator,³⁸ Smith's point is a larger one. While considered as an honest proposal for the remaking of the American City, the Broadacres plan is no more than a curiosity: what Smith sees in Broadacre City, however, is "an underlying principle which establishes the unity of

³⁵ In his 500-page biography of Wright, Brendan Gill devotes two pages to a discussion of Broadacre City. Following his account of the formation of the Taliesin Fellowship and the puzzlement of Wright's first apprentices to find that "the world-famous Frank Lloyd Wright... was, in fact, like any ordinary architect, all but unemployed" (Gill, 334). Gill goes on to characterize Broadacre City as the product of "Wright's mind... a simmer with unrecognized paradoxes, springing in most cases from half-remembered snippets of Rousseau, Henry George, Nietzsche and the like collided rambunctiously with one another" (Gill, 337).

³⁶ Brooks, 195.

³⁷ N. K. Smith, Frank Lloyd Wright, 153.

³⁸ See Zellner, 69. Sargeant also quotes these same lines to similar effect (Sargeant, 127).

(Wright's) life's work."³⁹ Rather than considering Broadacres as "a repository for unexecuted architectural projects"⁴⁰ it becomes, in this view, the ideal site for the buildings at their inception -- the setting for which his work, built and un-built, was intended and in which it can be fully comprehended. This interpretation has been recently embraced by the editors of Frank Lloyd Wright and the Living City, which is organized around this premise.⁴¹ Laying out the rationale David De Long argues that Wright's "major works can thus be seen as prototypes for the Living City."⁴² One implication of this statement is that the context in which Wright's buildings ought to be considered is that of Broadacre City rather than the actual settings in which they were built. The work of reconsidering Wright's work through this new lens is beyond the scope of my project. My goal is, rather, to further define the dimensions of that lens. The purpose of my project, then, is to enlarge our understanding of the foundational ideas and conceptual frameworks from which Wright's more well known, and well received, work springs. In re-approaching Broadacre City, I approach it not, then, as practicable program but, rather. as an explication and manifestation of Wright's worldview in the hopes that that understanding may shed some small light on the larger body of Wright's work.

³⁹ N. K. Smith, Frank Lloyd Wright. 155.

⁴⁰ Brooks, 195.

⁴¹ De Long, *Frank Lloyd Wright*. The book proceeds to discuss these major works in typological groupings with the presumption that they might all have appeared in Broadacre City. March and Sargeant have also argued for the significance of Broadacre City to a full understanding of Wright's career.

⁴² De Long, Frank Lloyd Wright, 42.

The Argument

To this point, while much attention has been given to the architectural and planning aspects of Broadacre City, at least as much has been paid to the social and political theory which underlies Wright's proposal.⁴³ I would argue that there is a third level to Wright's thinking that under girds these first two, and derives from Wright's worldview as it relates to the ideas of nature and technology and, further, that a full understanding of the nature of Wright's proposal can only be gained with insight into this worldview. While Wright was explicit about the role played by technology in the realization of Broadacres, there has been little study of how the two come together. This thesis project will undertake the critical examination of the cultural and intellectual framework that is at the root of Wright's synthesis.

In Chapter II I will establish the general context of the discussion by setting out the historical, textual and physical parameters of Broadacre City. I will particularly emphasize Wright's treatment of the role of technology within his new America. I have suggested that Wright's Broadacre City vision has its roots in the cultural idiom that Leo Marx called the American fable. I will establish this connection in Chapter III. In Chapter IV I will explore Wright's worldview rooted in romanticism and his principle of the organic as a component of that worldview. This exploration will also consider Wright's relationship to the world of modern architecture of the early twentieth century as a function of his worldview. Part of my argument rests on the premise that Wright's ability to conceive of the integration of nature and technology was a product of his romantic

⁴³ See, for example, Fishman, Ciucci and March.

epistemology and metaphysics. Philosopher of technology Carl Mitcham has delineated the way those particular intellectual frameworks foster a particular disposition toward technology, which Ii will argue that Wright shared. This discussion will be the subject of Chapter V. In Chapter VI I will examine Wright's particular ideas regarding nature and technology as expressed, largely, in his early writings, how they with ideas from the romantic tradition, and how Broadacre City is an expression of these ideas. In addition to recapitulating and concluding my argument, Chapter VII, I hope, will point beyond this work. While I thoroughly explore the relationship of Broadacre City to the American fable, which is, and will remain, beyond our grasp, remaining in the margins, largely unspoken, is its distopian corollary. It is the idea of the technological society that more nearly describes our situation.⁴⁴ Given these alternatives the important question is: must we accept the seemingly inevitable, or is there an alternative and can Wright's own vision help us find it?

CHAPTER II

BROADACRE CITY

The public unveiling of Broadacre City at the 1935 Industrial Arts Exposition of the National Alliance of Art and Industry at Rockefeller Center in New York was, at once, the culmination of years of work and the starting point of a crusade that would last another quarter century. While Wright's vision represented a radical re-imagining of American society, it harkened back to an earlier conception of America as a nation of independent, small-scale farmers and merchants living in a rural, decentralized country, bound by a shared purpose and common values, but with minimal governance. Broadacre City was, in short, Wright's attempt at the restoration of Jefferson's ideal from one hundred and fifty years before. Just as Jefferson had endeavored to carve out a middle ground between the industrialized nations of Europe and the primitiveness of native America,¹ where the honest and hard-working citizens would cleave close to the land and avoid the temptation and moral decay associated with the cities and industry,² Wright also envisioned a nation of independent farmers and land owners rooted in the American

¹ Leo Marx provides a compelling discussion of the contours Jefferson's thought on this subject. See Marx, *The Machine in the Garden*, esp. Chapter III.

² See Morton and Lucia White for a discussion of the history of American anti-urbanism.

landscape with only such industry as was required and compatible with this ideal. While, as I shall show, the roots of this vision of Broadacre City tap the deep springs of Wright's cultural and personal experience, the proposal for the remaking of America began to take concrete form in the wake of the economic collapse of 1929,³ in response to the social and economic climate of the times. Growing from those earliest imaginings the project was revised, revisited and reissued almost continuously over the next thirty years.

It is estimated that 40,000 people viewed the Rockefeller Center exhibit,⁴ the main feature of which was a twelve-foot by twelve-foot, eight-inch wood model. Constructed at a scale of one inch to seventy-five feet, the model showed a hypothetical portion of Broadacre City equal to about four square miles or 2,560 acres (the equivalent of four US Land Survey sections) that would reportedly accommodate 1400 families.⁵ At the opening of the Exposition on April 15th Wright delivered a short speech in which he expressed his belief that Broadacre City represented the fulfillment of the idea of America that had, to that point, failed to be realized. Hinting at the problem, and solution, Wright said: "even if the first forefathers of our democracy could have foreseen the kind of success we were to have by way of the machine they could not have set up the kind of

³ Alofsin, "Broadacre City," 8. In *The Living City* Wright gives the conflicting dates of 1921 and 1924 (pp. 129, 219) as marking the beginning of his interest in planning issues but without a specific reference. Alofsin suggests the Doheny Ranch project, but also points to three earlier projects (Como Orchards of 1908, Bitter Root Valley of 1909 and his entry for the Chicago City Club competition of 1913) as precursors to Broadacre City.

⁴ Sargeant, 123.

⁵ Physical description of the model is from Meehan, *Truth Against the World*, 344. The actual area based on the dimensions given would be, approximately, 4.42 square miles. In 1981 the Frank Lloyd Wright Foundation revised the number of families accommodated to 761 (p. 344, note 3).

necessary mechanism needed to defend their ideal of democracy."⁶ The decentralized plan, predicated on the idea that each person would have their own acre of land would, in Wright's mind, foster both economic security and individuality for all.⁷ Wright, however, explicitly dismissed the idea that his proposal was a "mere back-to-the-land idea,"⁸ which would imply a rejection, rather than a remaking, of the conditions of modern life. Broadare City, instead, represented "a breaking down of the artificial divisions set up between urban and rural life."⁹ Wright rejected the idea that that the city represented some necessary state of a machine-aided society. In fact, the opposite was true: it was the machine that made the dissolution of the city conceivable.

The earliest public intimations of this vision occurred in a lecture entitled "The City,"¹⁰ delivered at Princeton University in 1930, in which he characterizes the modern city as a dehumanizing "triumph of the herd instinct over humanity... a persistent form of social disease."¹¹ The city, Wright believed, was to die. The question was, whether the civilization that created it would die with it or, indeed, because it. It is in this context that Wright broached a theme that is at the heart of Broadacre City, the role of technology in returning an urban, industrialized society to nature. Wright believed the modern city to be

⁶ Printed in Ibid., 345.

⁷ In earlier versions of the proposal, the precept was that each family should have its own acre. The acre per person proposal, however, seems to be the one that Wright settled on.

⁸ Printed in Meehan, Truth Against the World, 345.

⁹ Printed in ibid.

¹⁰ Published as Chapter 6 of Wright, *Modern Architecture*.

¹¹ Ibid., 101.

the product of the necessities of an earlier time "when we had no swift, universal means of transportation and had no means of communication except by various direct personal contacts... Only by congregating thus, the vaster the congregation the better, could the better fruits of human living then be had." The city, however, had come to represent a threat to the humanity it once served. "The sentient individual factor – the citizen," Wright noted, had been "appropriately disposed of in the cavernous recesses of a mechanistic system appropriate to man's ultimate extinction."¹² The city that the machine had, in part, created, had become, itself, a machine of which its occupants were servants.

However, while the machine had played an enormous role in the building of the

city, it also offered the key to its dismantling. According to Wright:

The common denominator has arrived with the Machine in Usonia. Machine prophesy... shows, if nothing else, that we are to deal with machinery considered as common-denominator salvation and in its most dangerous form here among us and to deal with it soon, before it has finally to deal with our posterity as dominator. To deny the virtue of the common denominator or to deny virtue to its eventual emancipator the Machine would be absurd. But the eventual city the common denominator will build with its machines will not only be greatly different from the olden city of today; it will be vastly different from the new Machine-city of Machine-prophesy as we see it outlined by Le Corbusier and his school. What once made the city the great and powerful human interest that it was is now preparing the reaction that will drive the city somewhere into something else. The human element in the civic equation may already be seen drifting or pushed – going in several different directions... Organic consequences of these changes, unperceived at first, now appear. Freedom of human reach and movement, therefore the human *horizon* as a sphere of *action* is, in a single decade, immeasurably widened by new service rendered by the Machine.¹³

¹² Ibid., 102.

¹³ Ibid., 103. Italics in original. Wright uses the word Usonia to refer to the United States, especially his idealized vision of it. As has been widely noted, the origins of the word are somewhat murky. Wright attributed it to Samuel Butler's novel *Erewhon*, in which it does not actually appear. Sargeant suggests that Wright absorbed the term from his 1910 trip to European and the then-current European proposal to refer to the United States as U-S-O-N-A (United States of North America) to avoid confusion with the Union of South Africa. See Sargeant, 16.

Thus would the desire for space and freedom, which Wright saw as the essential character of humanity – the common denominator – be realized through the power of the machine, properly used.

One of Wright's main criticisms of the city and, more generally, the centralization of which it was the product, was the dehumanization of the individual and the subsequent dependence it engendered. The city denizen was locked into a system that lessened him while supporting him. While the common inhabitants of the city lived lives in which their freedom and individuality were squelched, others, whom Wright savaged as parasites, made their living off the people by virtue of what he called "the unearned increment," Wright used the term rent to describe the source of this increment, which he called "the uneconomic basis of the city." Wright identified three types of rent that he saw as "artificialities" that undermined the free individual. These were "rent for land," "rent for money" and "traffic in machine-inventions: another, less obvious, form of rent."¹⁴ It is this last form that is most striking and relevant to my purpose. In order for technology to fulfill its promise as liberator, "this now great common invention of mankind"¹⁵ must be freed, Wright argued, from the control of the overclass that applied it in the interest of profit – "captained and placed where they do not belong except as capitalistic centralization itself is a proper objective, $"^{16}$ – and not toward, as Wright saw it, its true purpose.

¹⁶ Ibid., 9.

¹⁴ Wright, The Disappearing City, 8.

¹⁵ Ibid., 9.

Just as all Usonians would have their own acre of land, Wright viewed technological advancement – to which he applied the metaphorical label "the Machine" – as a human birthright. Rather than being in private ownership and deployed toward the ends of profit, technology in Broadacre City was to be a public possession, used for the higher purpose of increasing "the flexibility and practical utility of every important human interest."¹⁷ Insuring this proper application was what Wright referred to as the design center. Closely resembling his own Taliesin Fellowship, the design center was to be a place where "young students of organic structure"¹⁸ – architects, artists and designers – would have access to the latest machinery with which to experiment in a multitude of fields and applications. It was through this mechanism that the application of technology to life was to be mediated. No longer to be a tool of profit and domination, the machine would fulfill its promise as "the forerunner of democracy."¹⁹

This argument was first fully articulated in 1932 in a book that would serve as the foundation on which Wright's advocacy for Broadacre City was built. Titled *The Disappearing City*,²⁰ the book reiterates the anti-urban argument from "The City" and begins to outline his alternate vision. At just ninety pages, the book offered descriptions of the physical and social disposition of Broadacre City. While the book included images of the stricken city disappearing into clouds it offered no illustrations of Wright's

18 Ibid.

¹⁷ Wright, *The Living City*, 190.

¹⁹ Wright "Art and Craft of the Machine," 90.

²⁰ Wright, *The Disappearing City*.

alternative. That same year he published and article in the *New York Times Magazine* entitled "Broadacre City: An Architect's Vision"²¹ which was specifically aimed at countering an article by Le Corbusier advocating for his *Ville Radieuse* plan which had appeared several weeks earlier.²² *The Disappearing City* was revised and republished, with different titles, twice in the ensuing years. In 1945 it was published as *When Democracy Builds*²³ with expanded text and also a few photographs of housing prototype models and the large site model from the 1935 Exposition, and just months before Wright's death it was again released as *The Living City*.²⁴

In addition to these volumes, Wright collaborated with his friend, and Northwestern University professor, Baker Brownell to publish *Architecture and Modern* $Life^{25}$ in 1937, which focused on social policy and New Deal initiatives of which Broadacre City might be seen as an extension. Also of note is Book Six of *An Autobiography*. Intended for the second edition of Wright's autobiography, it was published separately in 1943 due to the publisher's concerns that its radical tone was inappropriate during wartime. Book Six was ultimately included in the 1977 third edition of *An Autobiography*. In addition to these works, Wright published numerous articles arguing for his vision. Most notable among these is his 1935 piece "Broadacre City: A

²¹ Wright, "Broadacre City: An Architect's Vision."

²² Le Corbusier, "A Noted Architect Dissects Our Cities."

²³ Wright, When Democracy Builds.

²⁴ Wright, *The Living City*.

²⁵ Wright and Brownell.

New Community Plan,"²⁶ published in Architectural Record to coincide with the exhibit at Rockefeller Center. Wright also published a compilation of various of his arguments for and defenses of Broadacre City in the first volume of his magazine *Taliesin*.

Due to the long period of its development, Anthony Alofsin has remarked that in referring to Broadacre City it is necessary to indicate the particular version.²⁷ That assertion is certainly true with regard to the formal arrangement and representation. What also develops over the history of the project is the expression of the conceptual merging of advanced technology and pastoral landscape until it reaches final evolution and most evocative presentation in *The Living City*. It is here that we see the futuristic vignette drawings in which the skies are filled with Wright's version of the personal flying vehicle – a curious cross between helicopter and flying saucer he called the "aerator" – and automobiles of equally improbable design ply the wide flat roads. Conceptual sketches of these motor cars, as Wright called them, are also included in the book. In the background of these drawings can be seen versions of some of Wright's other projects such as his Beth Shalom Synagogue – reborn as a "universal (non-sectarian) cathedral"²⁸ - and St. Mark's tower set within a landscape both pastoral and technological.

It was to be modern technology that would allow this new form of society to take hold and spread. The Machine, in Wright's words, would allow "all that is human in the

²⁶ Wright, "Broadacre City: A New Community Plan."

²⁷ Alofsin, "Broadacre City," 8.

²⁸ Wright, The Living City, 127.

city to go to the country and grow up with it."²⁹ In a section of *The Living City* called "Forces Tearing the Vortex Down" Wright attributes this movement away from the city and against the outmoded drive toward centralization to essential human character - "the gradual reawakening of the primitive instincts of the agrarian," – aided by the "[p]hysical forces of the machine itself, electrical, mechanical and chemical invention."³⁰ Three technological advancements in particular made decentralization, in Wright's mind, not merely viable but inevitable. Though variously described, in their most concise form, these advancements were listed as "[t]he motor car... electrical intercommunication" and "[s]tandardized machine shop production."³¹

While these forces were already altering the conditions of life, Broadacre City was Wright's attempt to shape the outcome. And while each of these technologies had their role in the creation of Broadacres,³² it was transportation, specifically in the form of the automobile, that loomed the largest. Stitching together the unbounded expanse of Broadacre City was a vast system of roads and highways – what Wright called "the great arteries of mobilization."³³ While the roads and streets of Broadacre City provided an

²⁹ Wright, Modern Architecture, 108.

³⁰ Wright, *The Living City*, 62.

³¹ Wright, "Broadacre City: A New Community Plan," 244.

