

The Made Man and the “Minor” Novel: *Erewhon*, ANT, and Empire

ANNA NEILL

To draw a line from F. R. Leavis to Bruno Latour would be to trace how the concept of the “great novel” features in literary criticism’s recent de-privileging of the human (Latour, “Agency” 9). For Leavis, of course, novels that earned a place in the Great Tradition captured the essentially moral and psychological characteristics of human life; they demonstrated a “reverent openness” before such life and an awareness of its possibilities (9). Above all, they preserved the spontaneity of human minds in a world of utilitarian calculation, allowing the organic impulse to triumph over the mechanical one. Latour, whose work has had enormous influence on the critical turn against anthropocentrism, has recently defined the “great novel” as a medium for capturing the entanglements of matter—human and non-human, organic and non-organic—as it “disseminate[s] the sources of actions” across a vast field of actors (“Agency” 8). Its form recognizes the networked agency of the non-human along with the human. And as if to check literary criticism’s lingering Leavisite privileging of the organic, he advocates for a fiction that attempts

ABSTRACT: Bruno Latour has identified the “great novel” as a site for revealing the complex nature of agency in the Anthropocene. As it traces cause and effect through numerous, interrelated events, the “great novel” reveals a vast network of actors—entities, human and non-human—that are neither pure subjects nor pure objects. I examine firstly how novels by Charles Dickens and George Eliot depict the agency of non-human things within a network of actors. I then discuss how a self-proclaimed “minor” novel, Samuel Butler’s *Erewhon* (1872), challenges us to think about the colonial implications of the distributed, networked agency represented in “great” Victorian fiction. *Erewhon* shows how the imbrication of the human and the (in particular) non-human machinate underpins the entrepreneurial success of the colonial adventurer.

ANNA NEILL (aneill@ku.edu) is Professor of English at the University of Kansas. She is the author of *British Discovery Literature and the Rise of Global Commerce* (Palgrave Macmillan, 2002) and *Primitive Minds: Evolution and Spiritual Experience in the Victorian Novel* (Ohio State UP, 2013). Her current work includes a forthcoming article in *Textual Practice*, titled “Epigenetic Emergence: Reading for Growth in *Jane Eyre*,” and a monograph in progress, “Strange Stories and the Descent of Mind.”

the “interpretation of machines” and gives voice to the hybrid entities generating and generated by technological innovation (*Aramis* viii).

Latour’s example of a “great novel” is Leo Tolstoy’s *War and Peace* (1867). The lengthy nineteenth-century novel with its many-threaded plots seems a likely choice because it is sensitive to what Charles Dickens called the “connexion … between many people in the innumerable histories of this world, who, from opposite sides of great gulfs are curiously brought together” (*Bleak House* [1852–53] 235). Such connections are in turn enabled by manifold agentic forces in which the human does not assume any special status. Indeed, in Dickens’s writing, connection is assisted by what Hippolyte Taine described as “an enthusiasm … that will make a sort of human” out of a “vulgar object” (339). These forces and sources of social realignment therefore include everything from the petty objects of everyday life to the newly-invented contraptions that feed and further industrialization and empire. The first half of this essay will consider works by Dickens and George Eliot to show how non-human entities, particularly machines, enable forms of physical and psychological connection that make it possible for their novels to have such enormous social reach. I will focus on the train as one kind of machine that accrues agency and transformatively mediates relations among numerous other actors within far-reaching social and sympathetic networks. The second half will turn to a self-described “lesser” novel, Samuel Butler’s *Erewhon* (1872), written and set in a British colony. In this story, machines, including trains, are extensions of human bodies and as a result become motive-driven agentic beings. Yet such beings do not in this novel forge new connections in the social realm or broaden the scope of sympathy as non-human entities do in, for example, Eliot’s longer novels. Instead, the intertwining of human and machine in *Erewhon* results ultimately in an abstraction and reification of the European human as a “made man.” Correspondingly, this process makes way for the dispossession and exploitation of the indigenous figures in the novel, who become less than human in a decidedly hierarchical chain of being.

In this context, my use of the terms “great” (or for Eliot, “serious”) and “minor” or “lesser” is not evaluative, but rather identifies how the authors and critics I am discussing represent networked relations between the human and non-human. I will argue that the relative narrative poverty of Butler’s *Erewhon* can be read as an expression of resistance to imperial, machine-mediated networks and the abstractions of value that they make possible in the labor of colonial adventurers. The made men who discover a wealth and security in the colonies that they lacked in the metropole, the novel shows, rely on a vast imperial infrastructure in which complex relations between human

and machine actors make it possible for goods and capital to move rapidly around the globe. In this interpretation, the shame that Butler professes about his novel’s feeble plot and thinly-drawn characters appears somewhat disingenuous, for *Erewhon* is deliberately rejecting the rich agentic networks of what Latour identifies as the “great novel.”

