The Machine in the Garden in the 21st Century

Stephen Dougherty

University of Agder

Abstract: In this essay I will suggest Leo Marx's debt to a style of thinking about technology which cuts against the grain of the liberal humanism and liberal progressive ideology that informs his writing. This style of thinking, associated with the word technicity, underscores the intimacy of our relation to technology. The Machine in the Garden insists that technology is a crucial aspect of our human nature—it encourages us to see that nature is inseparable from our technological condition. In this sense, the machine and the garden are confounded in Marx's book. The book's key themes and conflicts short-circuit the mission to promote the liberal individualist illusion of escape from the shaping forces of history. What we can begin to glean in The Machine in the Garden is that there is no place for a transcendence that guarantees the "naturalness" of nature, or the romantic integrity of the self. There is only the world—an increasingly technologically mediated world—which on the one hand creates the very means for our access to nature, and on the other hand, dispels the very 'Nature' it reveals through an inevitable process of contamination across the nature/culture divide.

Keywords: technicity, liberal consensus, posthumanism, ecological thought, Leo Marx

Leo Marx's seminal book *The Machine in the Garden* (1964) is very much a product of its time. It also looks presciently towards great changes in our thinking about ecology and technology. As Marx suggests in his American Studies classic, the effects of industrial transformation on nineteenth-century literature and society were not adequately understood in his own day. The nineteenth century, as Marx saw it, heralded something entirely unique in the history of our relation to technology and nature, and more generally speaking, in our "larger structure of thought" (24). Thus Marx refers to the "new order" of industrial technology, marked off from pre-industrial

tech, as "a centrifugal force that threatens to break down, once and for all, the conventional contrast between ... two styles of life" (32)—the urbantechnological and the rural agrarian.

Marx's well-known narrative is about the encroachment of technology, the agent of historical change, into the realm of what he calls "American pastoralism" (4). This is a complex concept in Marx's book, though what is most important for us to recognize right away is the liberal humanist presuppositions that motivate it. Marx's American pastoralism is inspired by a desire to safeguard principles of free will and self-determination against statist threats feared by both the mainstream and the rising counter-culture of the 1960s. Such safeguarding was an admirable project in the liberal frame of mind, though it was founded upon a number of social exclusions and conceptual blindspots. In his essay "Dis-assembling The Machine in the Garden: Antihumanism and the Critique of American Studies" (1992), Jeffrey Louis Decker insists on the importance of interrogating these exclusions and blindspots in Marx's work, and in the work of canonical American Studies scholars of the 1950s and 1960s more generally. In my essay I want to suggest that, in the notable case of *The Machine in the Garden*, there is a considerable amount of self-dis-assembly, or critical deconstruction of "unmarked" humanism, going on already, via American pastoralism.

In part, American pastoralism refers to the cultural record of fears and anxieties for the future of traditional agrarian existence; in part it refers to the romantic possibility of spiritual transcendence through Nature. In its turn, this notion relies on an old-fashioned Cartesianism of mind and body, or mind and material history. Yet, as I shall argue, what makes Marx's book of enduring interest is the ideological stress he puts on his pastoral idea via a thinking of "originary technicity," such that we find signposts in *The Machine in the Garden* pointing to a post-pastoral, post-Cartesian world scattered through its pages. On Marx's account, the new, nineteenth-century order of industrial technology could not be sufficiently contained. Its viral invasion of self, mind, and "pure consciousness" constituted an assault on the conceptual borders that help to define both liberal humanism, and pastoralism as a kind of prophylactic practice. Its threat was not just virtual, as Marx's own rhetoric might lead us to believe; for what we witness in *The*

¹ See Bruce Kulkick's seminal essay "Myth and Symbol in American Studies" (1972) for an early and influential articulation of this line of criticism. Decker's "Dis-assembling," published twenty years later, owes considerable debt to Kulkick, though it is also critically transformed through its poststructuralist inputs.

Machine in the Garden is a post-pastoral world in the making, where the distinction between techno-culture and nature, mind and machine, starts disappearing.²

The approach to *The Machine in the Garden* I offer here responds to the criticism that the book is wrongly understood as a milestone in technology studies and ecological studies, because it insufficiently treats the material history of nineteenth-century industrial technology. Jeffrey L. Meikle investigates the history of this critique in his "Classics Revisited" review of The Machine in the Garden, following the 35th anniversary edition republication of the book in 1999. "If The Machine in the Garden is indeed distinguished by the near absence of any discussion of actual technologies," Meikle surmises, "then it makes sense to ask why many ... think of the book as a significant event in the formation of the history of technology as an academic discipline" (147). Critics writing well before Meikle have made similar claims. As John L. Bryant notes in his essay "A Usable Pastoralism" (1975), Marx "is often hard pressed to find any machines, much less derive a convincing interpretation of their function" (66). For his part, Meikle locates in Marx's work a typically humanities-inflected resistance to writing about technology, which, as Meikle explains, was shared by "a broad spectrum of scholars and teachers of American studies, especially those of the author's own generation who shared his anxiety about a postnuclear world dominated by the technological systems of what became known as the military-industrial complex" (156-157).