³² While the role of transportation and communications systems is clear, the idea of standardized production is somewhat less so. In *The Living City* and its predecessors, where Wright reiterates these three "inventions," standardized production is part of the more general subject of organic architecture (p. 64). The larger idea is that of standardized building materials and components which were crucial to Wright's conceptualization of his Usonian houses which could, theoretically be bought as kits and constructed by the owner.

³³ Wright, The Disappearing City, 69.

organizational system for the disposition of the various functions, and linking them to a larger system of highways, the impact of automobile travel go deeper still into Wright's vision. A basic premise of Wright's was that each Broadacre family would own at least one automobile, and the various types of houses were identified by the number of cars they could accommodate. Indeed, life in Broadacre City would hardly be possible without one. More than merely facilitating the process of travel, the automobile, for Wright, altered the scale of time and space. The automobile became not merely a means of transportation, but an aspect of human experience to be embraced. The primary organizing principle, the roadways of Broadacre City would also serve as "the natural veins and arteries of the new city."³⁴

In the service station of his own day Wright saw the future of both social and economic life. Well-located service stations would grow to become distribution centers for all manner of goods and services. Having abandoned the traditional city center, these new centers would be testament to freedom and mobility. Untethered from the logic of proximity, these waysides would be inconceivable outside of a system based on continuous coming and going via automobile. While these distribution centers were an extrapolation on a phenomenon that was already occurring, they further codified this phenomenon into a central and immutable aspect of life. It is thus that automobile travel was to be a lifestyle in-and-of itself. The automobile was not merely a means of getting between these various and far-flung locations. It was the means through which Broadacre City would be lived in and experienced.

³⁴ Wright, *The Living City*, 113.

The extent to which the automobile would shape life in Broadacre City can be seen in another of Wright's re-envisioned institutions. Each county seat – the principle local government in Broadacre City – would have a community center. Many of the available social and entertainment amenities – among them golf courses, race tracks, museums, libraries, zoos gardens and planetariums – would be associated with theses civic centers.³⁵ Describing his vision, Wright noted that these centers "would always be an attractive automobile objective – perhaps situated just off some major highway in interesting landscape – noble and inspiring."³⁶ This designation of the community center as an "automobile objective" links it to one of Wright's earlier projects which, in turn, illustrates the level of integration Wright imagined between the automobile and the life of Broadacre City.

In 1924 Wright began work, for Gordon Strong, on a resort facility to be constructed on the summit of Sugarloaf Mountain in eastern Maryland.³⁷ The main feature of the project was a long, spiral automobile ramp winding around a central core, creating a ziggurat-like profile. The ramp ascended, uninterrupted, to the top level of the structure where traffic was directed onto the descending ramp, stacked below the ascending. It was off of the descending ramp that Wright located the parking. The other programmatic elements were pushed to the center of the structure. While these elements

³⁵ Ibid., 176.

³⁶ Ibid., 174.

³⁷ For an in depth description of the history of this project see Reinberger, from which this description is drawn.

varied as the design developed, they included an auditorium, theater, planetarium, restaurants, guest rooms and support services.

One of the main disagreements between architect and client was the former's location of automobile traffic at the outer edge of the building, relegating other functions to the interior. Defending his spiral scheme, Wright noted that "the very quality of its movement, rising and adapting itself to the uninterrupted of people sitting comfortably in their own cars in a novel circumstance with the whole landscape revolving around them, as exposed to view as though they were in an aeroplane."³⁸ Rather than being strictly a means for transportation, it is apparent that Wright viewed automobile travel, and airplane travel too, as modes of experience in and of themselves. This accords with Wright's assertion that the automobile changed our perception of, and hence our relationship with, space.³⁹ Far from being at odds with the natural world, technology becomes imbedded in that world, providing a novel, exciting and fully valid experience of it.

This conception of the automobile objective as community center was not merely an anomalous element in the varied Broadacre landscape, but, rather, an extension of Wright's thoroughgoing vision of the merging of architecture, technology and nature. This vision is expressed in a section of *The Disappearing City* called "The Super-Highway and the Tributary Hard Road – The Lakes and Streams,"⁴⁰ where Wright

³⁸ Letter from Wright to Strong, November 14, 1924. Quoted in Reinberger, p. 48.

³⁹ Wright, When Democracy Builds, 44-5.

⁴⁰ Wright, *The Disappearing City*, 49.

describes the seamless marriage of the extensive Broadacre highway system with the natural topography: "Sweeping grades, banked turns, well considered cuts and fills healed by good planting of indigenous growth may have supreme beauty. Sympathetic moving lines that are the highways threading the hills and plains with safe grades will be, wherever they occur, elemental features of the landscape."⁴¹ In an effort to more fully capture the spirit of this idea, this section, in *The Living City*, is re-titled "Architecture and Acreage Together Are Landscape."⁴²

In recognition of the essential function of the automobile in Broadacre City,

Wright lavished much attention on the design of roads and highways: most notably the design for a highway intersection, intended to promote the free flow of traffic through the use of overpasses. Some of Wright's most rhapsodic passages are devoted to the beauty and freedom associated with motor travel. As if invoking a beautiful dream, he writes:

Imagine now, freeways broadened, spacious, well-landscaped highways, grade crossings eliminated by a kind of integrated bypassing... Imagine these great highways of generous, safe width and always easy grade – roadbeds concave instead of convex – bright with wayside flowers or cool with shade trees, joined at intervals with modern air-rotor fields from which self-contained mechanical units – safe, noiseless transport planes, radio-controlled, carrying neither engines nor fuel – like modern taxicabs take off from convenient stations to almost anywhere else.⁴³

Rather than being bound to their own individual acres, Wright presents a picture of the

⁴¹ Ibid.

⁴² Wright, *The Living City*, 73.

denizens of Broadacre in constant motion. The lifeblood in the veins of Usonia – all bound into a single entity.

Involved in Wright's vision are two separate questions. The first relates to the source of that vision: the happy coexistence of nature and machine in the midst of a bucolic yet civilized landscape. While Jefferson's influence must be acknowledged, as I will show, Wright's personal experience with this pastoral notion exists in its own right and is a powerful and complex factor in Wright's thinking. The second question concerns the philosophical ground that makes the proposed integration of machines, nature and humanity conceivable and in which the idea of the living city takes on its full meaning. It is to these questions that I will now turn.

CHAPTER III

WRIGHT, TALIESIN AND THE AMERICAN FABLE

In attempting to assess Broadacre City, many pages have been devoted to tracing its political and social influences and implications.¹ Regarding the extent of this sociopolitical focus, Walter Creese has noted that "[m]any have tried to read Wright's Broadacre City model as an essay exclusively about the Great Depression."² Emerging, as it did, in the 1930s, a time when Wright himself was virtually unemployed, the plan is redolent with the influence of its day. In arguing for his proposal Wright illustrated that he was quite familiar with the various social and economic prescriptions that arose in the 1930s, many of which had some relationship to the New deal.³ Among the ideas to find their way into the various iterations of Wright's proposal are Henry George's single tax; Ralph Borsodi's cottage industries revival in Suffern, New York; the Greenbelt towns as promoted by the Resettlement Administration; the Federal subsistence program; the TVA's Norris Village and Dam project and Henry Ford's idea for decentralized assembly

¹ Among these accounts are those by Robert Fishman, Lionel March and Giorgio Ciucci.

² Creese, 271.

³ Ibid.

plants.⁴ To the extent that the numerous depression-era proposals find a place in Wright's Broadacres exegesis, they do so to buttress an argument, and a vision, that precedes them. Whereas the Depression offered Wright the opportunity to pursue his vision of decentralized America – Usonia as he called it – the vision Wright attempted to propagate springs from a deeper personal and cultural experience.

For his part, Creese argues that "the [Broadacre City] proposal finds its greatest meaning only when recognized as an attempt to fit Wright's frustrated past to a happier and more adequate national future."⁵ While it cannot be disputed that Wright's tumultuous childhood and his consequentially precarious relationship to domesticity in early adulthood⁶ inculcated in him a heightened concern for and commitment to the preservation of the family as the fundamental unit of society, beneath that personal experience lies a cultural context that provides structure to that experience. This compelling cultural narrative is, I believe, a significant driving force behind the agrarian vision expressed by Broadacre City.

The vision of America as comprised of a multitude of independent, family-sized farms, of course, dates back at least to Jefferson who was the first and most dogged advocate of a nation so conceived.⁷ More than being merely a utilitarian conception, there

⁴ Ibid.

⁵ Ibid. Robert Fishman has also suggested that Wright's work at Taliesin and with Broadacre City was partly driven by his desire to remedy the social conditions and structures that he saw as having undermined his own parents' marriage. See Fishman, esp. Ch. 10.

⁶ The particulars of Wright's childhood and early adulthood have been exhaustively described in the several lengthy Wright biographies and, less transparently, in Wright's autobiography. For a brief and particularly insightful analysis of Wright's conflicting attitudes regarding the relationship of home, city and domesticity see Cronon.

is a moral imperative behind the visions of Jefferson and Wright. Jefferson's motivation, of course, was rooted in his belief that the husbandman working his land could maintain an independence and resulting moral rectitude that the merchant or worker in the city could not. Wright shared this faith in the power of the land to purify the character thus insuring the integrity of the individual. Leo Marx designates this conception of the land, and specifically American land, as a moral geography. It is the pursuit and consecration of this moral geography that is the subject of what he terms the American fable, which is itself, rooted in the earliest European attitudes concerning the New World. Following Marx's analysis, I would argue that a full understanding of Broadacre City must take into account its roots in a cultural context in which the American fable looms large.

The American fable is rooted in the association of the New World with the idea of a pastoral utopia. As Marx notes, this utopian mindset seized upon the idea of America as a virgin continent that might serve as the site of a rebirth of Western society.⁸ The result of this rebirth would be a pure sanctuary where harmony and joy reigned – an idea that has deep roots in the European poetic imagination: "With an unspoiled hemisphere in view it seemed that mankind actually might realize what had been thought a poetic fantasy."⁹ While the Garden of Eden is the preeminent inspiration for this striving, the phrase "city upon a hill" represents the translation of the archetypal symbol to the meaning of America in the European consciousness. The phrase was drawn from the

⁷ See Griswold for an analysis of the development of the origins of Jefferson's ideas and their significance to American self-identity. These attitudes are echoed in a book by Wright's own uncle. See Jones.

⁸ Marx, *Machine in the Garden*, 3.

Sermon on the Mount and used by the Puritan preacher John Winthrop in a 1630 sermon to refer to the settlement the Puritans were to construct in the Massachusetts Bay Colony and the prominence it would have in the eyes of the world. For the Puritan objective was nothing less than the redemption of mankind – or at least English-mankind. Departing from a fallen land, they were bound for a virgin continent where they would carve out a new city in accordance with the will of God – a spiritual reintegration of mankind and creation. This basic structure serves as the formula for Marx's American fable: American fables recapitulate the theme of America as a spiritually pure land upon which a harmonious existence might be built. This new realm exists somewhere between the wilderness from which it was hewn and the the civilization to which it was counterpoint. As elucidated by Marx an American fable consists of three stages. It "begins in a corrupt city, passes through a raw wilderness and returns to the city, but a different city from the one it left."¹⁰ Marx calls this mythic location contained within the fable the middle landscape.

As Marx points out, of all the American fables, one of the best known but least acknowledged as such is Thoreau's experiment at Walden Pond. In the spring of 1845, Thoreau withdrew from society as represented by the village of Concord to live, as he said, deliberately, on the banks of the pond. Thoreau, of course, makes much of his

¹⁰ Ibid., 71. Marx notes the similarity between this brand of fable and the myth of the hero's journey as formulated by Joseph Campbell. Campbell noted the pattern within various mythological systems where the culture or religious hero embarks on a similar, three-stage journey. The hero departs the known world of comfort and privilege, penetrates, at some peril, into an otherworld on some quest and returns to the world having gained insight, wisdom or power in some form. The stories of Gilgamesh, Orpheus, Siddhartha, among a multitude of others, all bear the basic imprint of this form. See Campbell.

withdrawal to the wilderness despite the fact that Walden Pond lies a scant two miles from Concord and, as is clear in the telling, the train runs by in extreme proximity. Nevertheless, Walden Pond offers a tonic to society and, according to Marx, may be viewed as an embodiment of the American moral geography.¹¹ In Thoreau's telling, Walden Pond and its environs are "a native blend of myth and reality. The hut beside the pond stands at the center of a symbolic landscape in which the village of Concord stands on one side and the vast reaches of unmodified nature on the other."¹² Frank Lloyd Wright's own version of this motif can be observed in the events surrounding the construction of Taliesin.

More so than in the events themselves, Wright's connection to the fable form is clearly seen in his retelling of those events. It is in the writing of his autobiography that Wright's version of the American fable takes shape. Written at the low point of his career, dogged by scandal and frustrated that the renown and reputation that he saw as his due had eluded him, the autobiography was an effort to resurrect his career, in part by making his claim to his rightful position. As such, *An Autobiography* reads like an epic with Wright as protagonist and hero. Within this epic structure, many of the events he recounts take on an undeniably mythological character.¹³ Most significant, indeed pivotal, among these is Wright's move to Taliesin in 1911. As recounted by Wright, his

¹¹ Ibid., 243.

¹² Ibid., 245.

¹³ Anthony Alofsin has noted the connection of Wright to this mythic structure as embodied by the Welsh bard Taliesin who represents the cycle of death and resurrection in Welsh mythology. See Alofsin "Taliesin," 48.

departure from Oak Park and eventual relocation to Taliesin fits the model of Marx's fable. This connection to the American fable and its mythological elements suggests an intriguing line of inquiry into Wright's thinking regarding the landscape and architecture of Taliesin.

At a basic level, Wright's move represents a repudiation of the city in favor of a purer landscape. And in the same way that "Thoreau moved to the pond to make a symbol of his life,"¹⁴ Wright's retreat to Taliesin is the decisive point in his turn against the city and serves as the ideal for all that would come afterward.¹⁵ It is apparent from Wright's description that his move to Taliesin is no mere change of venue. It represents a throwing off of the bonds of society and an exile into the wilderness where he, like Thoreau, might live deliberately and find his own truth in nature. As Wright explains: "When family-life in Oak Park that spring of 1909 conspired against the freedom to which I had come to feel every soul was entitled, I had no choice, would I keep my self-respect, but go out a voluntary exile into the uncharted and unknown... I got my back against the wall in this way. I meant to live if I could an unconventional life."¹⁶

In this context, Wright's desire for an unconventional life is virtually synonymous with Thoreau's desire to live deliberately;¹⁷ that is to live from out of one's own inner

¹⁴ Marx, Machine in the Garden, 245.

¹⁵ For a recounting and analysis of Wright's ambivalent relationship toward the city and his efforts to regularize and codify his attitudes in retrospect see Cronon.

¹⁶ Wright, An Autobiography, 167-8.

¹⁷ Cronon has explored the connection between Wright's desire to live an unconventional life and Emerson's aphorism that "whosoever would be a man must be a nonconformist." Given the intellectual debt of Thoreau to Emerson, and of Wright to both, this interpretation does not present a contradiction.

truth, unfettered by the forms of societal convention.¹⁸ Where Thoreau laments the mindless routine and conventions of politeness imposed by village life, prior to departing Oak Park, Wright is at a dead-end professionally and constrained personally by social expectation which he condemns with characteristic hyperbole, writing: "Marriage not mutual is no better, but is worse than any other form of slavery."¹⁹ For Wright, as for Thoreau, life within the city of his day comes to seem false: a perversion of truth and an impediment to individual expression.²⁰ It is a return to the revivifying force contained in nature that both cleanses and empowers. It is a return to the true source.

As with Thoreau, the location to which Wright withdraws is "a real place which he transforms into an unbounded, timeless landscape of the mind."²¹ Wright makes abundantly clear that the valley of his forebears partakes of the American myth, writing: "I turned to this hill in the Valley as my Grandfather before me had turned to America."²² In this way the valley becomes a microcosm of the New World, exuding purity and promise. But while Wright represents his journey as an exile into the unknown, the landscape was, in fact, quite well known: "As a boy I had learned to know the groundplan of the region in every line and feature."²³ As the home of Wright's maternal family,

¹⁸ The motto of Wright's maternal family was "Truth Against the World," which Wright inscribed above the mantel at Taliesin.

¹⁹ Wright, An Autobiography, 163.

²⁰ For a discussion Thoreau's experiment at Walden Pond in relationship to his idea of self-realization, see Marx, "Henry Thoreau."

²¹ Marx, Machine in the Garden, 244.

²² Wright, An Autobiography, 168.

²³ Ibid., 167.

the Lloyd-Joneses, the Taliesin valley was Wright's frequent summer home in boyhood and permanent home following the separation of his parents. While Wright was intimately familiar with the land in a real sense, so too had he absorbed its mythic significance.