Butler’s novel teaches us that our current critical romance with anti-anthropocentric, actor-network-rich forms of representation forgets how a flat ontology may play out in the history of colonial capital and empire. Even as we have learned to read against a metaphysics that elevates the human above other entities, or that ignores the entanglements of human subjects with non-human objects, we need to remain alert to the histories in which the human and the non-human find definition and agency. The point here is not to correct Latour, for whom our habitual and philosophical quarantining of subjects from objects has meant “withdrawing historicity from the [objective] world” (“Agency” 13). Rather, it is to attend to the historicity of network itself. Through its “minor” form, I propose, *Erewhon* attempts to do exactly that.

Latour himself reads *Erewhon* as a cautionary parable about the segregation of non-human agents from the realms of human passions and politics. In the story, the Erewhonians—an isolated society hidden in the Southern Alps of New Zealand—believe that evolution spells the eventual enslavement of humanity to the machine. Ultimately, they prophesy, technology will arrive at such a point that it will render humans mere parasites on the very inventions they have brought to life. Persuaded that they must do everything they can to prevent the monstrous eventuality of the post-human future, the Erewhonians destroy all of their machines, or else quarantine them in museums and imprison or execute anyone suspected of using them. In *Aramis, or the Love of Technology* (1993), Latour turns *Erewhon* into a cautionary allegory about the silencing of technology. As a means of giving voice to the machine, his account of the failure of Paris’s plan for a personalized rapid transit system (“The Aramis”) in the 1970s and 1980s includes a mish-mash of engineers’ reports, interviews, newspaper articles, technical documents, and other media to augment the fictional exchange between an engineer and a Sociology professor about the demise of the project. This assembly of voices (one whose use of documentary fragments is novelistic in the style of Bram Stoker’s *Dracula* [1897]) aspires to “[restore] freedom to all the realities involved before any one of them could succeed in unifying the others” (*Aramis* ix). It aims to animate the machine by identifying the enormous cast of actors—or, more properly, actants, since their agency does not imply consciousness—that first brought Aramis to life and then condemned it to death.

Aramis therefore is intended to read as a “great novel” in Latour’s sense of the term. It brings together a disparate collection of events, plans, accidents, and ambitions that together create a historical drama, in this instance with a non-human protagonist at its center. This form of narrative looks back to eighteenth-century speaking “it-narratives” (narrated by coins, banknotes, and pins). But it also recalls voluminous nineteenth-century narratives, such as Dickens’s *Our Mutual Friend* (1865), where discarded matter helps to drive the human plot and lies at the heart of a complex social web; or it invokes, as I shall discuss below, the networks of sympathy in Eliot’s novels that ultimately challenge human autonomy. Rather than pointing mutely to the post-human future—as Latour suggests the Erewhonian machines do—*Aramis*, like these capacious nineteenth-century precursors, seeks out and gives voice to non-human entities within a tangle of actants.

Victorianists have long been interested in narrative representations of non-human objects. Victorian drawing rooms remind us, as John Plotz has put it, how Victorians “loved their things,” as well as how these very things confirmed, expanded, and mobilized domestic English identity in an age of imperial expansion (1).¹ Major studies such as Asa Briggs’s *Victorian Things* (1988), Isobel Armstrong’s *Victorian Glassworlds: Glass Culture and the Imagination 1830–1880* (2008), and Andrew H. Miller’s *Novels Behind Glass: Commodity Culture and Victorian Narrative* (1995) have traced the movement and representation of objects within the homogenized or abstracted global spaces created and maintained by the circulation of commodities, even as these studies also recognize the disturbances and ruptures of such spaces.² Others, by Elaine Freedgood, Plotz, and Armstrong (in more recent work), have shown how objects carry a resonance not entirely reducible to the cycle of production and consumption, evoking rich material histories and provoking affective attachments that belong to other kinds of flows and transfers.³ Perhaps most significantly here, Caroline Levine has foregrounded how the demotion of human actors occurs in networked space: the lengthy Victorian novel affords the depiction of a complex layering and overlapping of networks in which characters function as nodes, and through which multiple invisible social forces pass and intersect. All of this suggests that—while many of the period’s most ambitious works of fiction trace the dance of subjects and objects within vast commercial, imperial, industrial, and social networks—objects, including those objects that Victorians made, cannot be understood entirely within human-driven systems, nor can their identity and reach be circumscribed by human desire.⁴