Marx couldn't face history, so this argument goes, because like his fellow cultural critics he was fearful of asking too many questions about the technological-cultural conditions that prevailed in his own day. Certainly those authors to whom Meikle refers, both Marx and other American Studies standard bearers, revealed little sense of political responsibility to confront the military-industrial complex in the years leading up to the Vietnam War; and while I do not dispute that real fears about facing down history,

² This problem of relation is central to Marx's study, both thematically and structurally. The machines of industrial technology are not of the same order as the "garden" of "American pastoralism." Machines index a material history, whereas American pastoralism is an intellectual and philosophical ideal. More specifically, Marx's American pastoralism is a heuristic device through which the significance of nineteenth-century industrial technology is revalued in light of mid-twentieth-century historical realities and literary-critical exigencies.

or owning up to the present, existed amongst these authors, I will claim that they responded to it in different ways, and that Marx attempts to accomplish something quite different from that of his contemporaries, even if there are also crucial similarities connecting his work and theirs.

First to a key similarity: *The Machine in the Garden* is essentially about how early Americans tried but failed to realize the pastoral ideal in collective practices, and then how that ideal was internalized within the consciousness of literary artists. Living "the American experience" is thus taken by Marx—along with other prominent American Studies scholars of the 1950s and 1960s such as R.W.B. Lewis, Charles Feidelson, Richard Chase, and Richard Poirier—as an adventure in imaginative perception. What counted most for these "liberal consensus" literary critics was the piercing life of the mind, shielded from the uncertainties of an increasingly technologically driven history. This was a crucial aspect of their ideological system, what Donald Pease refers to as the "fundamental syntax" of their exceptionalist and essentialist "field-Imaginary" (11); and it broadly draws together the main works of all the mid-century scholars mentioned above.

However, there is an important distinction between The Machine in the Garden and those other field-defining American Studies classics, such as Chase's The American Novel and Its Tradition, Lewis' The American Adam, Feidelson's Symbolism in American Literature, and Poirier's A World Elsewhere. Marx's book confronts the material-historical forces that liberal consensus criticism was mainly designed to deflect, even if, as Meikle and Bryant both note, it has less to say about technology than its title would suggest. Marx does indeed write about Hawthorne's limekilns and Melville's tryworks, to strategically note two dominant examples of technological representation in his book; however, as Meikle puts it, "he shifted those nebulous 'machines' to the periphery" (150) in between publication of his original foray into his theme, the 1956 New England Quarterly essay "The Machine in the Garden", and the book publication eight years later. In the book, Marx would reorient his study more firmly in the direction of literary critique. He would focus "on a series of dramatic intrusions in the landscape of the American garden," part metaphorical and part literal: "the shriek of a steam locomotive interrupting Hawthorne's contemplation of nature on a drowsy summer day in Sleepy Hollow; a steamboat looming monstrously out of the dark to smash the idyllic Mississippi raft of Huck Finn ..." (Meikle 150).

In other words, Marx would repeat in 1964 what American Studies scholars had already been doing for years: first, he would favor a privileged group of white, male canonical writers for his literary subjects; and second, he would refract technological history through the lens of metaphor, myth, and symbol, thus in effect depoliticizing that history. It is in such a manner that Marx has stood accused over the decades; and for various reasons his transgressions often ended up functioning as a lightning rod for criticism of American Studies practices more broadly—first by the early revisionists (such as Bryant), and later by the "New Americanists" (such as Decker and Meikle). With regard to the first charge, it is surely very difficult to dismiss the gendered and racially-biased elitism of his approach, as well as that of his contemporaries. By the lights of the cultural-critical perspective that has predominated in the humanities for much of the last half century, Marx's European male-writer focus constitutes at the very least a failure of imagination, curiosity, and empathy. But what about the second charge of the hypostatization of consciousness, the refraction of technological history through the myth of the cognitivized pastoral? Here I believe that the "crime" is mitigated by certain circumstances, or overlooked aspects of Marx's work which are perhaps easier for us to appreciate in the 21st century, thanks to changing technological conditions and the changing qualities of the critical discourses we use to speak about "nature," "technology," and "the human."