Known as the God-almighty Joneses for their self-serious piety, the family had already staked out the surrounding landscape as a realm in, but not of, the world. To the extent that Wright is able to lay claim to an authentic American fable he does so as an extension of the experiences of the Lloyd-Joneses. That the valley is not truly a wilderness when Wright returns there in 1911 is of no concern because it was his family that had sanctified it originally. This original sanctification, not surprisingly, follows much the same pattern that is described by Thoreau.²⁴ The making of this place in the wilderness exhibits all the standard elements: after a journey out from the corrupt city, compelled by the pursuit of truth ("truth against the world" was the Lloyd-Jones family motto), the family arrives upon *terra incognita* where they commence to build a world starting with "a small house was built on a gently sloping hillside facing south," upon "this ground dedicated to freedom." The character of this event is apparent in Wright's language as he describes how, in the "virgin soil" of the valley, "the family tree of Richard Lloyd-Jones, Welsh pioneer, with its ten branches and one scar, struck root in the

 $^{^{24}}$ The founding of the valley by Richard Lloyd Joneses, where Wright was born in 1867, is recounted in the first section of the first chapter of *An Autobiography*. It is, as such, Wright's origin story that establishes his credentials as an indigenous American: he is a product of the land and, thus, authentic representative of the nation to be built upon that land.

America of his hope."²⁵ In this sense, Wright need not venture all the way to the wilderness. The middle landscape he sought was already primed and waiting.

Conceived as a brow on a hill, overlooking the valley, Taliesin represented, for Wright, at once a recapitulation of the original founding of the valley, but also a culmination of this landscape and the fruition of its meaning. While the original house on a hill merely suggested the consecration of space around a sacred center the design of Taliesin makes this theme explicit. As originally constructed beginning in 1911, Taliesin consists of three intersecting, linear forms. These three elements wrap around the hillside just below the crown. The crown of the hill becomes an unenclosed courtyard. This arrangement of forms in the landscape works towards Wright's goals on multiple levels. In designing Taliesin it was Wright's desire to create a house that was "*natural*" and would belong to the hill as, in his mind, his mother and grandfather had.²⁶

One of the simplest aspects of this desire was that the house blend in with its setting and appear to be rooted in the ground rather than having been built upon it. It was a common admonition of Wright's that a house ought not to be built on top of a hill as such a siting would cause the house to dominate the hill – to be on it rather than of it.²⁷ Built from locally quarried stone, laid up in striated bands with the un-tooled side facing out like ledge stone, the house appears as an outcropping on the hillside. This same stone is used for landscape elements as well – stairs, benches, walls, retaining walls and pathways – effectively blurring the distinction between the built and natural

²⁵ Wright, An Autobiography, 6.

²⁶ Ibid., 168.

environments. This effect is enhanced by the individually articulated volumes, their roof pitches designed to mirror the slope of the hillside.

Beyond the blending of the house with the landscape, Taliesin orders and participates in that landscape. In wrapping around the hillside Taliesin provides, from inside the house, a panoramic view of the surrounding valley. Another effect of this distribution of the built forms is the way it controls the relationship between the hilltop and the valley. While being a physical barrier to that relationship, the connection is retained through vistas established from the manicured inner garden and hilltop, through passageways and loggias, out to the more rustic valley beyond. The effect of this physical arrangement is powerful both symbolically and experientially. Encircling the hilltop, Taliesin consecrates it as a sacred center that, in turn, bestows meaning on the surrounding valley through the manipulation of vistas and the resultant experience. "The landscape," as Narciso Menocal notes, "seemed to radiate from the house, " with Taliesin acting as "the hub of the landscape."²⁸ True to the nature of the American fable, Taliesin and the surrounding valley become, in Marx's phrase, "A timeless landscape of the mind," or, as Wright put it "a ground dedicated to freedom."²⁹

Unlike Thoreau, however, whose "hard-headed empiricism," in Marx's telling, imparts "a strong contrapuntal"³⁰ theme to his narrative, Wright's description of the

²⁷ Ibid., 168.

²⁸ Menocal, "Taliesin," 66.

²⁹ Wright, An Autobiography, 6.

³⁰ Marx, Machine in the Garden, 243.

planning of Taliesin is imbued with an expectation of Edenic ease and abundance. For instance, whereas Thoreau's recounting of his experiment with beans relates both the tedium and lack of profit against which the farmer struggles, there is a sanguinity in Wright's descriptions of the agricultural life at Taliesin that is at odds with even his own experience. As a young boy on his uncle's farm he writes that he had learned to "add tired to tired." At Taliesin, by contrast, nature yields all that can be desired, apparently without labor or, perhaps, with joyful labor. This abundance is described in a passage so lushly evocative it is worth quoting at some length.

I saw the hill-crown back of the house as one mass of apple trees in bloom, perfume drifting down the Valley, later boughs bending to the ground with red and white and yellow spheres that make the apple tree no less bountiful than the orange tree. I saw plum trees... I saw the rows on rows of berry bushes... I saw thickly pendent clusters of rubies like tassels in the dark leaves of the currant bushes... Black cherries? White Cherries? Those too. There were to be strawberry beds, white, scarlet and green over the covering of clean wheat-straw. And I saw abundant asparagus in rows and a stretch of great sumptuous rhubarb that would always be enough. I saw the vineyard now on the south slope of the hill, opulent vines loaded with purple, green and yellow grapes... Melons lying thick in the trailing green on the hill slope. Bees humming over all, storing up honey in the white rows of hives by the chicken yard. And the herd that I would have! The gentle Holsteins and a monarch of a bull – a sleek glittering decoration of the fields and meadows as they moved about, grazing.

Wright continues in this vein, listing a panoply of animals – domestic and exotic – various vegetables and a root cellar. Concluding this list he writes: "And so began a 'shining brow' for the hill, the hill rising unbroken above it to crown the exuberance of life in all these rural riches."³¹ This emphasis on the hill, rising above and anchoring the

³¹ Wright, An Autobiography, 169-170.

world revolving around it and the Edenic abundance that results, confirms the success of the reintegration of nature and technology in Wright's middle landscape.

Despite the contrast between Thoreau's matter-of-fact tone and Wright's paean, they arrive at the same conclusions. For Wright, as for Thoreau, the exile into nature proves an effective tonic for the malaise of civilization. According to Marx, "when Thoreau tells of his return to Concord, in the end, he seems to have satisfied himself about the efficacy of this method of redemption."³² As for Wright's redemption we are told: "Gradually creative desire and faith came creeping back to me again."³³ This flowering of the landscape and revivification of the spirit under the auspices of man and organic architecture is not, for Wright, a one off phenomenon, confined to the blessed pastures and slopes of the Valley. This vision, first posited at Taliesin, becomes his plan for a nation – brought forth from the mythical land of Usonia. In the hands of the architect, the pastoral ideal, so central to Wright's personal mythology, becomes a vision for a nation in the form of Broadacre City.

Extending his analysis of the American fable, Marx notes a transition as well that he describes as the "turning of an essentially literary device to ideological or political uses."³⁴ An important distinction between the two forms is illustrated by the phrases "pastoral ideal" and "pastoral design." Whereas in its literary form the pastoral design refers "to a highly wrought aesthetic form, a complicated way of ordering meanings that cannot be taken to imply any single, clear line of action;" in its political or ideological

³² Marx, *Machine in the Garden*, 243.

³³ Wright, An Autobiography, 174.

form, "the pastoral ideal affirms a belief which may serve as a guide to social policy."³⁵ Comparing the pastoral design of Shakespeare's *The Tempest* to the pastoral ideal that underlies Jefferson's *Notes on the State of Virginia*, Marx concludes that:

[t]he implications of Shakespeare's play, taken as a whole, are not at all the same as those of Prospero's 'majestic vision,' a kind of pastoral dream that *The Tempest* encompasses. Granted that the dream seldom has inspired more exalted expression, the play has the effect, in the end, of checking our susceptibility to such dreams. On the other hand, the idea that the American continent may become the site of a new golden age could be taken seriously in politics.³⁶

Three hundred years after Shakespeare, Wright's proposal for the abandonment of the cities, and construction of a different kind of city in the vast, undefiled land of the American Midwest and West suggest the resiliency of this political vision. Thus does Wright's own iteration of the literary form of the fable give way to its political manifestation in Broadacre City.

This transition from ideal to design accounts for a significant deviation of Wright's Taliesin fable from the standard form. Regarding that form, Marx notes that "the setting may be an island, or a hut beside a pond, or a raft floating down a river…but whatever the specific details, certain general features of the pattern recur too often to be fortuitous. Most important is the sense of the machine as a sudden, shocking intruder upon a fantasy of idyllic satisfaction."³⁷ Marx describes this jarring intrusion of the machine as a counterforce within the narrative of the American fable type. It is this

³⁴ Marx, Machine in the Garden, 73.

³⁵ Ibid., 74.

³⁶ Ibid., 74.

counterforce within the pastoral design that mediates against a straightforward reading of the typical American fable. Rather than being read as advocacy of the pastoral vision presented, a sense of uncertainty prevails. Describing the role of the counterforce, Marx writes:

Most literary works called pastorals – at least those substantial enough to retain our interest – do not finally permit us to come away with anything like the simple, affirmative attitude we adopt toward pleasing rural scenery...These works manage to qualify, or call into question, or bring irony to bear against the illusion of peace and harmony in a green pasture. And it is this fact that will allow us, finally, to get at the difference between the complex and sentimental kinds of pastoralism.³⁸

It is this ambiguity that Marx finds at the heart of great American fables such as *The Great Gatsby, Moby Dick* and *Huckleberry Finn*. It is precisely this quality, however, which Wright's Taliesin fable would seem to lack.

Rather than being a literary form only, Wright's fable is justification for actual architecture: a pastoral design. As such, it is incumbent on the designer to resolve the conflicts that the literary versions present. At Taliesin, as with Broadacre City, what must be successfully accomplished is the harmonious resolution of nature with the counterforce of the machine. It is this premise on which Taliesin is predicated – that it is possible to build with nature in a way that nature is broadened and extended while being in no way contradicted or undermined. Part of Wright's ability to conceive this premise at Taliesin may be merely fortuitous: the train does not run in close proximity to Wright's valley. Thus is Wright spared the specter of the locomotive disrupting his pastoral idyll.

³⁸ Ibid., 25.

Putting aside this, perhaps significant, reality, we may look at such machines that are part of Taliesin. Chief among these, as always with Wright, is the automobile. While the buildings themselves might appear as an extension of the landscape, the automobile is a different matter: as these glistening symbols of technology are, to a large extent, incompatible with architectural integration. While not being integrated into the landscape, the automobile, in Wright's vision, fully participates in it. As described by numerous others, the automobile approach becomes fully an aspect of the architecture of Taliesin. Winding up the hillside, the automobile approach passes through the porte cochere and is immediately presented with a view through a loggia to the southeast. The driveway then turns northeast where another view is presented through a break in the building on axis with the driveway. Reminiscent of Wright's project for an Automobile Objective, the automobile is fully integrated into the Taliesin landscape, without the sense of any discontinuity between the technological and the natural. Emphasizing Wright's determination that the two be reconciled, Walter Creese has noted Wright's practice of using his own equipment to grade the land adjoining the county roads that bordered his property in an attempt to more fully integrate them into his vision of the land.³⁹ While this, in itself, is not conclusive of anything, it suggests, again, Wright's commitment to the ultimate compatibility of Architecture, landscape and technology.

Before continuing, there is another aspect of this discussion that must be acknowledged. The boundless optimism of Wright's pastoral ideal of Taliesin and the unquestioned leap from there to the full-blown pastoral design of Broadacre City may

³⁹ Creese, 259.

seem, as Marx' suggests, a facile and sentimental resolution of a complex situation. In fact, the charge that Wright was beholden, particularly with regard to Broadacre City, to a form of sentimental pastoralism is one that has been made and needs to be seriously considered. When Marx tells us that "[t]he soft veil of nostalgia that hangs over our urbanized landscape is largely a vestige of the once dominant image of an undefiled, green republic, a quiet land of forests, villages, and farms dedicated to the pursuit of happiness,"40 he is not talking about Broadacre City. He might as well be, though, such is the image that Wright himself sought to convey. In outlining the pernicious effect of such attitudes, Marx, paraphrasing the conclusions of historians such as Richard Hofstadter, Marvin Meyers and Henry Nash Smith, asserts that this idealization of rural ways represents an impediment to clarity of thought and the social progress that might result from such.⁴¹ This charge that the Broadacre City plan represented a reactionary vision that sought social progress through reversion to a mythical ideal was precisely the one leveled against Wright by Meyer Schapiro. In one of the earliest and sharpest attacks against Broadacres in the pages of *The Partisan Review*,⁴² Schapiro condemns Wright's agrarian solution rooted in mythic idealism, describing it as "a familiar doctrine of innocence and original sin and a plan of redemption by rural housing."43

⁴⁰ Marx, *Machine in the Garden*, 6.

⁴¹ Ibid., 7.

⁴² Schapiro's critique was contained in a review of the book *Architecture and Modern Life*, which Wright co-authored with Baker Brownell. The critique of Wright's naivete regarding social issues of class and power is withering. See Schapiro.

⁴³ Schapiro, 42.

It is not my intention to defend Wright against this charge, or even to fully explore its validity. My intent, rather, is to attempt to elucidate Wright's notion of technology, its relationship to nature, and the way that this understanding, within the context of his worldview, allows for the resolution that Broadacre City represents. Certainly, what emerges, initially, from the application of Marx's explication of American pastoralism to the work of Frank Lloyd Wright is a rather unflattering judgement. Allowing Taliesin to stand as a prototype of one aspect of Broadacre City, as I believe we may,⁴⁴ it seems reasonable to consider if Broadacre City might not be summed up as merely a naïve pastoral dream born of deep affinity for both nature and the idealized meaning of America. While obviously connected to a vast technological network, and itself the result of certain technological systems, as Wright describes Taliesin there is no sense of this relationship or of the dangers represented by it. In Wright's view, it would seem, the agrarian lifestyle he envisioned was as viable in the 1930s as it had been in the 1850s.⁴⁵

Extending this criticism to Broadacres it is hard to overlook the apparently incommensurable juxtaposition of extensive and highly technological systems of transportation, communication and production alongside an agrarian society of noble husbandmen – a society aided, but in no way compromised, by technology. We are reminded of John Sargeant's description of Broadacre City with which this inquiry

⁴⁴ On some of the depictions of Broadacres, larger houses in the hilly quarter of the hypothetical site are referred to as "Taliesin type" houses.

⁴⁵ The extent to which Wright's vision of the Taliesin valley as being, somehow, outside of time is echoed by Kenneth Frampton's remark about Broadacre City as being not so much utopian as outside of time (Frampton, "Modernization and Mediation," 77).

commenced. What does it mean for a technologically advanced society to live in close contact with nature? Are these two terms mutually exclusive, or at least contradictory, as our American fables would have it? It is apparent that, for Wright at least, they were not. It remains, then, to be answered: how did Wright understand nature and technology that allowed him to conceive of their final integration, and from where did these attitudes derive? As I will show, this resolution is the product of Wright's immersion in romantic thought. It is this intellectual inheritance that provides the essential principles from which Wright's organic architecture springs. Further, these same premises that underpin organic architecture engender an outlook that allows for the taming of technology and its amelioration to the organic world.

CHAPTER IV

ROMANTICISM AND ORGANIC ARCHITECTURE

It has been common in architectural history to view Wright as a grandfather of modern architecture¹ – someone who initiated and inspired a movement but then failed to keep up, yielding the vanguard to the next generation. This attitude was famously exhibited by Philip Johnson who referred, cuttingly, to Wright as the greatest architect of the nineteenth-century living in the twentieth. The sense that Wright was somehow out of place in the architectural world of the early twentieth century is aptly illustrated by his inclusion in the Museum of Modern Art's International Exhibition of Modern Architecture of 1932. Too influential to ignore while codifying the arrival of this new style, the curators' attempt to fold Wright into the story of an architectural movement with which he did not fit points up a glaring incongruence. Fundamental to this endeavor is the assumption that the work of Wright and the later modern architects is rooted in the same philosophical and intellectual soil. It is, in fact, the differences in this regard that separates Wright from that branch of modern architecture.

In framing his study of Wright's intellectual context, Norris Kelly Smith notes, disapprovingly, this historicist view of Wright as a progenitor of modern architecture and,

¹ See Pevsner, for example.

thus, as partaking of the same architectural lineage as his European colleagues.² Rejecting these attempts to read Wright into a narrative of modern architecture that disregards the significant philosophical distinctions between he and his younger colleagues,³ Smith argues, instead, for an interpretation of Wright from within his own context, considering Wright's actual intellectual heritage. While the Enlightenment suppositions out of which functionalism springs are a driving force during the ascendancy of architectural modernism, Wright is heir to an alternate intellectual tradition. It is Wright's roots in romanticism and the specific epistemological and metaphysical premises at its core that provide the genesis for his approach.⁴

As summed up by Alfred North Whitehead, "the romantic revival was a protest on behalf of the organic view of nature, and also a protest against the exclusion of value from the essence of matters of fact."⁵ The phrase "exclusion of value from the essence of matters of fact" refers to the reductionism of enlightenment empirical philosophy and the growing hegemony of the scientific description of reality. This intellectual hegemony is also evident in early twentieth century architecture in the rise of functionalism as a dominant philosophy. In adopting Louis Sullivan's phrase "form follows function," European functionalists like Walter Gropius and Hannes Meyer make the matching of

² N. K. Smith, Frank Lloyd Wright, Ch. 1.

³ See ibid. In making his point Smith notes the work of Nikolaus Pevsner.

⁴ Richard Etlin has argued for a romantic legacy in architecture to which both Wright and Le Corbusier belong. Etlin's argument centers on the idea of the architectural system as a reaction to Enlightenment rationalism. My argument is not intended to contradict Etlin's, but to indicate, in Le Corbusier's writing and pronouncements, another side to his thinking that is very much in line with that same strain of Enlightenment thought.