So how do we assess the role of non-human things, especially mechanical things, in a fiction whose representational reach remains modest? Despite its

reference to *Erewhon*, Latour’s twentieth-century Parisian saga really looks back to the great British nineteenth-century novel in which objects can be emancipated from human consciousness within vast actant networks that individual minds cannot grasp. On the other hand, Butler’s first-person, somewhat formulaic, novella-length account of the manners of a remote and isolated people does not have scope enough to capture such fantastic webs of agency. In Latour’s reading, the suppression and silencing of the machines that threaten to take over in *Erewhon* is a metaphor for the way that scientific objectivity dispenses with all non-human agency. But read as a story about colonial New Zealand, the novel shows us how these mechanical entities become mobilized within imperial networks precisely because they carry an agency that is at once independent of human will and desire, and also capable of acting upon these. Butler reminds us that, even as we try to respect their ontologies and recognize our entanglements with them, such entities are easily reabsorbed into the stream of capital. Despite the richly interwoven plots of realist novels, then, *Erewhon* is paradoxically more alert to the colonial dimensions of narrativized networks than its more dilatory and metropolitan literary cousins.

The perpetual entanglement of human and non-human agents is richly portrayed in what might be described as the great novels of the global North. I will begin with works by Dickens and Eliot that foreground the role of machines and other non-humans in actor networks, even where the network is the conduit for distinctly human experiences and exchanges of sympathy. The narrative consciousness of these novels outdistances, even rejects, a humanism that locates narrative authority in the mind. In an implicit challenge to these ambitious narrative forms, I will argue, *Erewhon* shows how networks that embrace the motives and machinations of the non-human may not be innocent of human desire and design. Despite its superficial satire on the narrow vision of an anti-modern, machine-phobic culture, *Erewhon* can be read as skeptical of the anti-humanist, network-sensitive reach of the great novel. Reading Butler’s story carefully can give us pause before we inadvertently re-invoke the Great Tradition, this time for works of art in which “networks . . . link people and objects” across great distances (Levine 21).

Novels and Trains

Latour’s reading of *War and Peace* focuses on the passage in which Prince Kutuzov decides to begin military engagement. Here, what the narrator calls “inevitable movement” and “accomplished facts” are recognizably assemblages of a vast number of events preceding the decision (qtd. in Latour, “Agency” 9).

It is this awareness of his own lack of autonomy that actually enables Kutuzov to defeat Napoleon Bonaparte, whose megalomania is ultimately the cause of his defeat. In this passage, subjects and objects become confused because agency is not aligned discretely with a decision-making subject. Such “common ground of agency,” usually unexamined, is captured in the novel that tracks apparently individually-motivated decisions to a multitude of actions, including those that have taken place at a great distance (“Agency” 8).

As Latour recognizes, the *War and Peace* example represents the dissemination of agency across principally human networks. He therefore moves from Tolstoy to John MacPhee’s 1990 bestseller, *The Control of Nature*, reading that novel’s depiction of a struggle between natural forces and the Corps of Engineers as a drama of competing motives and goals. However, a nineteenth-century precursor to the way *Aramis*, in particular, has depicted the entanglements of matter and dissemination of agency beyond the human can be found in Dickens’s depictions of railway travel. Take, for example, a scene from *Our Mutual Friend* in which it becomes hard to discern where the human drama is distinct from the activity of mechanical actors. About two thirds of the way through the novel, Bella Wilfer and John Rokesmith start to fall in love. It is not so much the human as the non-human actors in the scene, however, who seem attuned to their developing feelings for one another:

The railway, at this point, knowingly shutting a green eye and opening a red one, they had to run for it. As Bella could not run easily so wrapped up, the Secretary had to help her. When she took her opposite place in the carriage corner, the brightness in her face was so charming to behold, that on her exclaiming, “What beautiful stars and what a glorious night!” the Secretary said “Yes,” but seemed to prefer to see the night and the stars in the light of her lovely little countenance, to looking out of the window.