As Meikle observes, Marx would "deftly [trace] the development of an ideology of technological progress" (151) that grew out of the materially exploitable distinction between technology and nature. He would do something else too: he would put in question the nature/culture dualism that grounds this progress ideology. The clue is in the preposition in the title—

The Machine in the Garden—which both assumes the distinction between nature and culture, and advances another kind of thinking of their relation altogether.

I want to suggest Marx's debt to a style of thinking about technology which cuts against the grain of the liberal or socialist humanism and liberal progressive ideology which irrefutably informs his writing. This style of thinking, associated with the word technicity, underscores the intimacy of our insinuation with technology, and in so doing problematizes our notion of the relationships between techne, nature, and whatever it is that *we* are in virtue of being, at least in part, some undecidable form of their synthesis. Whereas classical philosophy of technology insists upon the distinction be-

tween homo faber and his tools, theories of *originary technicity*, as Arthur Bradley explains, constitute "a machine for revealing that technology is always already contaminating *phusis*, *anamnēsis*, consciousness, ipseity, or the living more generally" (14).

The concept of originary technicity, associated with philosophers from Marx to Heidegger to Gilbert Simondon to Derrida and Bernard Stiegler, encourages us to see ourselves as ontologically connected with technology.³ All we need to do is think about the guiding metaphors since the rise of modern science for defining the human—the human as a clock, as a motor, as an information machine—and then recognize that the persistence of such historically determinate metaphors speaks to a profound need to understand human-ness through technological means. Originary technicity, then, insists that technology is a crucial aspect of our human *nature*—it encourages us to see that nature as inseparable from our technological condition. It is in this sense that the machine and the garden are confounded in Marx's book: they inform each other in deep down ways in spite of how we normally think about their relation. Marx thus undermines the notion of their radical difference, and this has consequences for our picture of U.S. literary/critical history, as well as for ecological theory and technology studies.

For the sake of getting a bead on this alternative thinking about technology in *The Machine in the Garden*, I want to begin with a brief passage of nineteenth-century science journalism that Marx discusses roughly halfway through the book:

In the period between 1830 and 1860 popular discussions of technological progress assume that inventors are uncovering the ultimate structural principles of the universe. In 1850 a writer inspired by a new telescope says: "How wonderful the process by which the human brain, in its casket of bone, can alone establish such remote and transcendental

3 In his Technics and Time, Vol.1: The Fault of Epimetheus, Bernard Steigler articulates the evolutionary argument for the technological-natural-human synthesis that informs the idea of originary technicity. As Steigler writes: "From the Zinjanthropian to the Neanderthal, cortex and tools are differentiated together, in one and the same movement. It is a question of a singular process of structural coupling in 'exteriorization,' an instrumental maieutics, a 'mirror proto-stage' in which the differentiation of the cortex is determined by the tool as much as that of the tool by the cortex, a mirror effect in which one, informing itself of the other, is both seen and deformed in the process, and is thus transformed" (176). In such a manner, the process of corticalization is bound up tightly with the evolution of knapped flint. The question of the "who" and the "what" in human evolution and human history are inseparable. This observation finds its various echoes in Karl Marx's description of the labor process in Chapter 7 of Capital, in Heidegger's "The Question Concerning Technology," and in Derrida's career-long elaboration of the deconstructive figures of différance, trace, and supplement.

truths." The overblown, exclamatory tone of so much of this writing arises from an intoxicated feeling of unlimited possibility. History has a meaning, a purpose, and a reachable goal: it is nothing less than man's acquisition of the absolute truth. (198)

In his framing commentary, Marx highlights the extravagant quality of this brief encomium, inspired by a telescope; and which, as his study reinforces, was so routine in the treatment of technological development in the nineteenth century: this glib self-satisfaction in European-American technical ingenuity. Yet for us, what is most striking about the language is not its tedious conviction that the secrets of the universe are revealed through science. Rather, it is its rhetorical incisiveness, in how it seals off the human brain, "in its casket of bone," from the technology with which it is intimately involved.

The real lesson here is in how readily nineteenth-century observers were able to separate out cognition and the record of technological advance from the existence of technological artifacts themselves. What the science journalist writing in 1850 does not see is how human cognition, perception, and technology form an integral unit, or an historical assemblage. This is the lesson of both originary technicity and historical materialism, as first propounded by another Marx, Karl Marx, whose writings were on the whole religiously ignored by the American Studies critics. Marx's work has of course exerted significant influence on the development of poststructuralism and related theoretical perspectives in the humanities since the 1970s. From the materialist point of view informing contemporary ecological theory, technology refers less to an instrumental reason and more to an ontological state.