⁵ Whitehead, 138.

form to function the fundamental architectural principle. The logical conclusion of this functionalist program is evocatively expressed by Le Corbusier who avers: "the house is a machine for living in,"⁶ thus aligning architecture with the ethos of the machine age, while imparting to it the credibility of science.

In the paragraph preceding his famous phrase, Le Corbusier notes: "the problem of the house has not yet been stated."⁷ It is only when the problem has been fully and correctly stated that a solution can be found. While the house as a machine for living has often been taken to imply a machine aesthetic, it is, more significantly, proposing the application of the scientific method to the design of housing. In this model, the application of reason in the form of the scientific method to a properly stated problem will yield the verifiably correct solution. Le Corbusier makes this point explicit when, years later, he proposes a "science of housing" and "laboratory' sites" where the form of the dwelling might be perfected through the research and experimentation.⁸ This approach rests on the idea that the problem of human habitation might be broken down into its component requirements, that those individual requirements might be quantified and correlated to architectural elements having definite characteristics and relationships and that those components might then be assembled into a house. The resulting house will be assured of fulfilling its intended purpose as surely as would a machine, so designed.

⁶ Le Corbusier, *Towards a New Architecture*, 10.

⁷ Ibid.

⁸ Le Corbusier, *The Marseilles Block*, Ch. 2.

Rejecting this conception of architecture, Wright argues: "The machine can be nowhere creator except as it may be a good tool in the creative artists toolbox. It is only when you try to make a living thing of the machine itself that you betray your human birthright."⁹ Wright applies this critique to Le Corbusier's conception of architecture with the observation that "a house is a machine in which to live but architecture begins where that concept of a house ends."¹⁰ What is missing, for Wright, from Le Corbusier's formulation is any allowance for value, while contending that without that value there is, in fact, no architecture.¹¹ In rejecting Le Corbusier's conception of architecture, Wright is not rejecting, merely, the idea that the house is, or should look like, a machine. He is rejecting the two underlying premises which would have the machine serve, in any way, as a model for architecture.

The first of these premises concerns the question of what we may know and how we may come to know it, and the second concerns the related understanding of the essential character of the universe or reality. While Le Corbusier's description of the house preferences an objective, analytical process as the source of architectural understanding, it also offers up the machine as the prototypical solution to all problems so conceived. Architecture, in this view, becomes, like engineering, an exercise in

⁹ Quoted in Kaufmann, 35.

¹⁰ Wright, "To the Young Man in Architecture," 216. A lecture to the Art institute of Chicago delivered in 1931.

¹¹ It should be noted that Le Corbusier himself suggested a similar idea when he drew the distinction between building or engineering and architecture (*Towards a New Architecture*, "The Engineer's Aesthetic and Architecture"). It is not, however, within the scope of this project to flesh out the contours of Le Corbusier's line of thought in this area.

objective problem-solving;¹² the resulting solution being pre-conceived as a variety of machine. The machine is, here, a symbol by which Le Corbusier understands the universe and its workings. And his proposal represents a reification of the idea of the machine itself: essential truth distilled from nature and manifested. In rejecting these premises, Wright argues that there is a truth, a value, beyond what may be objectively derived and embodied by this method of mechanical distillation. Further, he argues that access to this value requires a faculty that transcends that of purely rational thought.

This alternate view of the machine is exhibited in Wright's numerous pronouncements on the subject. Where, for Le Corbusier, the lessons drawn from the machine are fundamental and may be widely applied, for Wright the machine is merely a particular instance of a deeper, universal principle, which is "Life."¹³ As he notes, "all life is machinery in a rudimentary sense, and yet machinery is the life of nothing. Machinery is machinery only because of life. It is better to proceed from the generals to the particulars; so do not rationalize from machinery to life, why not think from life to machines?"¹⁴ Though he does not formulate it as such, Wright's attitude is more closely described by the idea of the house as an organism for living in. Suggesting this

¹² I should acknowledge the danger of attributing any particular set of ideas to as complex an intellect as Le Corbusier's. As much an iconoclast as Wright, it is easy to imagine Le Corbusier overstating his commitment to this rationalist approach if it suited his purposes. Le Corbusier serves as a spokesman for this position because his arguments for it are the most well known and provocative, not because he was the most dogmatic in practice.

¹³ I have capitalized this term, as Wright, himself, often did, to emphasize Wright's understanding of Life as a principle as opposed to the biological phenomenon, which follows, always, the principle, but is not synonymous with it. A similar idea is conveyed by Wright's capitalization of the word Nature (surely drawn from Emerson), as an expression of the thing that he worshipped. Which is not to be confused with the natural world.

¹⁴ Wright, "To the Young Man in Architecture," 216.

formulation Wright avers that "no rationalizing of the machine nor factorializing of aesthetics can obscure the fact that architecture is born, not made – must consistently grow from within to whatever it becomes."¹⁵ This association between architecture and life was neither glib nor merely contrarian. For Wright, Life represents the primary value and, indeed, the primary reality. "I have learned in my lifetime" he wrote, "that there is only one trust worthy of any man and that this is trust in life itself; the firm belief that life *is* (worlds without end, amen) that you cannot cheat it nor can you defeat it."¹⁶ It is this attitude that underlies organic architecture and, indeed, Wright's entire worldview.

It has been common to dismiss Wright's organic architecture as a vague term applied to a nebulous product or process.¹⁷ In his history of modern architecture *Space*, *Time and Architecture* Sigfried Giedion notes the existence of opposing approaches to

architecture. "Throughout history," he writes,

there persist two distinct trends – the one toward the rational and geometrical, the other toward the irrational and the organic: two different ways of dealing with or mastering the environment...Since the beginning of civilization there have been cities planned according to regular schemes and cities which have grown up organically like trees.¹⁸

While Giedion notes, diplomatically, that of the approaches he delineates "one cannot be considered superior to the other,"¹⁹ his description belies his evenhandedness. His

19 Ibid.

¹⁵ Ibid., 213.

¹⁶ Wright, Organic Architecture, 46.

¹⁷ It should be noted that part of this attitude must be attributed to Wright's multiple and ever-changing pronouncements on the subject.

¹⁸ Giedion, 348. It is interesting that Giedion would attribute to the organic approach a desire to "master the environment."

suspicions of the dimly lit, irrational depths of the primitive mind are evident when he turns to his description of Wright, where he observes that: "Wright's whole career has been an endeavor to express himself in what he calls 'organic architecture,' whatever that may be. He likes to work in the shadow of this feeling."²⁰ What is for Giedion a vague and shadowy presence in Wright's mind is, for Wright, the abiding principle from which his work springs.

Despite such veiled dismissals and attempts to attribute to Wright a personal and idiosyncratic interpretation of 'organic,' it is no secret that his organic philosophy was in no sense original to him and was in fact firmly rooted in the romantic tradition.

In applying the romantic theory to architecture, Wright holds that a building should be organic...According to this theory, the form of a building should be determined by its relations to its site and the human use for which it was intended, by the nature of the materials used in its construction, and by an esthetic principal of unity analogous to the living, changing unity of a plant or animal.²¹

This interpretation of Wright's meaning of organic derives directly from romantic theory

beginning with Coleridge, who in a lecture in 1818 said that:

The form is mechanic, when on any given material we impress a predetermined form, not necessarily arising out of the properties of material; - as when a mass of wet clay we give whatever shape we wish it to retain when hardened. The organic form, on the other hand, is innate; it shapes as it develops, itself from within, and the fulness (sic) of its development is one and the same with the perfection of its outward form. Such as the life is, such is the form.²²

²⁰ Ibid., 349.

²¹ Adams, 46.

⁵⁶

²² Quoted in Ibid., 47.

It is in this last line of Coleridge that we are reminded of Wright's rephrasing of Sullivan's dictum. For he contended that when Sullivan said "form follows function," what he meant was "form and function are one."²³

Thus, despite attempts to impute an ambiguity or fatuousness to Wright's explication of organic architecture, his various pronouncements on the subject appear often as paraphrase of the poets and philosophers of romanticism.²⁴ In one instance he writes: "the very word 'organic' itself, means that nothing is of value except as it is naturally related to the whole in the direction of some living purpose."²⁵ Elsewhere, Wright avers that romance is "an earnest life-long search for that thing growing out from within the nature of the thing...not from anything applied to that thing from without."²⁶ In a particularly evocative description of organic architecture, Wright declared that it grew "out of the ground and into the sun."²⁷ In this we see the unmistakable shadow of Carlyle

who, in describing what he called "dynamical elements," declared that they "rose up, as it were, by spontaneous growth, in the free soil and sunshine of Nature."²⁸

²³ Wright, Organic Architecture, 7.

²⁴ I am ignoring, here, discussion of the influence on Wright's thought of Violette-le-Duc with regard to architectural theory, which has been discussed by Cronon, among others, because I wish to focus on the underlying romantic philosophy in which Wright was also immersed.

²⁵ Quoted in Adams, 46.

²⁶ Quoted in Ibid. Ellipsis in original.

²⁷ Quoted in Kaufmann, 44.

²⁸ Quoted in Channell, 7.

So, while it has been remarked that "the word 'romantic' has come to mean so many things that, by itself, it means nothing,"²⁹ its philosophical positions are well defined.³⁰ It is from the perspective of those philosophical positions that Wright's pronouncements regarding nature, the machine and architecture become comprehensible and we find the source of Wright's architectural philosophy. Of particular importance are the epistemological and metaphysical premises that set him apart from his European colleagues. As I noted, in its philosophical form, romanticism is a reaction to enlightenment empirical philosophy, generally, and the epistemological system developed by John Locke, specifically. This system posits that knowledge is gained through the senses by the collecting of sense data, which the mind manipulates by breaking down to their component parts and recombining those parts. The mind, for its part, is a *tabula rasa* containing no innate ideas and consisting, primarily, of the faculty to receive and manipulate sense data.

There are two related implications of this system that romanticism rejects. The first of these is the atomistic and, thus, mechanistic, conception of reality it implies. As conceived by Locke, phenomena and, hence, ideas regarding those phenomena are composed of smaller parts that can be detached and reassembled into other ideas, not unlike the way a machine might be disassembled and reassembled into the same or a different machine. The whole is merely the sum of its parts and a new idea is arrived at

²⁹ Quoted in N. K. Smith, Frank Lloyd Wright, 36.

³⁰ The literature on this subject is, of course, extensive. I have relied on Newsome for the history and origins of Romantic thought.

similarly to the way a new machine is invented – a group of previously existing parts is assembled into a novel result.³¹ The system is an extension of the mechanistic worldview that originates in Descartes' separation of body from mind. The mechanical worldview, for which the clock served as the first symbol, posits not merely that the universe functions like a machine or that a machine might serve as an accurate model for the universe but, more fundamentally, that the universe shares a basic structure with machines.

The reaction to this system within romantic thought is profound. Following the idea of the whole as the sum of its parts, the parts are, likewise, the sum of their parts. That is to say, the parts, and the parts of the parts have no essential, innate character, and achieve their meaning only in their final forms. Matter becomes, in this view, a collection of undifferentiated atoms, differently assembled. Rather than being the result of some inherent character or purpose, things are merely the result of the imposition of form upon matter. Architecturally speaking, rather than growing from within, architecture is form imposed upon matter, a mere machine.

The influence of this model within early twentieth century architecture is clear enough. Le Corbusier, as ever, modern architecture's most polemical spokesperson, describes architecture as "the masterly, correct and magnificent play of masses brought together in light." The source of this assertion springs from the epistemology of sense data and their perception. He writes: "Our eyes are made to see forms in light." And the

³¹ The extension of this atomistic view into architecture was clearly illustrated by Le Corbusier and his ideas regarding housing. The most obvious parallel is his Marseilles Block where the entire enterprise, conceptually, relies on the perfection of the individual 'cell.' The building then resulted from an

forms in question are "the great primary forms," "cubes, cones, spheres, cylinders or pyramids."³² These forms have no inherent meaning either in themselves or owing to their materiality. They are, instead, discrete parts, composed of smaller parts that achieve meaning only to the extent that, when assembled, they are able to convey a certain feeling or evoke a certain response.³³ The materiality of these forms is in no way relevant. The forms are, in fact, immaterial.

In contrast to this viewpoint is Wright's repeated emphasis on what he called the nature or meaning of materials.³⁴ Lecturing on this topic in 1931 Wright states:

I began to study the nature of materials. I learned to see brick as brick, learned to see wood as wood and to see concrete or glass or metal each for itself and all as themselves. Strange to say this required concentration of imagination; each required a different handling and each had possibilities of use peculiar to the nature of each.³⁵

What Wright points to is the idea that materials each have a specific character that should, both, dictate and be expressed by their use, and, further, that the perception of these characteristics requires a particular form of attention and study. This form of study,

agglomeration of cells. While Le Corbusier employed the language of organisms, the conception is mechanical.

³² Le Corbusier, *Towards a New Architecture*, 34.

³³ It should be noted that Le Corbusier is not clear as to how we come to have ideas of these forms. He does write that "the image of these [forms] is distinct and tangible within us and without ambiguity," leaving open the possibility of innate ideas.

³⁴ In 1928, as part of his on-going "In the Cause of Architecture" series for *The Architectural Record*, Wright published a series of five essays dedicated to this topic; one each on stone, wood, the kiln, glass and concrete. Each was subtitled "The Meaning of Materials." See Wright, "In The Cause of Architecture: III-VII.

³⁵ Wright, "In the Realm of Ideas," 192.

which he concedes sounds strange, is a study via the imagination. This faculty of mind is the second topic of distinction between romantic and empirical thought.

The second implication of the empirical system relates to the limits of human knowledge it implies. If we accept that ideas existing in the mind are simply images of sense perceptions of the external world, as Locke describes, then the ability to know is limited by and to perceivable phenomena. Against this view of the world and the function of the mind, romanticism conceives of an alternate epistemology that posits expanded abilities of the mind and extends the frontiers of possible knowledge. The key to this epistemology is the dual functions that it attributes to the mind. These functions are the reason and the understanding. The understanding, the romantics hold, is that faculty of mind that, according to Emerson, "adds, divides, combines and measures."³⁶ These processes yield practical knowledge and the ability to manipulate the physical world: this activity being the purview of science and its close cousin engineering. In addition to the understanding, which more or less accords with Locke's theory, the romantics hold a second and higher capability called reason. Where understanding is empirically focused, and limited, reason is primarily creative and intuitive. It is the reason that is the source of a deeper, extra-rational truth. As Emerson puts it, the Reason "transfers all these lessons [of the empirical Understanding] into its own world of thought, by perceiving the analogy that marries mind and matter."³⁷ It is in the shadow of this feeling, in Giedion's phrase, that Wright liked to work.

³⁶ Quoted in Marx "Neo-Romantic Critique," p. 164.

³⁷ Quoted in ibid. Brackets in source.

Wright's exposure to romantic thought is multiple. The stature of Emerson within the Lloyd-Jones family and their familiarity with his ideas and Transcendentalism itself is, of course, well documented.³⁸ In addition to this exposure, Wright would encounter variations of these ideas through his association with Louis Sullivan. Among Sullivan's views is his distinction between knowledge and understanding. By knowledge, Sullivan means sensory information and logical manipulation of that information, whereas he takes understanding to be instinctual and related to insight and intuition.³⁹ While Emerson

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uses understanding and reason to refer to these same faculties it is a distinction without a difference.⁴⁰ As for Wright's stand on this issue, while he did not rigorously employ the terms Reason and understanding to refer to the pair of mental faculties in any rigorous way, his epistemological commitments are abundantly clear.

As an illustration of this commitment on Wright's part, it is useful to consider the prelude to his autobiography. While, in itself, a rather curious passage, when viewed in light of the discussion of Wright's romanticism and connection to Emersonian epistemology, it is immediately clarified as a statement of Wright's fundamental belief system. The Prelude purports to describe, in dramatic tone, an incident from Wright's youth on his Uncle John's farm in Wisconsin. Setting up the scene, Wright describes a

³⁸ See Madden. In addition to offering a comprehensive list of authors who have discussed Wright's connection to Emerson and Transcendentalism (note 1) Madden offers an analysis of the convergences and divergences in the thinking of Wright, Sullivan and the four transcendentalists; Emerson, Theodore Parker, Thoreau and Whitman.

³⁹ Madden, 289.

⁴⁰ Ibid., 288.