O boofer lady, fascinating boofer lady! If I were but legally executor of Johnny’s will! If I had but the right to pay your legacy and to take your receipt!—Something to this purpose surely mingled with the blast of the train as it cleared the stations, all knowingly shutting up their green eyes and opening their red ones when they prepared to let the boofer lady pass. (594)

I have suggested elsewhere that this passage liberates the narrative voice from the consciousness of the human characters, who seem only dimly aware of their blossoming passion. Instead, narrative intuition is distributed among the “knowing” train stations, blasting train horn, winking lights, and the spirit of a dead child who once named Bella the “boofer lady.”⁵ Here, clearly, there is no discrete, individual human awareness unfolding against a background of dead or otherwise inanimate objects. Nor is this quite an instance of the

pathetic fallacy gone mad, in which life and humanity is drained out of people by things, as Dorothy Van Ghent described in Dickens.⁶ Instead, knowing non-human objects take the place of an omniscient, organizing narrator, foretelling connections soon to be revealed among disparate characters and events. This narrative device does more than simply animate and anthropomorphize non-human entities. For the railway and the ghost are both “quasi subjects” (“Agency” 5); they share awareness and—given the sequence of events that will precipitate the couple’s union—*agency* with the human subjects who, like them, are no longer (if indeed they ever were) autonomous entities.

Similarly, in *Dombey and Son* (1848) the (demonic rather than benevolent) figure of the train seems at first to be a projection of human feeling. In bitterness at the death of his son, Mr. Dombey finds “a likeness to his misfortune everywhere” (312). In his mind, the train’s inexorable rush towards its destination becomes a modern incarnation of a scythe-wielding Death. The scenes that flash before the eyes of the passengers are only so many forms of life that will inevitably be cut down:

Breasting the wind and light, the shower and sunshine, away, and still away, it rolls and roars, fierce and rapid, smooth and certain, and great works and massive bridges crossing up above, fall like a beam of shadow an inch broad, upon the eye, and then are lost. Away, and still away, onward and onward ever: glimpses of cottage-homes, of houses, mansions, rich estates, of husbandry and handicraft, of people, of old roads and paths that look deserted, small, and insignificant as they are left behind: and so they do, and what else is there but such glimpses, in the track of the indomitable monster, Death!

Away, with a shriek, and a roar, and a rattle, plunging down into the earth again, and working on in such a storm of energy and perseverance, that amidst the darkness and whirlwind the motion seems reversed, and to tend furiously backward, until a ray of light upon the wet wall shows its surface flying past like a fierce stream, away once more into the day, and through the day, with a shrill yell of exultation, roaring, rattling, tearing on, spurning everything with its dark breath, sometimes pausing for a minute where a crowd of faces are, that in a minute more are not; sometimes lapping water greedily, and before the spout at which it drinks has ceased to drip upon the ground, shrieking, roaring, rattling through the purple distance! (311–12)

“The power that force[s] itself upon its iron way” is apparently a figment of Dombey’s tortured imagination, incongruously assigning intention and appetite to iron and steam (311). Yet the demon engine is more than the creature of his depressed fancy. To some degree it represents a fusion of animal and machine, where the mechanical cannot be understood in opposition to the emotional,⁷ or where humans assume the characteristics of self-regulating machines.⁸

But it is the diminishing of autonomous human faculties that really comes into focus here. With their fantastic acceleration, trains had enormously impacted, even annihilated, traditional perceptions of time and space—a phenomenon famously captured in J. M. W. Turner’s *Rain, Steam and Speed—The Great Western Railway* (1844) where, even as the observing eye falters before the blurred outline of objects, the mind begins to grasp how forces beyond its powers of representation are shaping perception.⁹ Rail speed and even rail disaster (which will ultimately enable multiple plot resolutions in *Dombey and Son*) occur in what Nicholas Daly calls “machine time”: a sequence of events too rapid for the human sensorium to register, let alone trigger a reaction (23). Even while it outpaces the human mind’s capacity to predict and prepare for events in its environment, machine time is simultaneously reassuringly predictable and homogenous, precisely because it does not depend upon human movement or attention. It is the train, then, and not Dombey’s gothic anthropomorphizing of it that brings so many varied scenes into one continuous space, positing connections between rich and poor, and between urban-industrial and rural spaces. Indeed, lest the reader be too eager to understand the train’s monstrosity as the projection of Dombey’s diseased psychology, or as a metaphor for his emerging awareness of the destruction nurtured by industrial-imperial greed, the narrator pulls back to show us what Dombey himself cannot grasp: “As Mr. Dombey looks out of his carriage window, it is never in his thoughts that the monster who has brought him there has let the light of day in on these things: not made or caused them” (312). The train—seemingly alive, seizing the scene with the help of active verbs that allow it to roar and yell and tear and drink, demonstrate perseverance and exultation, and hurtle human bodies at unnatural speed through landscapes within which they now have almost no immersive experience—is not merely likened to but is itself the source of the sensory upheaval that amplifies Dombey’s bleak thoughts. As such, it is also revelatory; it casts light on changes that are otherwise visible only at a scale that human consciousness cannot grasp: the evacuation of the premodern landscape, the new disparities of wealth that industrialization has created, and the vanishing of traditional modes of production. To the extent that narrative can capture such revelations, it makes new modes of human perception possible.