Those properties that we readily identify with the human condition as such—agency, mind, consciousness, thinking—are shown from the materialist perspective which philosophers of originary technicity assume as inextricably bound up with quasi-mechanical technical processes. From this perspective, as promoted by philosophers of technics, our technology is not supplemental but rather essential to our humanity. There is no transcendence, but there is this connecting that Leo Marx gestures towards in the commentary above, such that the brain, the hand, and the ground and polished glass of the telescope lens form an irreducible whole. This notion may have been anathema to the variety of intellectual history that Marx more popularly practiced, but our present interest in Marx's book stems from the fact that it is there anyway.

Another way of putting my argument is that The Machine in the Garden queries the liberal consensus critical heritage from which it emerges. The book's key themes and conflicts short-circuit the mission to promote the liberal individualist illusion of escape from the shaping forces of history. This was a mission to promote the concept of a "world elsewhere," to recall the critic Richard Poirier's rebranding of the liberal consensus mythos. According to Poirier, this world elsewhere, this other place, conjured in and through the creative language of literary artists, is the space of the romantic self's natural freedom from history and necessity. A World Elsewhere was published two years after The Machine in the Garden, in 1966, as if to neutralize the obscure threat to the consensus critical establishment that Marx's quietly unsettling work constituted. For what we begin to glean in *The Machine in the Garden* is that there is no elsewhere, no place for a transcendence that guarantees the "naturalness" of nature, or the romantic integrity of the self. There is only the world—an ever increasingly technologically mediated world—which on the one hand creates the very means for our access to nature, and on the other hand, dispels the very 'Nature' it reveals through an inevitable process of contamination. Nature and technology are entwined in the most compelling of Marx's analyses, through a critical emphasis on what we might call technical, or technicized, perception.

Let us consider Marx writing on Melville's Moby Dick, an essential literary touchstone in The Machine in the Garden. Marx notes how Melville "pursues the analogy between human and natural productivity" in Moby Dick (311), in a scene where Ishmael remembers a curious adventure from years past, amongst Polynesian islanders, and which curiously takes place inside the skeleton of a sperm whale. As Ishmael recounts, a giant whale skeleton had been ritually transformed by a tribe of islanders into something like a lush green temple: "It was a wondrous sight," Ishmael remembers. "The wood was green as mosses of the Icy Glen; the trees stood high and haughty, feeling their living sap; the industrious earth beneath was as a weaver's loom, with a gorgeous carpet on it, whereof the ground vine tendrils formed the warp and woof ..." (Melville, quoted on p. 311). "The bones of the skeleton are criss-crossed with vines." Marx observes of the scene, "and through them the sunlight seems 'a flying shuttle weaving the unwearied verdue." Suddenly Ishmael is reminded of a textile factory. As Marx writes of Ishmael's jarring conceit:

Here, growing in the whale's skeleton, is the greenness Ishmael has been seeking, yet that same greenness has the aspect of a factory. It is a bold conceit, this green factory inside the whale—another vivid metaphor of American experience: Ishmael deliberately making his way to the center of primal nature only to find, when he arrives, a premonitory sign of industrial power. Art and nature are inextricably tangled at the center. (312)

Indeed, for Marx, *Moby Dick* is centrally about the recognition of this entanglement. In the preceding passage, "primal nature," strangely bodied forth in a whale skeleton, is thoroughly hybridized: it is fused from the bones up, so to speak, with the mechanical and the machinic. It is in such a manner that Melville's novel serves as an important case study for the greater, and partially ideologically obscured, historical materialist argument of *The Machine in the Garden*.

For the sake of exemplifying the contrast between Marx and his contemporaries, I shall turn to R. W. B. Lewis's treatment of *Moby Dick* in *The American Adam* (1955). Lewis highlights another scene from *Moby Dick*, the incident of "The Try-Works," to make his case for Melville's ironic transcendence of the foundational struggle between what Lewis famously identifies as the competing Parties of Hope and Memory in U.S. literature. These Parties roughly correspond in *The American Adam* to the opposing attitudes towards the myth of the "new man" in nineteenth-century American letters, the "new hero" who emancipates himself from history in the manner mythologized in certain eighteenth- and nineteenth-century literary traditions, and condoned in the mainstream liberal consensus criticism of the mid-twentieth century. For Lewis, the subject of "The Try-Works" chapter is "the different degrees of moral alertness" (132) corresponding to the different ways of confronting the cultural conflict between hope and memory, or "innocence" and history, in nineteenth-century U.S. literature.