"[l]ight blanket of snow fresh-fallen over sloping fields, gleaming in the morning sun." The event is a walk with his uncle who "pulled his big hat down over his shock of gray hair and started straight across and up the sloping fields toward a point on which he had fixed his keen blue eyes." In contrast to his uncle's single-minded determination, Wright tells that "soon the boy [Wright] caught the play of naked weeds against the snow, sharp shadows laced in blue arabesque beneath. Leaving his mitten in the strong grasp, he got free... Eager, trembling, he ran to and fro behind Uncle John, his arms growing full of 'weeds." Upon reaching his destination,

Uncle John turned to look back. A smile of satisfaction lit his strong Welsh face. His tracks in the snow were straight as any string could be straight. The boy came up, arms full, face flushed, glowing... A stern look came down on him. The lesson was to come. Back there was the long, straight, mindful, heedless line Uncle John's own feet had purposefully made. He pointed to it with pride. And there was the wavering, searching, heedful line embroidering the straight one like some free, engaging vine as it ran back and forth across it. He pointed to that too—with gentle reproof... Uncle John's meaning was plain—Neither TO RIGHT NOR TO THE LEFT, BUT STRAIGHT, IS THE WAY. The boy looked at his treasure and then at Uncle John's pride, comprehending more than Uncle John meant he should. The boy was troubled. Uncle John had left out something—something that made all the difference to the boy.⁴¹

Given the rich and fortuitous detail of this episode, it is tempting to question whether it actually happened as described, or even at all. Those suspicions, however, should not undermine an interpretation of Wright's meaning. What Wright presents in this passage is a dramatization of the epistemological divide. The contrast between the unwavering path of his uncle and his own serves as an illustration of the functioning of the merely rational mind as opposed to the mind imbued with the higher creative

⁴¹ Wright, An Autobiography, 23-4.

function, alive to the deeper truth of the world. Rather than an exercise in efficiency in which the relevant information is constrained to the facts of starting point, destination and the snow to be gotten through, Wright's path introduces value into what is for his uncle a matter of fact. In tracing his vine-like path, Wright perceives and participates in the world in a fashion that, in his mind, transcends the rational goal of getting from point A to point B, and yields understanding beyond the merely empirical. This path is, at once, creative, intuitive, and holistic; in a word, it is organic. It requires joy, abandon and an awareness born of inspiration. At the conclusion of the event, both Wright and his uncle have arrived at the same place, but Wright has arrived there with something that is unavailable to his Uncle's virtuous, but merely rational mind. Face flushed and glowing, the boy has experienced the thrill of life, and gained something (represented, perhaps metaphorically, by the weeds) in the process.

Wright is not the only architect to draw meaning from a comparison between straight and circuitous paths. Le Corbusier, also, highlights a distinction between the straight line and its alternative. Not surprisingly, he comes down in favor of the former. By way of explanation he writes: "Man walks in a straight line because he has a goal and knows where he is going... The pack- donkey meanders along, meditates a little in his scatter-brained and distracted fashion."⁴² Commenting on this, Catherine Ingraham notes that, for Le Corbusier, "orthogonality keeps culture hegemonically superior to nature and attempts to obliterate the traces of nature in culture."⁴³ Orthogonality is, like the machine,

⁴² Le Corbusier, City of To-morrow, 11.

⁴³ Ingraham, 69-70.

a principle distilled from, and set above, nature. Rather than being derivative of nature, orthogonality represents, for Le Corbusier, the elevation of its principles to their purest form through the imposition of order. The struggle of mankind and the achievement of modernity is self-mastery represented by the straight line – the conquering of our animalistic irrationality. Interestingly, Le Corbusier's donkey is no mere insensate brute, for he does stop to meditate, albeit in a confused and distracted way. The donkey may be viewed as a stand in for romantics and others who have not fully embraced rationality, insisting instead on the existence of something that can't quite be proved.

In divining Wright's epistemological position, we need not rely merely on a literary interpretation of Wright's more poetic passages, because he directly addresses these same ideas. In The Architectural Record in 1927, Wright proclaims:

All Man has above the brute, worth having, is his because of imagination. Imagination made the Gods—all of them he knows—it is the divine in him and differentiates him from a mere reasoning animal into a god himself. A creative being is a god...reason and Will have been exalted by Science and Philosophy. Let us now do homage to Imagination...Let us call Creative–Imagination the Man-Light in Mankind to distinguish it from intellectual brilliance.⁴⁴

Here Wright uses the word imagination to mean the intuitive and creative faculty (Emerson's Reason and Sullivan's understanding), and reason to mean the empirical and logical one (Emerson's Understanding and Sullivan's knowledge). Like Sullivan and Emerson, Wright elevates the creative and intuitive mind above the merely rational. Without imagination man is "a mere reasoning animal." While in no way invalid, reason

⁴⁴ Wright, "Fabrication and Imagination," 145.

is insufficient. It is, rather, imagination that defines and elevates humanity and allows for the full extent of human expression.

The specifics positions of romantic epistemology and metaphysics yield a complex relationship with technology. Though committed to an organic worldview, many romantics of the eighteenth and nineteenth centuries were actively engaged with the scientific and technological developments of their time.⁴⁵ Rather than rejecting science and technology, they objected, instead, to the mechanical philosophy that lay at its foundation.⁴⁶ It is precisely this attitude that I have suggested in the earlier discussion of Wright. Rather than being anti-technology, Wright was adamantly in favor of it. What he opposed was the notion that technology represented some form of truth - that in its power and efficiency the machine was, somehow, a mirror of the universe and should therefore dictate modes and means. What was objours was the mechanical view of the world that held that the discoveries of science represented the highest form of truth and that the technological fruits of science were, therefore, manifestations of that truth. What remains to be explored is whether Wright's intellectual inheritance may have conditioned him to adopt a particular attitude toward technology and, if so, how that understanding contributes to the amelioration of nature and technology

⁴⁶ Ibid.

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⁴⁵ Channnell, 5

CHAPTER V ROMANTICISM AND TECHNOLOGY

In addition to providing Wright with a philosophical framework for his architectural expression, romantic thought suggests a specific attitude toward technology that derives from these philosophical premises. This attitude and the relationship it suggests have been discerned by philosopher of technology Carl Mitcham.¹ In exploring the question of how a social or cultural understanding of technology is related to particular religious, ethical and philosophical traditions, Mitcham describes what he calls three ways of being-with technology or, stated otherwise, three being-with relationships² that have been dominant in Western culture during various historical periods. Mitcham classifies these relationships as Ancient skepticism, Enlightenment optimism and Romantic uneasiness. In discussing the nature of these relationships, Mitcham focuses on four conceptual categories through which they may be distinguished. These categories are Volition (which concerns religion), Action (ethics and politics), Knowledge

¹ The following discussion is drawn from Mitcham "Three Ways of Being-With Technology," and all references to Mitcham in this chapter are from that work. The points regarding the romantic search for a means of control over technology represent my expansion of Mitcham's analysis.

² Mitcham draws the hyphenated phrase being-with from Heidegger's work on the concept of being. A full discussion of this derivation is beyond the scope of the current work.

(epistemology) and Objects (metaphysics and aesthetics).³ The exploration of these three relationships and their orientation vis-à-vis these categories will further illuminate the influence of romantic thought on Wright and, in the process, flesh out the contours of Wright's relationship to technology. It is this conception of the proper relationship to technology that, I maintain, Wright's conception of Broadacre City is an expression of, and on which it fully relies.

The ancient, or pre-modern, relationship with technology can be summed up, according to Mitcham, by the statement "technology... is necessary but dangerous."⁴ The first intimations of this attitude are found in the religious sphere of Greek and Hebrew mythology. As depicted in the stories Prometheus, Hephaestos, Daedalus and Icarus and The Tower of Babel, technology can "easily turn against the human by severing it from some larger reality – a severing that can manifest in a failure of faith or shift of the will, a refusal to rely on or trust God or the gods."⁵ The ethical argument against unbridled trust in technology, on the other hand, is encapsulated by "Socrates' distinction between *whether* to perform and action and *how* to perform it."⁶ For Socrates, these questions rest upon the deeper "distinction between scientific or technological questions concerning the laws of nature and ethical or political questions about what is right and wrong, good and

³ Mitcham, 54, Table 1. The table provides this categorical structure that is presented more loosely in the text itself.

⁴ Ibid., 33.

⁵ Ibid., 33.

⁶ Ibid., 34.

bad, pious and impious, just and unjust."⁷ Whereas, regarding the first distinction, Socrates maintains we must rely on the guidance of the gods to determine the appropriateness of a particular action, the second distinction highlights Socrates' conviction as to the supremacy of ethical and political issues over a preoccupation with scientific and technological pursuits, and even over cosmological inquiry or speculation. Above all else, Socrates is concerned with virtue represented by the pursuit of moderation. In this pursuit, cosmological speculation offered no help, and scientific and technological knowledge was an outright threat.

Closely related to this ethical and political objection is the epistemological. The issue in this regard is the relative importance of various types of knowledge. As summarized by Mitcham, Socrates maintains that:

Because it cannot bring about a conversion or emancipation from the cares and concerns of the world, technology should not be the primary focus of human life. The orientation of technics, because it is concerned to remedy the defects in nature, is always towards the lower or the weaker... *Eros* or love, by contrast, is oriented toward the higher or the stronger; it seeks out the good and strives for transcendence.⁸

As with the previous objections, technology, while without question useful, is, here again, susceptible to abuse. When abused, or used without awareness, technology becomes a distraction from truth and a replacement for that which has real meaning or value. It is the metaphysical objection, as suggested by Aristotle, which goes to the heart of this issue of truth or value and its relationship to the artifact.

⁷ Ibid., 34.

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⁸ Ibid., 36-7.

Taking a metaphysical stance that will also illuminate certain of Wright's attitudes, Aristotle locates reality in the particular instance rather than, as Plato does, in the transcendent law or form. In the case of all natural entities the reality "is dependent on an intimate union of form and matter, and the *telos* or end determined thereby. The problem with artifacts is that they fail to achieve this kind of unity at a very deep level."⁹ In this view natural objects are the result of an inextricable merging of matter, form and purpose whereas artifacts represent a, more or less, arbitrary imprinting of form on matter for the purpose of achieving a given end. The further danger of technology in this regard is the systemization of the production of artifacts that it implies, which tends to treat matter as an undifferentiated substrate to be manipulated at will. Whereas art, "insofar as it truly imitates nature...engenders an inimitable individuality in its products, precisely because its attempts to effect as close a union of form and matter as possible requires a respect for or deference to the materials with which it works."¹⁰ We see in this attitude, of course, the precursor to the romantic principle of the organic as expressed by Coleridge and of course, Wright's commitment to the nature of materials as an architectural principle.

Summing up this ancient way of being-with technology, Mitcham depicts it as an uneasy relationship fraught with mistrust and characterized by efforts to keep technology at some remove.¹¹ For my purposes I would add an additional element to Mitcham's

⁹ Ibid., 37.

¹⁰ Ibid., 37.

¹¹ Ibid., 39.

assessment. Though the relationship might in fact be one of unease and tension, this tension is subject to resolution on the basis of a particular understanding of its source. That is to say, in the ancient view, technics are part of a larger being-with the world that provides a structure for interpreting and, thus, normalizing the relationship. Whether it is by ethics or aesthetics, the arts are understood to be controlled, or at least controllable, by some higher capacity of judgement. It is precisely this characteristic, as I will show, that is lost in the transition to the modern attitude.

The modern way of being-with technology finds its first comprehensive expression during the time of the Renaissance in the writings of Francis Bacon, and later comes to characterize the Enlightenment philosophy of the eighteenth century. Roughly stated, this position maintains the inherent goodness of technology while arguing that any misuse is accidental in character. Where Plato and Socrates hold grave concerns regarding the consequences of technology, in Bacon's arguments, technological expertise is unmoored from all such doubt. A key to Bacon's position lies in his reversal of the Socratic position in favor of the higher, spiritual knowledge. Bacon argues, rather, that striving for such moral knowledge is the result of vain ambition and is, itself, responsible for the Fall. The blame lay not, as the myth of Prometheus seemed to imply, with scientific and technical knowledge but, rather, with "vain philosophical speculation concerning moral questions."¹² The repercussions of this attitude help to subvert all of the ancient resistance to technology.

¹² Ibid., 40.

Bacon bolsters this position with a unique theological interpretation. The Judeo-Christian conviction that humankind was made in the image of God, when linked with the understanding of God as creator of the heavens and the earth, represented, for Bacon, an explicit ordination by God of the human will to technology. Rather than representing a turning away from God, technology represents, rather, a continuation of His work. As Mitcham notes, "[t]he contemporary theological notion of the human as using technology to prolong creation or cocreate with God depends precisely on the reinterpretation of Genesis adumbrated by Bacon."¹³ Technology, thus, becomes the primary human activity and *homo sapien* becomes *homo faber*.¹⁴ A result of the application of such divine sanction to technology is the emergence of the idea of progress and the uncritical attitude toward it that dominated Western society for almost four hundred years. In Mitcham's view, while the premodern attitude engenders a relationship with technology that effectively limited rapid technical expansion in the West for approximately two thousand years, the Renaissance and Enlightenment attitude encourages an alternate relationship that has been responsible for an unleashing of technical power unprecedented in history.¹⁵

The idea of progress and the promises it offers overwhelmed ancient injunctions. Whereas the ancients distrusted wealth and the concomitant luxury owing to its

¹³ Ibid., 41.

¹⁴ As part of his extended critique of modern technology, Lewis Mumford rejected the conception of humanity in terms of *homo faber*, arguing that the capacity for symbolic thinking long precedes the extensive application of tool-making abilities and is the foundation of human culture. Mumford also argues that such a conception of humankind hyper-validates a potentially destructive human activity. Mumford argues, instead, for a "human-centered technics." See Mumford.

¹⁵ Mitcham, 45-6.

weakening effect on virtue, wealth and its creation came to be seen as, at worst, neutral, and, more likely, a good. Thus, Western society entered into a self-validating cycle wherein technology yielded increasing wealth and power, which further enhanced its status and the drive for advancement. Falling under the wheels of the juggernaut were all the ancient positions. How could technology pose a danger to society when clearly it was a boon? Likewise, how could knowledge of the world that proved so powerful and efficacious be less than true? And, again, how could artifacts constructed in accordance with the laws of nature be any less real or, indeed, different than nature itself?

As I have stated, the implications of Mitcham's analysis go beyond his stated conclusions. In addition to casting off the skeptical attitude that suggested that technology should be controlled, what is abandoned with the birth and expansion of the Enlightenment attitude is any means by which technology may be controlled. As a result of the self-validating cycle of technical progress, the modern view posits science as the ultimate source not only of knowledge, but of value as well. Above this scientific-technical view of the world, no realm of human thought or action – religious, moral, political, practical or philosophical – can be interposed. As I have shown in the previous chapter, the Romantic Movement was a reaction against this empirical worldview. It is in this context that we might recall Whitehead's description of romanticism as "a protest against the exclusion of value from the essence of matters of fact." It is the specific parameters of the being-with technology relationship implied by romanticism that I will now summarize.

Regarding the persistence of modern technological optimism, Mitcham notes that while it continues to dominate in practice, it has been undermined in theory. As I explored in the previous chapter, the romanticism that emerges in the late eighteenth century offers a critique of both Newtonian mechanics and scientific rationality. In response to these it argues for an organic cosmology and an epistemology that promotes the faculty of creative intuition over empirical rationality. And while there is an apparent neutrality implied with regard to technology, Mitcham contends that central to romanticism is a fundamental questioning of modern technology.¹⁶ This questioning, however, is fundamentally ambiguous: while it distinguishes the romantic attitude from both ancient skepticism and modern optimism, it contains similarities with both. Returning to the question of the means by which technology might be controlled, as described by Mitcham, the underlying characteristic of the romantic attitude is the search for the conceptual field that might transcend the demonstrable power of the technical arts. The romantics were caught between the thrill of progress and the sense of loss. Unwilling to reject technology and the progress associated with it, they sought a new way forward.

In briefly summarizing the romantic relationship with technology with respect to the categories established by Mitcham, its synthetic quality is revealed. With regard to the question of volition, the ancient and modern attitudes present a polarity that the romantic attempts to mediate. Rather than the will to technology causing people to turn away from God or, on the other hand, being sanctioned by god, the romantic view conceives of this technical striving as an aspect of the creative impulse, and in that sense fully "natural." As Mitcham notes, however,

¹⁶ Ibid., 46.

nature is reconceived as not just mechanistic movement but as an organic striving toward creative development and expression. From the perspective of 'mechanical philosophy,' human technology is a prolongation of mechanical order; from that of *Naturphilosophie* it becomes participation in the self-expression of life.¹⁷

The dictates of "life," in this scenario become a controlling force on the will to technology. And, as will become significant regarding Wright, the dictates of life are relevant and discernable in the moral, religious, philosophical and aesthetic spheres.

With regard to political and ethical considerations – the field of action – the romantics again seek for a mitigating force to counteract technology, while also mediating between modern and pre-modern understandings. Rather than representing a threat to individual morals and social order, as the ancients feared, or a boon in terms of individual socialization and the creation of wealth, the romantics acknowledge both sides of this situation. Technology is socially disruptive in the sense that it weakens the bonds of social affection on which a cohesive society depends. What it offers is the promise of individual freedom and liberation. This freedom is undercut, however, by the alienation from virtue needed to capitalize on it. This reference to virtue, Mitcham cautions, should not be taken as a reversion to the values of Socrates. In place of the passive and contemplative virtue of ancient Athens, the romantics, after Rousseau, see virtue in creative action. It is creative action in the world, born of passion, that is the highest form of human activity. It is this idea of action, directed by "an expansive imagination – namely love,"¹⁸ that can redeem technology from its moral limitations.

¹⁷ Ibid., 46-7.

¹⁸ Ibid., 51.