For Dickens, the train is therefore a key actor in the great novelistic project that draws numerous and complex connections among disparate places and events. This perhaps explains why Leavis did not include him among the great novelists, claiming that (with the exception of *Hard Times* [1854]) his novels lacked a “sustained seriousness” (19). The imbrication of machine “knowing,” anticipation, perception, and even design with human motives distracted

Dickens, in Leavis’s view, from what Leavis championed in Eliot as a “profoundly serious interest in life” (18). Yet Eliot too shows how the non-human (and even at times the non-organic) world is deeply implicated in the human one, especially when that world is grasped, by means of sympathy, as a vast web of events and actors.

Sympathy in the Serious Novel

In Dickens’s writing, our perception and recognition of a vast arena of interrelated events is made possible by allowing the perspectives, passions, and motives of non-humans to jostle among those of human beings; in Eliot’s novels, the wide web of sympathy that enables moral life can paradoxically crush the human psyche. What Elizabeth Deeds Ermarth has described in Eliot’s conception of moral sympathy as the “mutual influence of dissimilar destinies” and “a sense of connection between widely separated lives” involves understanding how social being is formed in the recognition of difference (42). Sympathy therefore respects what Eliot calls “inevitable kinship” with the non-human, the “minim mammal” that is related to the great philosophical mind (*Daniel Deronda* [1876] 471), or “contemptible details” like a “dirty old barouche” that nonetheless must be accounted for in the “turning of lives” (228). This is the view of sympathy that drives contempt for what she describes in the essay “Silly Novels by Lady Novelists” (1856) as works whose high society authors have “no close acquaintance with any other form of life” (245). By implication, “serious” novels endeavor to portray life as a web of sympathies, to capture the recognitions of difference that make social existence possible; they are therefore likely to be dilatory accounts of minds opening to others as their protagonists are woven into multiple plots and linked to a wide cast of other characters.¹⁰ This focus on a great network of relations turns narrative authority away from the autonomous, world-making human subject.

Acknowledging Dickens’s “greatness,” Eliot praised his “power of rendering … external traits,” and added that, were he equally gifted at portraying psychological character, “his books would be the greatest contribution Art has ever made to the awakening of social sympathies” (“Natural History” 143). Eliot’s own fiction aims to provoke sympathy, “surpris[ing] even the trivial and the selfish into … attention to what is apart from themselves” by means of deep psychological portraiture, capturing the complex motives in relation to others that structure every human action, sometimes beneath the threshold of conscious awareness (142). In order to grasp such complexity, she argues, we must begin by recognizing the crudeness of our representational tools. In the

word “railway,” for example, is embedded not just a familiar station or an image of track stretching as far as the eye can see, but also a multitude of other concrete items of knowledge and experience, such as would manifest more immediately in the minds of a “‘navvy,’ an engineer, a traveller, a railway director and a shareholder, [or] a landed proprietor in treaty with a railway company”; only if we combine all these essential facts do we have “the existence and relations of the *thing*” (139). Eliot’s conception of “thing” here is quite a lot like Latour’s: the thing is an assemblage, a collection of “complex facts summed up in [a] collective term” (140). Only by recognizing the collective nature of things do we become capable of sympathy.

Of course, Eliot’s teasing out of human connections and relations with regard to a non-human entity is more concentrated on the institution of the railway than on its machines. Moreover, in *Middlemarch* (1871–72), it has been noticed, the railway is at once something that involves a concrete historical web of actors and a “preindustrial” organic entity that “breeds” and suffers “infant struggles,” and whose figuration is in part an effort to hold on to the experiential and the local in the face of the ever-increasing abstraction of value in economic-industrial modernity (Givner 228). In this combination, the railway becomes a repository of human sympathy in which face-to-face recognition of the joys and sufferings of others can be experientially broadened into a wider world of institutionally driven connections.