In this often-discussed chapter from Melville's novel, Ishmael falls asleep at the tiller one black, moonless night. He wakes up with a start, not recognizing he has slept at all. He has inadvertently turned himself around, back to the prow, and finds himself gazing perplexedly into the fiery furnace of the "try-pots" amidships, where the harpooners work the whale blubber and extract the oil. Thinking that the ghastly, fiery activity on the boat is really out there in the Java seas, menacing the ship from beyond, Ishmael nearly capsizes the Pequod, readying to turn it violently away from imagined danger. "The moral follows" (131), Lewis writes, quoting the hopeful and buoyant lines of Ishmael in his commentary on the event:

Look not too long in the face of fire, O man! ... believe not the artificial fire, when its redness makes all things look ghastly. Tomorrow, in the natural sun, the skies will be bright; those who glared like devils in the forking flames, the morn will show in far other, at least gentler relief; the glorious, golden, glad sun, the only true lamp—all others but liars. (Melville, quoted on p. 131)

What is striking here is how nature and technology—"glad sun" and "artificial fire"—function as analogues for those opposite poles in between which are situated the differing degrees of moral alertness pertaining to Lewis's competing Parties of Hope and Memory. At the poles, the empty innocence of Nature/Hope faces off against the baleful artifice of Technology/History. In Ishmael's sermonizing, as Lewis highlights, technology is associated with "a sense of evil so inflexible ... that it is perilously close to a love of evil, a queer pact with the devil" (Lewis 132). For Ishmael, at least here in the "Try-Works" chapter, the fire of technology, born of human artifice, provides a dangerous light from which to see one's self in the world. If we orient ourselves in the world by this evil and false light, we are doomed. If we wait for the golden light of the one, true, god-like sun, the "natural" light from which to judge the morality of our actions and the righteousness of our behavior, then we will find our salvation.

In *The American Adam*, Lewis sanctions the nature/technology dualism that Ishmael seizes upon in a homiletic mood, and uses it to forward his own argument about the field of U.S. literature's troubled relation *per se* to history, memory, and the technology of the archive. This seductive argument of tragically lost innocence would help to secure the fortunes of the American Studies movement in the 1950s, and would also help to sustain it through the whole of a bitter postwar period in which the U.S. would keep losing its innocence over and over again. Lewis certainly does not promote the reality of American innocence, but he does promote the myth. He argues for its embeddedness in the cultural DNA of America; and so, according to the argument of *The American Adam*, America's trouble with history is destined to persist, in no small part through the double alienation from both technology and nature that is attendant upon this failed quest for illusory innocence.

As Marx argues in a different spirit from Lewis: "In a whaling world, Ishmael discovers, man's primary relation to nature is technological" (295, italics added). This discovery has nothing to do with alienation, and everything to do with connection, and recognition of the elemental relationships that exist between humans, the natural world, and techno-

logical means. Marx turns to Chapter 60 of *Moby Dick*, "The Line," in order to illustrate "the astonishing range of insight released by Melville's whaling trope" (295). In this chapter, Melville's profoundly materially-oriented narrative zooms in on the whale-line. The whale line fastens the harpoon that pierces the whale's blubber to the ship-board systems which will carve up the whale's body and extract its exploitable resources. In other words, the whale line connects the "natural," living body of the whale to the technology of the whaling ship for the sake of commercial culture. Marx suggests that "The Line" is insignificant in terms of the "action" of the novel, but this is only half right because so much of the action of *Moby Dick* concerns mental recalibrations of these elemental relations between culture, nature, and the human. If the line is "magical, sometimes horrible" (384), as Melville writes and Marx approvingly quotes, it is because of the strange connective properties which Melville attributes to it.

Melville's description of the line, according to Marx, discloses the elemental aspect of physical dependence, plunder, and exploit that underlies the deceptively mild, abstract quality of life in our technical civilization. Here the simple Manila rope is made to seem an archetype of the physical bond between man and nature, whether industrial or primitive. Although whaling is a rationalized, collective operation, based on a strict division of labor, it remains a bloody, murderous hunt. Playing this fact against the illusion that civilized man has won his freedom from physical nature, Melville transforms the line into an emblem of our animal fate (295-296).

If technology is supposed to help us achieve transcendence, as the journalist writing about the telescope assumes, Marx stresses how the lessons of *Moby Dick* teach us otherwise. Technology is intimately bound together with nature, and the human is the product of their inextricable connectedness. Ishmael discovers on board the Pequod that "man's primary relation to nature is technological." Our very capacity to know, Marx insists with a suddenly unguarded materialist conviction in his close reading of "The Line," is evidence that the eminently 'natural' process of thinking itself possesses a technical dimension, and that it is, invariably, historically conditioned. If it is so on board the Pequod, where Ishmael comes to realize the moral and social consequences of this technological relation to nature, it is so in the wider world too. Such knowledge, as Marx fatefully recognizes, must redound on Nature itself, getting us back to his prefatory comments about changes in our "larger structure of thought," and about

the "centrifugal force" of industrial technology in breaking down the very distinction between pastoral and the urban-technological, or nature and history.