This last point, of course, leads directly to the earlier discussion of romantic epistemology. Rather than rejecting technical knowledge as superficial or false, or elevating it to a position of supremacy, the romantics accept technical knowledge as useful, while interposing above it vision and the poetic imagination. Where, during the Enlightenment, reason became "the only means to advance human freedom from material limitations, "for the romantics, "the focus on reason [is] itself a limitation."¹⁹ As an answer to this limitation the imagination is both intuitive and creative. And through the "liberation of imagination the historical condition of technical activity can in turn be altered."²⁰ It is the creative imagination that will, in the words of Coleridge, "idealize and ...unify."²¹ Thus, for Wright, it is the creative imagination that will idealize and unify nature and technology. Recalling Wright's words from Chapter Two, "architecture and acreage together are landscape."

Lastly, then, is the consideration of the romantic attitude toward the creations of technology. Unlike the Greek philosophers, the romantics did not consider artifacts to be, necessarily, separate from or outside of nature. On this point, the romantic view shares with that of the Enlightenment "the belief that nature and artifice operate by the same principles... [H]owever, the romantic view takes nature as the key to artifice rather than artifice as the key to nature."²² Summing this view up, Mitcham offers an observation

¹⁹ Ibid., 51.

²⁰ Ibid., 51.

²¹ Quoted in Ibid., 51.

²² Ibid., 52.

that can only remind us of Wright's pronouncements on the subject: "The machine is a diminished form of life, not life a complex machine."²³ This primacy of life, or the organic, over the mechanical engenders, as well, a metaphysical reality that is "best denoted not by a stable or well-ordered form, but by process and change."²⁴ This shift in understanding leads to the interpretation of technology as actively engaged in this process of emergence. What begins to take shape in this discussion is a picture of the romantic tradition as an attempt to reintegrate technology into a worldview in a way that allows for scientific discovery and technical advancement while subjecting that process to some higher, controlling ideal. It is this romantic way forward that I contend is at the root of Wright's conceptualization of Broadacre City.

²⁴ Ibid., 52.

CHAPTER VI

WRIGHT, TECHNOLOGY AND BROADACRE CITY

The paired concepts of nature and technology stand as central themes in the body of Wright's work and thought. They are, as well, the warp and woof of the fabric of his Broadacre City vision. It is only by dint of the resolution of these domains that that vision is, for Wright, achievable and, for us, fully comprehensible. While Wright's conception of nature and its intellectual lineage have been thoroughly explored, his understanding of technology has received less attention. That Wright was among the first architects to promote the role of technology in the arts, as he did in his Hull House lecture, is an historical commonplace. Also significant to the commentary on his work is his careerlong experimentation with new building materials and construction methods – his textile block houses of the 1920s being only one example. And, of course, no discussion of Wright's work is complete without noting his enthusiasm for the automobile and the significance of it to his ability to conceive of the decentralization that lies at the heart of Broadacre City. What is lacking from this body of scholarship is any attempt to reconcile his enthusiasm for technology with his commitment to the organic, specifically with regard to the resolution of these terms that Broadacre City represents. I maintain that the grounds for that resolution lie in Wright's immersion in romantic philosophy and the

specific relationship to technology that that set of ideas engenders, and, further, that it is Wright's faith in the ethos of the American fable that accounts for Wright's dogged pursuit of his improbable vision.

Any attempt to understand Wright's thinking regarding technology must begin with his seminal statement of support. In a lecture at Jane Addams' Hull House on March 1, 1901¹, Wright calls for artists – among which group he includes architects – to embrace the new means of mechanical production, asserting that:

in the Machine lies the only future of art and craft – as I believe, a glorious future; that the machine is in fact, the metamorphosis of ancient art and craft; that we are at last face to face with the machine – the modern Sphinx – whose riddle the artist must solve if he would that art live – for his nature holds the key."²

Speaking, as he is, to the Chicago Arts and Crafts Society, Wright is by no means preaching to the choir. Though Wright's early work is often associated with the arts and crafts movement, his views regarding the machine put him radically at odds with the followers of Morris and Ruskin, who advocate for a return to traditional handcrafts. Making this point explicit, Wright disparages "the tyros [who] are taught in the name of John Ruskin and William Morris to shun and despise the essential tool of their Age as a matter commercial and antagonistic to Art."³ For Wright, such a reversion is neither possible nor desirable. The machine, for him, is not different from the traditional tools of the artist, just their necessary development.

¹ The talk is titled "The Art and Craft of the Machine." See Meehan, p. 87, note 1, for the dating of this talk and its publication history. The same talk was presented again, almost verbatim with a rather selfaggrandizing introduction, as "Machinery, Materials and Men," the first lecture of Wright's 1930 Kahn Lecture Series at Princeton. Published in Wright, *Modern Architecture*.

² Wright, "Art and Craft of the Machine," 89.

³ Ibid., 90.

The machine represents, at once, an abrupt transition, but also the continuation, and even the culmination, of art. As Wright notes, "although there is involved [in the Machine Age] an adjustment to cherished gods, perplexing and painful in the extreme; the fire of many long-honored ideals shall go down to ashes, to reappear, phoenixlike, with new purposes."⁴ Despite the disruption that the machine represents for art, Wright is convinced of its promise and, more, it's necessity. Emphasizing his commitment in this regard he adds, "the machine is capable of carrying to fruition high ideals in art—higher than the world has yet seen!"⁵ More than merely another tool, the Machine is, for Wright, the culmination of the idea of the tool, and with that culmination the full purpose and potential of humanity are within reach.

Indeed, for Wright, the true meaning of "the Machine is intellect mastering the drudgery of earth that the plastic arts may live; that the margin of leisure and strength by which man's life upon earth can be made beautiful, may immeasurably widen; its function ultimately to emancipate human expression!"⁶ Rather than being a mere tool for the accomplishment of some discrete task, the machine is, here, part and parcel of the achievement of true human purpose – the emancipation of expression and, thus, self-realization. And while the notion of "the Machine…mastering the drudgery of earth" seems redolent with the technological triumphalism associated with the modern attitude, it is the ultimate goal that sets Wright's vision apart: Whatever gains are achieved are the

⁴ Ibid., 90.

⁵ Ibid., 90.

⁶ Ibid., 93.

result of human impetus and creativity directed toward a very specific, and wholly humanistic, end.

While Wright's attitude seems sensible, indeed, almost mundane, it has not been the dominant position. According to Michael L. Smith, subsequent to the 1890 census declaration that the American frontier was gone, "in the absence of a geographical frontier, mainstream American culture placed new emphasis on an alternative iconographic terrain: the technological frontier, where the speeding train would appear, not as the new conveyor of progress, but as progress itself."⁷ In fact, the modern phenomenon of ever increasing technical advancement and its seeming inevitability is fundamental to the modern concept of progress. As Smith further notes, this process has, in fact, come to be seen as identical to progress – progress being nothing other or more than the ever-increasing technical advancement of human civilization.⁸ This identification of technical change with the concept of progress imparts a teleological aspect to technology, notwithstanding Smith's observation, that as the idea of progress became increasingly linked with technical advancement it imparted a high level of uncertainty as to exactly where this progress was leading.⁹ In this scenario, along with the unknowable character of the technological future we get, as well, an uncertainty as to what our goals are. Our destination becomes wherever technology takes us.

⁷ M.L. Smith, 43.

⁸ Ibid.

In this view, technology ceases to be a collection of tools and techniques and becomes an active force with its own destiny independent of, and in some ways more relevant than, that of its creators. This condition was diagnosed by Thomas Carlyle who wrote in *Sign of the Times*, "[t]he creed of the Age of Machinery is Fatalism: by insisting upon the force of circumstances, men argue away all force from themselves until they 'stand lashed together, uniform in dress and movement, like the rowers of some boundless galley."¹⁰ In the thrall of breathtaking technological advancement, humankind surrenders its own will and resigns itself to following the seemingly ineluctable dictates of technology. It is precisely this attitude against which Wright passionately argues. In linking technology to the emancipation of human expression, Wright seeks, as it were, to take the tiller and place it in the hands of humankind. Rather than being at the mercy of the teleology of progress as represented by technology, the world for Wright is to be what it is made to be, and it will be made, one way or another, by the machine.

The romantic counter-model is expressed in a verse by Johann Wolfgang von Goethe.

There is no past we should long to resurrect, There is eternal newness only, reconstituting itself Out of the extended elements of the past and true yearning should always be toward productive ends Making some new, some better thing.

In Wright's earliest pronouncements on technology we see the very echo of the Goethe's sentiment. The idea that the machine ought to be abandoned for the sake of art Wright rejected out of hand. There was no arresting the flow of history. It must, instead, be

¹⁰ Quoted in Marx, Machine in the Garden, 286.

directed. Rather than attempt to resurrect a past – in this case the past of the ancient crafts – Wright is interested in the eternal newness and the machine as a tool by which it is achieved, but in no sense its embodiment. Wright's idea that the ideals of art would rise "phoenixlike" from their own ashes is akin to Goethe's reconstitution of the present "out of the extended elements of the past." It expresses the very essence of the idea of an emergent world, based on transcendent truth. In this view, the machine is not a force to be turned back or overcome, it is, instead, part and parcel of the emergent world – it must be engaged. In this view, technology is a tool of human creativity which, properly employed, is instrumental in the creation of the emergent world.

We have here the elaboration, by Wright, of the primary romantic attitude toward technology. As summarized by Mitcham, the romantic relationship to technology is characterized by particular attitudes and convictions: "Technology is an aspect of creativity;" "Technology engenders freedom but alienates from affective strength to realize it," "while also "weaken[ing] social bonds of affection;" "Imagination and vision are more important than technical knowledge;" "Artifacts expand the processes of life."¹¹ While the previous paragraphs illustrate Wright's understanding of technology as central, yet subservient, to human creativity and the emergence of new culture and ways of life, Wright's writings, likewise, illustrate the instrumental nature of technology and its ability to both engender and threaten freedom. Rather than, itself, embodying the idea of progress and technical mastery of nature, the machine is a tool and the meaning thereof

¹¹ Mitcham, "Three Ways of Being," 54, Table 1.

lies in its use. While placing great power in the hands of humankind, technology threatens the society by fostering the confusion between means and ends. Assessing this ambivalent nature of the machine, Wright asserts:

There is no initiative will in machinery... The Machine is an engine of emancipation or enslavement, according to the human direction and control given it, for it is unable to control itself...The monster is helpless but for him – I have said monster – why not savior? Because the Machine is no better than the mind that drives it or puts it to work and stops it.¹²

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Whatever danger the machine poses is rooted in the failings of human character or vision. Crucial to proper control of the machine is the proper character of its user.

The question Wright's position suggests is two-fold: by what set of principles shall technology be directed, and, given human nature, can adherence to these principles be ensured? In the previous chapter I described the romantic relationship with technology as representing a forward that mediates between the ancient distrust of technology and the modern adulation of it. The key element of this project was, I maintain, the attempt to interpose some realm of control – moral, aesthetic or epistemological – over the scientific rationalism that had broken technology free from these traditional constraints. For Wright, this realm of control is provided by his understanding of nature and its symbolic position within the structure of the American fable.

From Wright's perspective, one of the particular failings behind the threat posed by the machine is the greed that has "now come close to enslaving humanity by means of the Machine."¹³ In order for technology to act as an agent of emancipation it is necessary

¹² Wright, "The Architect and the Machine," 131.

¹³ Ibid.

to correct human nature, to cleanse it of its deficiencies, or to entrust it to those with the proper vision. It is in this context that Wright's thinking bears close parallels to his great influence, Emerson. As Leo Marx notes, Emerson, in typical romantic fashion, is an enthusiastic advocate of technology and the promise it holds. And like Wright, Emerson too is aware of the inherent dangers. For behind Emerson's enthusiasm for technology is his faith in the purifying capacity of nature. Attesting to this faith, he proclaims: "there are to be no satanic mill in America, no dark, begrimed cities."¹⁴ Under the influence of nature in the form of the American landscape, the people

will be saved from the satanic mechanism by an influx of grace...a total political, economic and religious conversion. The young American, like the noble husbandman, will renounce the values of a commercial society. No longer driven by lust for wealth and power, he will adopt material sufficiency as his economic aim."¹⁵

This faith in the purifying force of nature and the moral superiority of the farmer is, of course, deeply rooted in the American psyche, and firmly ensconced in the American self-image going back at least to Jefferson.¹⁶

Wright's adherence to this conceptual scheme is apparent when, in the first sentence of *When Democracy Builds*, he writes: "[t]he value of earth as man's heritage is gone far from him in cities centralization has built." Elaborating he notes that "[p]erpetual to-and-fro excites this citified citizen, robs him of the deeper meditation and reflection once his as he lived and walked under clean sky among the greenery to which

¹⁴ Marx, Machine in the Garden, 234-5.

¹⁵ Ibid., 238.

¹⁶ See Morton and Lucia White for a study of this attitude within American intellectual history.

he was born companion. He has traded the Book of Creation for emasculation by way of the Substitute.¹⁷ That human beings are predisposed to live lives of "material sufficiency" in a state of harmony with nature is a fundamental assumption underlying Broadacre City. This is that lesson of Taliesin: under the auspices of nature and organic architecture the need for the "cities centralization has built" melts away. Elaborating on that, it is also plain that it is what Marx calls the moral geography of America which will compel these latent proclivities to come to the fore, displacing the distorted existence that was the result of millennia of false culture.

As described by Norris Kelly Smith, the impetus for Broadacre City is not, per se, Wright's anti-urbanism, but rather "what seemed to him the false sense of values that lay behind the unnatural ways in which people lived and worked and found entertainment there."¹⁸ Speaking at Princeton, Wright made explicit the results of the power of the machine at the disposal of a corrupted culture: "See the magnificent prowess of this unqualified power – strewing our surroundings with the mangled corpses of a happier time. We live amid ghostly relics whose pattern once stood for cultivated luxury and now stands for an ignorant matter of taste."¹⁹ Thus had the culture of cities degenerated.

Taste represents, to Wright, the bastardization of true aesthetic judgment in favor of what he derisively calls the styles. When, in 1939, he announces that "America begins

¹⁷ Wright, When Democracy Builds, 1.

¹⁸ N. K. Smith, Frank Lloyd Wright, 115-6.

¹⁹ Wright, Modern Architecture, 15.

west of Buffalo,"²⁰ it is apparent that Wright has given up on the East Coast, and in his mind it is "the great Middle West"²¹ where Usonia would take root and thrive. Wright's attitude is not driven by the fact that the east had been overbuilt and overpopulated, which it had, but, rather, that it had been corrupted. Through its long, close association with Europe, the eastern portion of the United States had forfeited its ability to nurture the true Usonian. This is in keeping with the symbolic import of westward migration within the framework of the American fable. As Marx notes: "Moving west means casting off European attitudes and rigid social forms and urban ways. (The city is an obsolete, quasi-feudal institution.)."²²

Wright envisions, as Emerson had before him, "a pastoral retreat on a monumental scale," resulting in "a distinctive national culture."²³ Where, for Emerson, the result would be what he called "an American genius," Wright's version is the true Usonian: an indigenous culture springing from the same ground dedicated to freedom as had Taliesin. In locating Broadacre City in the real America west of Buffalo, Wright is not so much seeking a geography that is mostly uninhabited as he is one that is uncorrupted. Broadacre City, in Wright's mind is to occupy the moral geography of the middle landscape between wilderness and civilization. The inhabitants of this landscape

²⁰ Wright, Organic Architecture, 27. Italics in original.

²¹ Ibid.

²² Marx, Machine in the Garden, 238. Parentheses in original.

are, almost by definition, intelligent and refined, having reaped all the benefits of culture, yet retaining the innocence, integrity and guilelessness of the primitive.

In a series of lectures delivered in London in May of 1939, where he delivers what he calls "an informal Declaration of Independence,"²⁴ Wright draws repeatedly on this conception of the individual. Opening the first lecture, Wright makes the distinction between the talk he is about to give and a formal lecture, going so far as to disavow any knowledge of formal lectures, never, himself, having been to one.²⁵ Quoting Sullivan, Wright gives the definition of highbrow as "a man educated far beyond his capacity," and asserts that "Usonia *is* educated far beyond capacity;"²⁶ this education corrupting the character and acting as an impediment to the realization of a true culture. Establishing his own credentials as a representative of the ideal state Wright reiterates this theme at the start of the second lecture, declaring "you have no lecturer before you tonight. A worker is in from the field."²⁷ Should the audience be misled by the urbane, world-famous, international architect before them, Wright assures them that he is, instead, the genuine product of the pure ground of Usonia.

While the purified society ensconced in the moral geography of Usonia would surely strive to apply technology towards the correct ends, by what principle, we may ask, might those ends be determined? As is often the case with Wright, the seeds, and

²⁴ Wright, Organic Architecture, 1.

²⁵ Ibid., 1.

²⁶ Ibid., 5-6. In this context Wright uses Usonia to refer to the actual United States, and not his idealized vision of it.

perhaps the fruit, of his ideas can be found in the work of those whom he continually refers to as his influences. In this regard it is instructive to turn to the message of Wright's old teacher, Thoreau. The final chapter of Walden, entitled "Spring," recounts the coming of spring to Walden Pond after Thoreau's second winter there and just prior to his departure. As such, it is rife with the symbolism of culmination and rebirth. A pivotal scene in this chapter is a reverie that occurs while Thoreau watches the thawing of the embankment that supports the bed of the railroad track.