The critical project that Marx maps out in *The Machine in the Garden* is guided by a sense of momentous change in thinking about the relation between nature and technology. However, this does not mean that his book is completely unmarked by the same conventional thinking about the nature/ culture dualism that characterized the more mainstream, liberal consensusinspired American Studies scholarship of the day. If in its most prescient moments Marx's criticism gestures toward the dissolution of the nature/ culture divide, elsewhere it helps to consolidate it. In other words, The Machine in the Garden goes both ways. I shall here turn to Marx's commentary on Emerson, on the poet's duty to aestheticize the railroads, mills, and factories that were transforming the New England countryside from the 1830s on. Only through such aestheticization, or such working-over of human artifice into a more fundamental, and natural, unity of experience, Marx suggests, could ugly, dirty factories and such be integrated into a greater Whole, a "natural" Order. Emerson's position, Marx writes, "is like the one Shakespeare had assigned to Polixenes in the pastoral episode of *The* Winter's Tale" (242).

If there is conflict between techne, or art, and nature, this must be reconcilable, because, as Polixenes explains in a passage that has spawned considerable critical debate over the centuries: "Nature is made better by no mean/But Nature makes that mean; so over that art/ Which you say adds to Nature, is an art/That Nature makes." Marx reads these lines at face value: Emerson-as-Polixenes sees nature as preceding technology, or artifice. Nature comes first—it has ontological primacy—and technology comes second, for it is subsumed by Nature and therefore rates only as a "second nature." Yet in fact, Polixenes' lines are shot through with dramatic irony. The real lesson of this speech in *The Winter's Tale* is that Polixenes fails to extend his conviction in the "naturalness" of cross-breeding in plants to the world of human beings. Polixenes' distinction itself is strategic artifice, for he cannot abide the idea of his noble son Florizel marrying, and "cross-breeding," with Perdita, the princess whom he falsely believes to be low-born.

My point is that Marx's own failure to acknowledge Shakespeare's irony in his commentary on Emerson is a telling indication of the institutional

collusion between the liberal consensus ideology to which he submits here, and a certain style of romantic idealism to which Emerson was obviously prone. Marx couldn't get entirely away from that. Unlike Coleridge, who argued that Polixenes' lines ironically establish the primacy of artifice over nature; or unlike Karl Marx, who insisted that man is the creation of his own labor, Leo Marx's liberal consensus conditioning shows in his occasional dedication to the idea of a human imagination beyond techne and history. In some ways, this is precisely what makes The Machine in the Garden so strangely compelling a book to this day, this vacillation between a critical and philosophical materialism and a more culturally, or at least institutionally, predominant idealism. And yet, through this vacillation a boundary is repeatedly crossed, such that we end up finding the historical machine, in the figure of technical perception, very much embedded in the liberal-humanist garden of ascetic contemplation, such that Marx's book arguably ends up accommodating itself to a Marxian world view, in spite of its liberal consensus affiliation.

Perhaps another way of stating this is that in his dual allegiances to technics and romantic idealism, Marx essentially stages the difficulty of putting the machine in the garden. But it is there, and this is why Marx remains relevant. With its built-in escape hatch to a wished for realm of pure literary imagination, Poirier's A World Elsewhere is a much more institutionally constrained product of American Studies scholarship in the years immediately preceding the rise of poststructuralism and the New Americanist assault on the mid-century American Studies movement—the increasing sophistication of which is traceable from John L. Bryant's attention to "the pitfalls of the dialectical method" (68) in The Machine in the Garden, to Jeffrey Louis Decker's project "to disassemble the critical machine within the Americanist's garden in order to denaturalize the uncritical promotion of a 'humanistic understanding of American culture'" (282). If Marx's book has generated far more critical attention, and general interest, over the years than most other American Studies classics, it is due to the creative potential of this inherent tension; it is due to the way in which it opens itself to the future by not being entirely certain about how to articulate the relationship between human beings, technology, and the natural world; aside from the insistence that they occupy the same world because there is no elsewhere.