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As Marx points out, there is hardly a chapter of *Walden* in which the engine is not mentioned, whether seen of heard.²⁸ In many of these instances, the railroad and locomotive represent a dangerous or hostile presence; "that devilish Iron Horse whose ear-rending neigh is heard throughout the town" is a "Trojan horse" "that has browsed off all the woods on Walden shore."²⁹ There are also several references to the embankment itself, beginning in the first chapter. In the chapter titled "The Ponds," emphasizing "the 'cut' in the landscape made by the embankment,"³⁰ Thoreau, wishes for a champion to meet the locomotive "at the Deep Cut and thrust an avenging lance between the ribs of the bloated pest."³¹ Despite the negative imagery Thoreau uses to describe the railroad, *Walden* exudes an ambivalence throughout and, as such, represents Thoreau's meditation on the subject. It is a meditation that is not resolved until the final chapter.

³⁰ Ibid.

²⁸ Marx, Machine in the Garden, 260.

²⁹ Quoted in Ibid.

³¹ Quoted in Ibid.

It is in "Spring" that the Deep Cut – "a wound inflicted upon the land"³² – is healed. This healing is due to the capacity of nature to naturalize: that is, to subsume and reclaim all that has come out of it. It is, as Marx notes, the movement away from Concord and towards nature that allows for the redemption of machine power.³³ The redemption of the machine is its merging or immersion in nature and in Thoreau's realization that the Machine is not alien to nature, but an outgrowth of it that may be re-integrated. "There is nothing inorganic" Thoreau muses and further: "The very globe continually transcends and translates itself... The institutions upon it are plastic like clay in the hands of the potter."³⁴ In Marx's words, "Thoreau's study of the melting bank is a figurative restoration of the form and unity severed by the mechanized forces of history. Out of the ugly 'cut' in the landscape he fashions an image of a new beginning."³⁵

Recalling Wright's remarks on the machine, we recall, also, his assertion of its fundamental neutrality. What matters is the intent of the user. Following on that, we might reasonably infer that the way to ensure proper intent is through a process of purification in nature similar to that found in Marx's analysis. Anything can be 'naturalized' provided it be given over to nature. And it is in this context that we should return to what Norris Kelly Smith has termed "Wright's chief value-word," organic. As Smith notes, Wright uses the word as a positive description of all manner of things, from

³³ Ibid., 261.

³² Ibid.

³⁴ Ibid., 261-2.

³⁵ Ibid., 262.

"details of construction, to single buildings, to kinds of architecture, to ways of living, and to conceptions of society as a whole."³⁶ Elaborating, Smith writes: "It had for him the kind of meaning we customarily designate by the word 'religious': in general, it pertained to his emotional commitment to certain convictions about man and the world; more specifically it expressed his fundamental belief or intuition about *religio* – about that which makes possible a 'binding up,' the many into one – in short, 'universe."³⁷ Thus, rather than deriving from biology or biological activity, the word organic, for Wright, represents the principle that underlies biology, and everything else.

Describing his relationship to religion, Wright notes that he capitalizes Nature and worships that. This particular idea is almost certainly attributable to Emerson. Lecturing at Princeton Wright offers perhaps his most concise and illuminating description of his understanding of nature: "the word NATURE means the principle at work in everything that lives and gives to Life its form and character... The word has nothing to do with realistic of realism, but refers to the essential *Reality* of all things – so far as we may perceive Reality."³⁸ Thus the three central yet nebulous terms in Wright's vocabulary – nature, organic and life – are different faces of this essential, universal principle. Smith is quite correct in his religious and cosmological interpretation of Wright's concept of organic. It refers to a system that is, at once, aesthetic, moral and metaphysical. It is an all-encompassing, transcendent principle.

³⁶ N. K. Smith, Frank Lloyd Wright, 127.

³⁷ Ibid.

³⁸ Wright, Modern Architecture, 27.

For an object, person, or society to function and endure it must subject itself to this order. In describing this controlling principle Wright often used the term "life." While savaged by Meyer Schapiro for what he considered the impossible romanticism of this term in Wright's writing, ³⁹ I believe that Wright's usage of the word is key to our understanding of him. As Smith points out, Wright used the word organic to describe all manner of objects, systems and entities. What allowed them to be characterized as such was the presence or absence of this quality of life. And while living things, in their natural state, had the quality as a matter of course (this is especially true of the indigenous, unadulterated products of nature, such as weeds), human creations were not necessarily so endowed. Expressing this sentiment Wright states: "All man-made things are worthy of life. They may live to the degree that they not only served utilitarian ends, in the life they served but expressed the nature of that service in the form they took as things."⁴⁰ Being imbued with life, artifacts achieve a quality of authenticity similar to that possessed by living things, wherein form and function are one.

In this capability of artifacts to achieve the authenticity that Wright called life we witness the essence of the romantic view of technology as differentiated from both the ancient and modern views. Recalling Mitcham's description, one of the primary objections to technology within the ancient attitude was Aristotle's contention that "reality... is dependent on an intimate union of form and matter, and the *telos* or end

³⁹ See Schapiro.

⁴⁰ Wright, "The Architect and the Machine," 132.

determined thereby. The problem with artifacts is that they fail to achieve this kind of unity at a very deep level.⁴¹ While natural objects are the result of a fundamental merging of matter, form and purpose, artifacts are the products of an arbitrary imprinting of form on matter for the purpose of achieving a given end. The latent danger of technology here implied is the systemization of the production of artifacts. In its most developed incarnation, as one of the primary fruits of modern life, systemized production treats matter as a homogenous substrate, with no essential character that may be manipulated at will. This is opposed to art which, "insofar as it truly imitates nature…engenders an inimitable individuality in its products, precisely because its attempts to effect as close a union of form and matter as possible requires a respect for or deference to the materials with which it works."⁴² Contrasting the modern means of production with that of the ancient artist, Wright asks: "What do we do with this sacred inheritance? We feed it remorselessly into the maw of the Machine to get a hundred or thousand for one…and call it progress."⁴³

It is in this context that Wright's commitment to the "meaning of materials," discussed in Chapter IV, reaches its full significance. Wright's central assertion in this regard is that any successful use of materials must stem from a deep understanding of the character or essence of that material. Stone and wood, for example are utterly different and any application of one or the other must arise of out of an understanding of this

⁴¹ Mitcham, "Three Ways of Being," 37.

⁴² Ibid.

⁴³ Wright, "The Architect and the Machine," 132.

difference. While this is certainly true for architecture – Wright asserts, for example, that the post and lintel construction of the Greek temple in stone was a bastardization of a form conceived in wood⁴⁴- it is equally true of the objects mass-production. It is thus that Wright's approach to architecture and production is dependent upon a merging not only of form and function, but of matter as well.

In claiming that "all man made things are worthy of life," Wright is rejecting the system of modern production and its suggestion that there is some realm of utilitarian, mass-produced objects that are outside of this realm of control. He, likewise, rejects the attitude that human artifacts are, necessarily, less real than the products of nature. This principle of life serves, then, for Wright, a two-fold purpose that distinguishes Wright's understanding of technology from both ancient distrust and modern embrace. On the one hand, life is the controlling principle that technology need be made to serve. Rather than being left to fulfill its own ends – namely efficiency – technology must, according to Wright, serve the principle of life. In so doing this controlling principle also ensures that the results will be organic – that is, they will be present no conflict with the natural world. In this way, the distinction between the creations of nature and those of humankind is transcended.

Wright elaborates this idea of control and compatibility in a June 1927 essay subtitled "Standardization, Soul of the Machine." He writes:

Standardization apprehended as a principle of order has the danger of monotony in application. Standardization can be murderer or beneficent factor as the life in the thing standardized is kept by imagination or destroyed by lack of it... The

⁴⁴ It was Laugier, of course, who suggested the relationship between the primitive hut in timber and the temple in stone.

'life' in the thing is that quality of it or in it which makes it perfectly *natural* – of course that means organic.⁴⁵

What is crucial to note in Wright's formulation is the position of the faculty of imagination. Interpreting Wright's comments further, what he is implying is that when in the control of reason, standardization is reduced to "a principle of order" – i.e. efficiency – it's least common denominator. It is the imagination, on the other hand, that is able to impart life into the process of standardization and its products. It is here that we should recall the romantic understanding of the imaginative, or intuitive, faculty as the source of true knowledge and apprehension of the world. In his address to the Arts and Crafts Society of Chicago, Wright is explicit in citing the nature of the artist as crucial for the control and redirection of the machine.⁴⁶ It is the artist's access to imagination that is an artist and artists in general – that they were the culture creators and bearers of truth.

Wright expresses his understanding of the connection between art, nature and the quality he calls life, in his writing on the Japanese print – an art form of which he became enamored during his time in Tokyo working on the Imperial Hotel. In the early pages of *The Japanese Print: An Interpretation*, Wright suggests his reader "[g]o deep enough into your experience to find that beauty is in itself the finest kind of morality – ethical, purely – the essential fact I mean, of all morals and manners."⁴⁷ In this one, somewhat convoluted, sentence Wright ties together the threads of his ethical and aesthetic ideas.

⁴⁵ Wright, "Standardization, the Soul of the Machine," 136.

⁴⁶ Wright, "Art and Craft of the Machine."

⁴⁷ Wright, *The Japanese Print*, 14.

The essence of this idea is the unity of aesthetics and morality – truth and beauty.

Elaborating this connection, Wright continues:

A flower is beautiful, we say – but why? Because in its geometry and in its sensuous qualities it is an embodiment and significant expression of that precious something in ourselves which we instinctively know to be Life, 'an eye looking out upon us from the great inner sea of beauty,' a proof of the eternal harmony in the nature of a universe too vast and real and intimate for mere intellect to seize.⁴⁸

The flower, for Wright, is beautiful because it is a manifestation of the profound truth that lies at the heart of the universe: a truth that can be perceived and understood only through the mythopoetic capacity of imagination. This quality of life, then, is derived from the one true source. As such, beyond being a merely aesthetic principle, it is an ethical one as well.

Regarding this connection between ethics and aesthetics, Wright, elsewhere, remarks that all nations need an aesthetic to keep themselves properly focussed. It is this aesthetic, based on the apprehension of nature provided by the imagination which is to be the basis of an American architecture – replacing the "styles" which Wright disparaged. This principle is to be at the heart of architecture, but also of the entire culture, not least part of which is industry. Viewed in this light, it is apparent that when Wright refers to "the principle of standardization and its tool – the machine,"⁴⁹ he is referring to something radically different from the values of efficiency and progress. As it had been for Emerson, for Wright it is up to the artist to assimilate the machine and its products

⁴⁸ Ibid.

⁴⁹ Wright, "Standardization, the Soul of the Machine," 135.

under the control of nature. "He knows by feeling – say instinct – right or living from wrong or dead."⁵⁰ Wright offers one of the most illuminating summations of this conceptual nexus in arguing for his Broadacre City proposal. In the forward to *When Democracy Builds* he writes:

True human culture has a healthy idea of the beautiful as its life-of-the-soul: an Aesthetic-Organic as *of* Life, not *on* it. One that nobly relates man to his environment. This normal esthetic sense would make of a man a gracious, potent, integral part of the whole of Life. Ethics, Art, and Religion survive only as they are actual departments of the aesthetic sense; survive only to the extent that they embody human sentiment for the beautiful. To ignore this truth is to misunderstand the soul of man, turn him over to science ignorant of significance and blind to his destiny.⁵¹

Returning to our American Fable we see that, like Thoreau, Wright, too, conceives of transcending the conceptual chasm separating nature and the machine and imagines a future based on this potential integration. Where Wright diverges form Thoreau is in the locating of meaning and value of the pastoral visions they project. As Marx points out, "the melting bank and the coming of spring is only 'like' a realization of the golden age. It is a poetic figure." As such, rather than residing "in natural facts or in social institutions or in anything 'out there" the meaning lies in "consciousness. It is a product of imaginative, of the analogy-perceiving, metaphor making, mythopoeic power of the human mind."⁵² While "for Thoreau the realization of the golden age is, finally, a matter of private and, in fact, literary experience," Wright's is a very real and universal experience. While the "writer's physical location…has nothing to do with the

⁵⁰ Ibid., 137.

⁵¹ Wright, When Democracy Builds, v. Italics in original.

⁵² Marx, Machine in the Garden, 264.

environment, with social institutions or material reality" and therefore "is of no great moment," for the architect location and environment are everything, or nearly so. And while Marx asserts that "Thoreau restores the pastoral hope to its traditional location"⁵³ in the world of literature, Wright can be satisfied with no such resolution. Inspired by Emerson's rhetoric, Thoreau, in his uncompromising fashion, is intent on realizing and living the pastoral myth for himself. Ultimately, of course, Thoreau returns to Concord. After two years on Walden Pond he pronounces his experiment a success, yet not such a success, apparently, that it should become a permanent way of life. Though useful as experience it can be no more than that. Wright's own experience, on the contrary, convinced him of precisely the opposite. His childhood in the Valley became a model of what was possible for all, and Broadacre City is intended as the realization of that vision.

In summing up Wright's understanding of technology and its relationship to society and nature, and his vision for the remaking of society based on that understanding, I would return to one of his most evocative explications found in his early lecture at Hull House. Attempting to demonstrate "how interwoven it is, this thing we call the Machine, with the warp and woof of civilization, if indeed it is not the very basis of civilization itself," Wright advises:

Be gently lifted at nightfall to the top of a great downtown office building and you may see how in the image of material man, at once his glory and his menace, is this thing we call a city. There, beneath, grown up in a night, is the monster leviathan, stretching acre upon acre into the far distance. High overhead hangs the stagnant pall of his fetid breath, reddened from the light of its myriad eyes, endlessly everywhere blinking. Ten thousand acres of cellular tissue, layer upon layer, the city's flesh, outspreads enmeshed by intricate network of veins and arteries, radiating into the gloom, and there with muffled, persistent roar pulses

⁵³ Ibid., 265.

and circulates as the blood in your veins, the ceaseless beat of the activity to whose necessities it all conforms.⁵⁴

At once, Wright invokes the sense of power and dread associated with the machine and the industrial city, while simultaneously hinting at its fundamental humanity, and hence potential redemption. As once Emerson had argued that there need be no distinction between humankind and technology, Wright offers a vision, in concrete, of this resolution. After several more paragraphs wherein Wright bears witness to the terrible and wondrous machinations of "this monstrous thing, this greatest of machines," he closes thus:

If the pulse of activity in this great city, to which the tremor of the mammoth skeleton beneath our feet is but awe-inspiring response, is thrilling, what of this prolific, silent obedience? And the texture of the tissue of this great thing, this Forerunner of Democracy, the Machine, has been deposited particle by particle, in blind obedience to organic law, the law to which the great solar universe is but an obedient machine. Thus is the thing into which the forces of Art are to breathe the thrill of ideality! A SOUL!⁵⁵

In this flight into the technological sublime we see the machine in all its threat and promise. Technology is both the forerunner of democracy, and a belching, clanking monstrosity. We also see the city through Wright's eyes as reality and hope. The city of Chicago, as he depicts it, is a vast, tremendous pulsating entity – part organism part machine but with no distinction between the parts. It is, however, an insensate brute, a Frankenstein's monster, alive and human in form but without a soul. The challenge of Art, and the role of the artist, is to bring this automaton truly to life, to imbue it with that

⁵⁴ Wright, "Art and Craft of the Machine," 106.

⁵⁵ Ibid., 107.

which would make it worthy of life for its own sake and for the sake of its inhabitants: to make it a truly living city.

CHAPTER VII CONCLUSION

With his country in the grip of the Great Depression, Frank Lloyd Wright envisioned the dawning of a new, Usonian society, the fruit of modern technology, especially the automobile, that would allow the vast expanse of the United States to be transformed into a decentralized, agrarian nation dedicated to the cause of individual freedom. A utopian vision short on specifics and any viable path to its realization, Wright's expectation seems to have been that this living city, given the proper conditions, would sprout spontaneously from the ground. To this improbable vision Wright devoted a considerable portion of the last thirty years of his career and of his life. Indeed, it is not unreasonable to consider it his final work: The Living City having been published just months before his death. Given its central position in his late career, and the doggedness with which he argued for it, the significance of Broadacre City would seem to extent beyond the formal planning ideas and social theories it embodies. While Wright offered various social and economic theories in support of his plan, it was not the implementation of these programs or the realization of their implied social order that fueled Wright's determination. These were mere rationalizations for a more deeply rooted vision. Nor did that vision spring solely from Wright's own personal experience with the issues of family

and domesticity. In taking up, again, the topic, I have asserted that the fundamental character of Broadacre City is as an expression of Wright's romantic worldview and a product of his immersion the symbolic framework of the American fable.

The central fact of Broadacre City, I maintain, is Wright's attempt to adapt a technologically advanced society to an agrarian culture, where the inhabitants are intimately connected to the land from which their sustenance is drawn. In establishing this framework, Wright takes up one of the seminal dichotomies of Western philosophy; the schism between nature and culture. It is a dichotomy that is especially relevant to America, which, since the time of first European contact, has been held up as a virginal land in which humankind might begin anew, away from the corrupting influence of the old world. It is a problematic conception that was brought into sharp focus by the rapid industrialization of the nineteenth century. Leo Marx has shown that many of the masterpieces of American literature are, in fact, efforts to deal with the challenge to the pastoral image of America that nineteenth century industrialization presented. Marx characterizes such works, among them *Moby Dick*, *Huckleberry Finn* and *Walden*, as pastorals, in the tradition of Virgil's *Eclogues*, and considers them variants of what he calls the American fable.

I have suggested that Wright created his own variant on this American fable in the building, and his recounting of the building, of Taliesin. As told in his autobiography, Wright's depiction of his departure from Oak Park, exile into the figurative wilderness and redemptive founding of Taliesin closely mirrors the form of the fable as described by Marx. In Wright's telling, the valley in Spring Green, Wisconsin, originally settled by his maternal family the Lloyd-Joneses, is sanctified as a middle landscape: in Marx's wonderful phrase "a real place which he transforms into an unbounded, timeless landscape of the mind," between the city of Chicago on one side and unmodified nature on the other. However, while the fables Marx examines suggest the possibility of a middle landscape somewhere between corrupt civilization and primitive nature, they ultimately undermine our faith in such a possibility. The power of the machine, in these versions, is ineluctable, especially in the face of human frailty. Wright, of course, draws a different moral from his fable. In Wright's view, the machine in the proper hands it may be tamed, and the pastoral vision made reality.

Wright's belief in this possibility, I have argued, is rooted in the particular metaphysical and epistemological positions that underpin romanticism and Wright's romantic worldview. These positions foster a relationship with technology that mediates between the mistrust and skepticism engendered by ancient Greek philosophy and the uncritical optimism of the Enlightenment and the scientific worldview. Key to this middle way is the intuitive, imaginative faculty of mind posited by the romantics, that privileges human creativity and its role in the creation of an emergent world as opposed to the ancient emphasis on gaining understanding of a pre-existing, static reality. At the same time, this imaginative faculty supercedes the merely rational scientific knowledge, which came to be seen as the highest understanding of what is "real." It is from this perspective that technology comes to be seen as a mirror of reality and constraints upon it tend to fall away. The romantic view, thus, actively engages with technology, while denying that it embodies inherent truth or represents transcended knowledge of reality. It is a way forward that, while embracing technological development, subjects that development to human direction.

For Wright, the romantic position manifests in his all-encompassing concept of the organic and the underlying principle of life, of which it is an expression. In this view it is the imagination that is able to access and interpret the principle of life and apply it to the human-built world. It is through this mechanism that all things, including architecture and the machine, may come to be organic an in harmony with the nature. What Wright argues for, then, is the control of technology and the society employing that technology through adherence to the dictates of the organic. Rather than a machine in the garden, Wright posits a living city. David Channell has alluded to this notion with the phrase "vital machine:" that is, a conception of the physical world in which the philosophical distinction between the natural and the mechanical has been overcome. Thus, by subjecting technology to the control of a transcendent moral and aesthetic principle, Wright envisions the reintegration of art, life, nature and technology. In doing so, he offers a vision that is part American fable and part technological society.

In choosing the title of this work, I have attempted to suggest the tension between these concepts as a framework for considering Broadacre City. I have implied a location for Broadacre City somewhere between the poles of Utopia, implied by the American fable, and dystopia, implied by the technological society. And, while I have explored its relationship to the former, its connection to the latter remains, for now, unexplored. What I have hinted at, at various points in this work, however, is the possibility of an analysis of Broadacre City from the perspective of the philosophy of technology. The phrase technological society originates, of course, with Jacques Ellul's 1954 work of that same name,¹ in which he presents his pessimistic analysis of the functioning of technology in society. Rather than being merely the set of means to be directed towards a society's ends, Ellul argues that technology may be characterized, instead, as a "technological milieu" to which the members of a society adapt and which, quite apart from being consciously selected and organized by the society, is, to a certain degree, self-directing in that the technological milieu creates the conditions out of which further decisions about technology are made, thus determining the parameters.

It is this sort of deterministic view on which Marx's charge of sentimental pastoralism seems to rely: in accepting technology we must accept a certain form of society. Wright, for his part, seems unaware, at least consciously, of the possibility of this characteristic of technology. While technology might be a means to ends both good and bad, there is no force within it to determine these ends. This instrumentalist position is undermined, however, in significant ways. The most glaring example of this is Wright's attitude toward the automobile. Rather than being merely a means of transportation, the automobile, within Broadacre City, shapes the experience of the user. It is thoroughly embedded in daily life to the extent that it can no longer be considered merely a tool. The corollary of this situation, of course, can be seen in the thoroughgoing effect the automobile has had on life in the United States. While Wright predicted the decentralization and suburbanization that were to come, he failed to see the way that the automobile would shape attitudes and ideas and establish parameters for further

¹ Ellul.

transportation decisions: imagining, instead, that freedom-loving individuals, ensconced in the moral geography of America, would naturally according to the principle of life.

The question remains, however, whether Wright's view of technology is, in fact, hopelessly naïve and therefore irrelevant, or if, instead, there is some value and possibility in it. Unfortunately for Wright, the deck seems to be stacked against him. While the hopefulness of Wright's vision is roundly contradicted by his literary contemporaries, it is also contradicted by our own experience. For we have become, some might say, the tools of our tools. A more neutral phrasing of this idea would note that nearly every aspect of daily life in the industrialized world is structured by technology. And while this entanglement with technology, which drives it, and us, ever onward, creates for each generation marvels undreamed of by the one previous, it also presents each generation with new, seemingly unavoidable, catastrophes. From mechanized warfare to nuclear annihilation to global warming, the landscape of each generation rests upon a topography of technology. For better or worse, the wonders and perils of each era spring, increasingly, from a common source.

Despite this pessimistic perspective, there are others that suggest the possibility of hope. Drawing from critical theory, Andrew Feenberg has proposed a critical theory of technology² as an alternate platform from which to re-approach technology. Central to his argument is a concept he calls "subversive rationalization." Feenberg argues against Weber's concept of rationalization that assumes a necessary connection between modern technology and authoritarian control. The impact of this assumption can be seen, for

² Feenberg.

example, in the urban planning of Le Corbusier: within the rigorously zoned and structured life of his ideal cities, the only zone of experience excluded from this totalizing system is the individual alone in his room.³ Feenberg, instead, suggests the possibility of the decoupling of technology from authoritarian hierarchy. While technology may, indeed, lend itself to such control, Feenberg suggests that in a different social context it might just as well be operated democratically. It is this possibility that Wright suggests in his Broadacres program. In suggesting the elimination of the form of rent for technology, Wright attempts to instantiate the democratic control of technology, which would fall to the local design centers that are an important feature of his plan.

This call for democratically controlled technology is reminiscent of the thinking of others in this arena, such as Lewis Mumford's call for a human-centered technology.⁴ Within the realm of architecture, Kenneth Frampton's conception of critical regionalism seems particularly relevant.⁵ Frampton, like Feenberg, approaches the topic from the perspective of critical theory, and argues for the resisting of global civilization through the expression of local culture. Just as Wright sought the creation of a true, indigenous culture, Frampton sees the opposition of local cultures as a means redirecting the role of technology and, ultimately, forging an integration of technology with nature. The

³ See Richards for a full discussion of the Le Corbusier's concept of the individual in relationship to his urban planning ideas.

⁴ Mumford.

⁵ Frampton, "Prospects for a Critical Regionalism." In an unpublished paper I have argued that Frampton's approach to critical regionalism differs from that of its originators Alexander Tzonis and Liane Lefaivre in his approach to technology. While Frampton suggests the local and communal control of technology, Tzonis and Lefaivre propose an ironic treatment of it that leads to questioning and awareness, but necessarily an altered relationship.

exploration of Wright's ideas regarding organic architecture and technology in relationship to Frampton's critical regionalism seems, to me, particularly intriguing.

In approaching Broadacre City more than seventy years after it was first conceived it is difficult to get beyond initial judgments. From our vantage point of hypermodernity, Broadacre City, as with most things merely modern, seems both hopelessly quaint and wildly optimistic: an example of what Hilde Heynen calls "pastoral modernism."⁶ However, while Broadacre City is, undeniably, a product of its time and exists, consequently, as an historical artifact, it is also an expression of a particular set of ideas about the world; both the world as it is in its essence and what humankind might, and ought to, make of that world. And, so, while the world that Wright sought to make was the product of planning and architecture, it was also, and more so, the product of these underlying ideas and values. It is, above all, a suggestion of possibility: possibility for the future of the built world, yes, but also, and more importantly, possibility for the inhabitants of that world. While it has been suggested that Wright opened the door for the potentially ruinous trend of suburban sprawl, to stop there is to see only a fraction of the truth. Wright's efforts, in fact, consisted of the attempt to direct a future that seemed inevitable towards a more human and humane result. This, then, is the ultimate question with which my exploration has been concerned: while I have endeavored to illuminate Wright's understanding with regard to technology and its role, on a deeper level, I have been concerned with how that understanding can illuminate our own.

⁶ Heynen.

REFERENCES

- Adams, Richard. "Architecture and the Romantic Tradition: Coleridge to Wright," *American Quarterly* 9, no. 1 (Spring 1957): 46-62.
- Alofsin, Anthony. "Broadacre City: The Reception of a Modernist Vision, 1932-1988," *Center* 5 (1989): 5-43.
- Brooks, H. Allen, ed. Writings on Wright: Selected Comment on Frank Lloyd Wright. Cambridge, MA: MIT Press, 1981.

Campbell, Joseph. The Hero With a Thousand Faces. New York: Pantheon Books, 1949.

- Channell, David F. *The Vital Machine: A Study of Technology and Organic Life*. New York: Oxford University Press, 1991.
- Ciucci, Giorgio. *The American City: From the Civil War to the New Deal*. Translated by Barbara Luigia La Penta. Cambridge, MA: MIT Press, 1979.
- Creese, Walter L. The Crowning of the American Landscape: Eight Great Spaces and their Buildings. Princeton: Princeton University Press, 1985.
- Cronon, William. "Inconstant Unity: The Passion of Frank Lloyd Wright." In Frank Lloyd Wright, Architect. New York: The Museum of Modern Art, 1994.
- De Long, David G. "Frank Lloyd Wright: Designs for an American Landscape, 1922-1932." In Frank Lloyd Wright: Designs for an American Landscape, 1922-1932. New York: Harry N. Abrams, 1996.
- Ellul, Jacques. *The Technological Society*, trans. John Wilkinson. New York: Vintage Books, 1964.
- Etlin, Richard. Frank Lloyd Wright and Le Corbusier: The Romantic Legacy. New York: Manchester University Press, 1994.

- Feenberg, Andrew. Critical Theory of Technology. New York: Oxford University Press, 1991.
- Fishman, Robert. Urban Utopias in the Twentieth Century: Ebeneezer Howard, Frank Lloyd Wright and Le Corbusier. Cambridge, MA: MIT Press, 1982.
- Frampton, Kenneth. "Modernization and Mediation: Frank Lloyd Wright and the Impact of Technology." In *Frank Lloyd Wright, Architect*. New York: The Museum of Modern Art, 1994.

- Giedion, Sigfried. Space, Time and Architecture, 5th ed. Cambridge: Harvard University Press, 1967.
- Griswold, A Whitney. Farming and Democracy. New York: Harcourt, Brace, 1948.
- Gill, Brendan. Many Masks: A Life of Frank Lloyd Wright. New York: Putnam, 1987.
- Heynen, Hilde. Architecture and Modernity: A Critique. Cambridge, MA: MIT Press, 1999.
- Ingraham, Catherine. Architecture and the Burdens of Linearity." New Haven: Yale University Press, 1998.
- Jones, Jenkin Lloyd. The Agricultural Social Gospel in America: The Gospel of the Farm. Lewiston, NY, Edwin Mellen Press, 1986.
- Kaufmann, Edgar, ed. An American Architecture: Frank Lloyd Wright. New York: Bramhall House, 1955.
- Le Corbusier. *The City of To-morrow and its Planning*, trans. Frederick Etchells. Cambridge, MA: MIT Press, 1971.

——. The Marseilles Block, trans. Goeffrey Sainbury. London: The Harvill Press, 1953

------. *Towards a New Architecture*, trans. Frederick Etchells. New York: F.A. Praeger, 1946.

- Madden, Edward H. "Transcendental Influences on Louis H. Sullivan and Frank Lloyd Wright," *Transactions of the Charles S. Peirce Society* 31, no. 2 (Spring, 1995): 286-320.
- March, Lionel. "An Architect in Search of Democracy: Broadacre City." In Writings on Wright: Selected Comment on Frank Lloyd Wright. Cambridge, MA: MIT Press, 1981.
- Marx, Leo. "Henry Thoreau." In *The Pilot and the Passenger: Essays on Literature, Technology and Culture in the United States.* New York: Oxford University Press, 1988.

------. The Machine in the Garden: Technology and the Pastoral Ideal in America. New York: Oxford University Press, 1964.

—. "The Neo-Romantic Critique of Science." In The Pilot and the Passenger: Essays on Literature, Technology and Culture in the United States. New York: Oxford University Press, 1988.

Meehan, Patrick J., ed. *Frank Lloyd Wright Remembered*. Washington DC: The Preservation Press, 1991.

——, ed. Truth Against the World: Frank Lloyd Wright Speaks for an Organic Architecture. New York: John Wiley and Sons, 1987.

- Menocal, Narciso G. "Taliesin, the Gilmore House and the Flower in the Crannied Wall." In Wright Studies, Volume One: Taliesin: 1911-1914. Carbondale, 111.: Southern Illinois University Press, 1992.
- Mitcham, Carl. "Three Ways of Being-With Technology." In From Artifact to Habitat: Studies in the Critical Engagement of Technology. Bethlehem, PA: Lehigh University Press, 1990.

—. "Philosophy and the History of Technology." In *The History and Philosophy of Technology*. Chicago: University of Illinois Press, 1979.

Mumford, Lewis. "Technics and the Nature of Man." In *Philosophy and Technology: Readings in the Philosophical Problems of Technology*. New York: The Free Press, 1972.

- Newsome, David. Two Classes of Men: Platonism and English Romantic Thought. London: J. Murray, 1974.
- Pevsner, Nikolaus. *Pioneers of Modern Design from William Morris to Walter Gropius*. New York: Museum of Modern art, 1949.
- Reinberger, Mark. "The Sugarloaf Mountain Project and Frank Lloyd Wright's Vision of a New World," *Journal of the Society of Art Historians* 43 (March 1984): 38-52.
- Richards, Simon. Le Corbusier and the Concept of Self. New Haven: Yale University Press, 2003.
- Sargeant, John. Frank Lloyd Wright's Usonian Houses: The Case for Organic Architecture. New York: Whitney Library of Design, 1976
- Schapiro, Meyer. "Architect's Utopia," Partisan Review IV, no. 4 (March, 1938): 42-7.
- Smith, Michael L. "Recourse of Empire: Landscapes of Progress in Technological America." In Does Technology Drive History?: The Dilemma of Technological Determinism. Cambridge, MA: MIT Press, 1994.
- Smith, Norris Kelly. "The Domestic Architecture of Frank Lloyd Wright." In Four Great Makers of Modern Architecture: Gropius, Le Corbusier, Mies van der Rohe and Wright. New York: Columbia University, 1963.
 - —. Frank Lloyd Wright: A Study in Architectural Content. Englewood Cliffs, NJ: Prentice-Hall, 1966.
- White, Morton and Lucia. The Intellectual Versus the City, From Thomas Jefferson to Frank Lloyd Wright. Cambridge, MA: Harvard University Press, 1962.
- Whitehead, Alfred North. Science and the Modern World. New York: Macmillan, 1947.
- Wright, Frank Lloyd. "The Art and Craft of the Machine." In *Truth Against the World: Frank Lloyd Wright Speaks for an Organic Architecture*. New York: John Wiley and Sons, 1987.
- ———. An Autobiography. New York: Horizon Press, 1977.
- ------. "Broadacre City: An Architect's Vision: Spread Wide and Integrated, It will Solve the Traffic Problem and Make Life Richer, Says Frank Lloyd Wright," *New York Times Magazine*. March 20, 1932.

The Disappearing City. New York: William Farquhar Payson, 1932.
————. "In the Cause of Architecture: IV. Fabrication and Imagination." In <i>In the Cause of Architecture: Essays by Frank Lloyd Wright for Architectural Record 1908-1952</i> . New York: Architectural Record Books, 1975.
"In the Cause of Architecture: III. The Meaning of Materials – Stone." In In the Cause of Architecture: Essays by Frank Lloyd Wright for Architectural Record 1908-1952. New York: Architectural Record Books, 1975.
"In the Cause of Architecture: IV. The Meaning of Materials – Wood." In In the Cause of Architecture: Essays by Frank Lloyd Wright for Architectural Record 1908-1952. New York: Architectural Record Books, 1975.
"In the Cause of Architecture: VI. The Meaning of Materials – Glass." In In the Cause of Architecture: Essays by Frank Lloyd Wright for Architectural Record 1908-1952. New York: Architectural Record Books, 1975.
———. The Japanese Print: An Interpretation. New York: The Horizon Press, 1967.
———. The Living City. New York: Bramhall House, 1958.

.

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.

Modern Architecture: Being the Kahn Lectures for 1930. Princeton: Princeton University Press, 1931.

------. An Organic Architecture: The Architecture of Democracy. Cambridge, MA: MIT Press, 1939.

———. "To the Young Man in Architecture." In *The Future of Architecture*. New York: Bramhall House, 1953.

------. When Democracy Builds. Chicago: University of Chicago Press, 1945.

Wright, Frank Lloyd and Baker Brownell. Architecture and Modern Life. New York: Harper and Bros., 1938.

Zellner, Peter. "The Big City Is No Longer Modern," Daidalos 69/70 (1998/99): 68-75.