In its ambiguities, Marx's book has helped to establish a new tradition. It ushered in a new era of ethical/ecological engagement in literary and cultural scholarship. Marx himself defends his book against the New Americanist

claims of its "allegedly 'holistic,' universalizing tendency" (*Afterword* 493) mainly on the basis of its participation in the environmental politics of the 1960s. If, as he insists, he regrets his failure to have taken up "the history and the expressive life ... of women, ethnic and racial minorities, gays, and members of the working class" (492), he nevertheless refutes the broader charge of his book's political quietism. As he writes in 1999, in the wake of the New Americanist revisionism and the multicultural turn in cultural studies:

True, the divisions in American society and culture highlighted by the earlier generation of scholars were not those on which today's multiculturalist scholars chose to focus. Nevertheless, *The Machine in the Garden* emphasizes a fundamental divide in American culture and society. It separates the popular affirmation of industrial progress disseminated by spokesmen for the dominant economic and political elites, and the disaffected, often adversarial viewpoint of a minority of political radicals, writers, artists, clergymen, and independent intellectuals. (*Afterword* 493)

Had Marx included the voices of writers beyond the narrow literary canon of mid-century, his study would have been richer, and perhaps of still greater contemporary interest. Yet its achievement is significant in spite of these shortcomings. Indeed, The Machine in the Garden seems all the more relevant in the light of more recent critical and theoretical developments. If not exactly participating in it, The Machine in the Garden gestures towards the politics of the posthuman. Marx's book certainly shares a defining trait of posthumanism, which as Jussi Parikka puts it, is a "lack of certainty of what constitutes the human brought about by scientific, technological, and ecological forces" (63). I quote the media studies theorist Parikka here because his critical and theoretical project across a number of books resonates with Marx's, at least in terms of this insistence on the hybridization of nature/ technology. As Parikka writes of this project in Geology of Media (2015), he does "not engage with an Aesthetization of Nature that might separate humans from their environment ... but with the opposite: to establish proximity, map the links, the continuum of medianatures where the natural ecology is entirely entangled with the technological one" (63). Marx helped to establish this proximity, entangling nature and culture through an incipient thinking of technicity in and for U.S. literary studies.

⁴ See also Parikka's Digital Contagions: A Media Archaeology of Computer Viruses (New York: Peter Lang, 2007) and Insect Media: An Archaeology of Animals and Technology (Minneapolis: University of Minnesota Press, 2010).

As Marx intuitively understood, there is great danger in seeing ourselves as ontologically alienated from either nature *or* technology. Hence his thinking about ecology is itself ecological. Here too, I see Marx as nudging at an early point toward a developing posthuman understanding of the relations between nature, technology, and ourselves. If Marx's writing resonates with Parikka's, it resonates too with Timothy Morton's. In such books as *Ecology Without Nature* (2009), *The Ecological Thought* (2010), and *Hyperobjects* (2013), Morton argues that we have to move beyond the idea of nature as outside of civilization, as "a thing of some other kind" (*ET* 3). But making that leap, in order to see Nature as a product of historically conditioned thought, also entails moving beyond the idea of the human as outside of technology.

We recall Marx on Melville: man's relation to nature is technological. By the same token, as promoted by so much poststructuralist and posthumanist-inspired thought, our relation to technology is natural: our nature is technological. As Morton writes, "[t]he ghost of 'Nature,' a brand new entity dressed up like a relic from a past age, haunted the modernity in which it was born" (*ET* 5). This is precisely what concerned Marx, that this modern and romantic haunting by an alienated (and alienating) Nature was actually a dangerous symptom of the onset of technological modernity.

The modern Western alienation from Nature was a function of the alienation from technology, and this was simply another way of referring to an abdication of responsibility, of not owning up to the fact that our "alienation" was convenient for some, like owners of industrial capital, and damaging for many more. It suggested that forces were at play over which humans had no meaningful influence. In the long run our "alienation" has led us to the brink of ecological catastrophe. Certainly Marx saw through the delusions of tragic and alienated innocence better than most mid-twentieth-century U.S. cultural critics.

Meanwhile, the old obsession with nature versus technology or nature versus culture that Marx himself grappled with is *still* "the cognitive dissonance of our time," as the architectural theorist David Ruy writes in a recent Syracuse University course prospectus titled "The Garden in the Machine." This is a neat bit of riffing on Marx's book title which, trolling the web further, one discovers, has a certain persistence in academic publishing, as well as in the annals of urban planning and architectural practice. There is, for example, Claus Emmeche's book *The Garden in the Machine: The Emerging Science of Artificial Life* (1996); and Scott MacDonald's *The*

Garden in the Machine: A Field Guide to Independent Films About Place (2001); and there is the architectural firm Studio Gang's 2012 project proposal to revitalize Chicago's run-down Cicero neighborhood by creatively recombining foreclosed factory and housing spaces; the high-profile project being named ... "The Garden in the Machine." All of these examples use the punning Marx reference as a point of departure for addressing in one way or another the continuing cognitive dissonance regarding nature and culture that Ruy remarks on, and that the literary critic and environmental theorist Frederick Turner takes up too, with considerable bile, in his essay "Cultivating the American Garden:"

This ideological opposition of culture and nature—with no mediating term—has had real consequences. More often than need be, Americans confronted with a natural landscape have either exploited it or designated it a wilderness area. The polluter and the ecology freak are two faces of the same coin; they both perpetuate a theory about nature that allows no alternative to raping it or tying it up in a plastic bag to protect it from contamination. (45)

And yet the reversal in terms of what is *in* and what is *out* certainly points to some kind of mutation in the "nature" of our cognitive dissonance. More than half a century after Marx's book publication, we live in a world of far more porous borders between techno-culture and nature. The blurring line is indisputable: think of bio-engineering, genomics, cybernetics, and nanotech. Think of how our immersive technical systems are themselves beginning to assume "natural" qualities, as in "digital ecosystems" and "cloud computing." David Ruy writes in "The Garden in the Machine," "[today] [w]e are seeing the distinction between the natural and the artificial becoming difficult—perhaps even unnecessary." Marx would not, and could not, have put it the same way in 1964. We may indeed still routinely think unreflectively in terms of this nature/culture binary, but we are also more capable today of stopping ourselves, looking around the world, and thinking beyond it. My conviction is that Leo Marx helped us to get there.

⁵ See "Foreclosed: Rehousing the American Dream." http://www.moma.org/interactives/exhibitions/2012/ foreclosed/cicero. Accessed Jan. 29, 2016.

Works Cited

- Bradley, Arthur. *Originary Technicity: The Theory of Technology from Marx to Derrida*. New York: Palgrave MacMillan, 2011.
- Bryant, John L. "A Usable Pastoralism: Leo Marx's Method in The Machine in the Garden." *American Studies* 16.1 (1975): 63-72.
- Chase, Richard. *The American Novel and Its Tradition*. New York: Doubleday & Co., 1957. Decker, Jeffrey Louis. "Dis-assembling the Machine in the Garden: Antihumanism and the Critique of American Studies." *New Literary History* 23.2 (1992): 281-306.
- Emmeche, Claus. *The Garden in the Machine: The Emerging Science of Artificial Life*. Trans. Stephen Sampson. Princeton, NJ: Princeton University Press, 1996.
- Feidelson, Charles. Symbolism and American Literature. Chicago: University of Chicago Press, 1943.
- Lewis, R.W.B. *The American Dream: Innocence, Tragedy, and Tradition in the Nineteenth Century.* Chicago: University of Chicago Press, 1965.
- MacDonald, Scott. *The Garden in the Machine: A Field Guide to Independent Films About Place*. Berkeley: University of California Press, 2002.
- Marx, Leo. "Afterword: The Machine in the Garden." *The Massachusetts Review* 40.4 (1999): 483-496.
- _____. The Machine in the Garden: Technology and the Pastoral Ideal in America. New York: Oxford University Press, 1967 (1964).
- Meikle, Jeffrey L. "Leo Marx's The Machine in the Garden." *Technology and Culture* 44.1 (2003): 147-159.
- Melville, Herman. Moby Dick. London: Penguin Books, 1986.
- Morton, Timothy. The Ecological Thought. Cambridge, Ma.: Harvard University Press, 2010.
- _____. Ecology Without Nature. Cambridge, MA: Harvard University Press, 2009.
- . Hyperobjects: Philosophy and Ecology After the End of the World. Minneapolis: University of Minnesota Press, 2013.
- Parikka, Jussi. A Geology of Media. Minneapolis: University of Minnesota Press, 2015.
- Pease, Donald E. "New Americanists: Revisionist Interventions into the Canon." *boundary* 2 17.1 (1990): 1-37.
- Poirier, Richard. A World Elsewhere: The Place of Style in American Literature. Oxford: Oxford University Press, 1966.
- Ruy, David. "The Garden in the Machine." Syracuse VC Studio, Fall 2013. http://soa.syr.edu/live/files/20-david-ruy-vc-studio-syllabus. Accessed Jan. 29, 2016.
- Shakespeare, William. The Winter's Tale. New York: Signet Classic, 1963.
- Steigler, Bernard. *Technics and Time, Vol. 1, The Fault of Epimetheus*. Translated by Richard Beardsworth and George Collins. Stanford, California: Stanford University Press, 1998.
- Turner, Frederick. "Cultivating the American Garden." *The Ecocriticism Reader: Landmarks in Literary Ecology*. Eds. Cheryll Glotfelty and Harold Fromm. Athens, Ga.: University of Georgia Press, 1996.