Elsewhere in Eliot’s writing, however, the non-human is what stands at the limits of sympathy, and the task of the narrative is to push against these limits and draw the objects that lie outside them into its fold. This, for her, is the difference between greater and lesser minds. At one extreme lies a form of sympathy so exquisite that it can distill spiritual meaning and destiny out of “unnumbered impressions”—Mordecai’s prophetic gift in *Daniel Deronda*. At the other extreme lie characters like the self-serving aristocratic Grandcourt, whose instincts are so narrow as to be like those of an insect, or (strangely kin to him) the cataleptic Silas Marner. The greatness of psychological realism, then, lies in its capacity to imitate the expansive mind: to create a “narrow portal” that will filter and make meaningful an “inrush” of perceptions (*Deronda* 471). At the same time, a single consciousness may not be able to endure such understanding: in *Middlemarch*, for instance, the narrator famously describes how “if we had a keen vision and feeling of all ordinary human life, it would be like hearing the grass grow and the squirrel’s heart beat, and we should die of that roar which lies on the other side of silence” (192). The price of truly grasping the social and its fantastic relay of human and non-human actors, in other words, may be emotional disintegration.

This paradox at the heart of Eliot’s novels—that sympathy is at once the key to sociability and also a force that may de-animate the human—anticipates the non-anthropocentric, object-oriented focus of much current critical thought. Latour describes “the network of individuals, the welter of equipment, the pullulations of occasions” that make up the stream of human and non-human events constituting the social (*Style* 24). But others have proposed more specifically how sympathy *diminishes* the human. Blakey Vermeule, for instance, describes how literary forms enhance sympathetic feeling and sociality by engaging in “mind blindness” (68), an opacity in the depiction of character that temporarily de-animates and dehumanizes the social world in order to exercise the reader’s mind-reading skills. Hence, strangely, the deliberate shrinking of other minds into objects lies at the core of social feeling. In a similar vein, Rae Greiner reveals how novelistic realism captures the very failure of minds to grasp the content of other minds; it is only by preserving the distance between self and other that social order becomes representable.¹¹ And Jonathan Lamb has proposed that acts of sympathetic kindness are possible only with the crushing of the ego and utter abjection of the human subject.¹² These accounts of sympathy point to the speculative nature of realism: as Ian Bogost has put it, objects become accessible to thinking subjects only through an “alien phenomenology” (40). Neither fully accessible nor infinitely removed from us, objects reveal only those portions of themselves that are in dynamic relation with other objects or parts of objects, including ourselves. Otherwise, they are secret and unreadable. As a mode of speculative realism, sympathy is full of peril for the autonomous subject and its confident mapping of a horizon of objects.

The anti-humanism of the great novel is therefore found in the way that it ranges across so many characters, objects, places, and events, and through so many pages. Whether concentrated on the discovery of a much larger world than the ego can ever manage or manipulate, like the awareness that throws Gwendolen Harleth into a cataleptic fit, or narratively pulled away from human consciousness to the exhilarated “mind” of an object, as in *Dombey and Son*, the great novel’s unravelling of human autonomy is tied to its depiction of a network. This is the vast web of entities through which the human and non-human are imbricated, or through which sympathy routes minds to other minds even as it humbles thought in the face of what it cannot grasp and subdue.

The Made Man and the Machine

Erewhon has none of the webby realism of a great novel. Indeed, in his preface to the revised edition, Butler expresses astonishment that this early novel received the recognition it did given its “literary inelegancies” (xv) and

the fact that there was “hardly any story and little attempt to give life and individuality to the characters” (xvi). Of course both characterization and plot are limited by the genre of utopia (or sometimes dystopia). Although the opening scenes in which the narrator, Higgs, journeys across a mountain range in search of good grazing land are based on Butler’s own experiences in New Zealand, the semi-autobiographical aspect of the story quickly recedes.¹³ Most of the narrative instead describes the manners and institutional histories of the strange country into which Higgs stumbles: punishments for illness instead of crime; a system of coinage that rewards corrupt church ministers; “Colleges of Unreason”; a discourse on vegetarianism that devalues human rights; and (my focus here) “The Book of the Machines,” which describes how industrial revolution was reversed and machines were outlawed in Erewhon. Through these descriptions, *Erewhon* seems more interested in outlining the hypocrisies of English society than in fleshing out the characters and fortunes of the real or imaginary inhabitants of a remote country in the South Pacific.

Reviewers had mixed responses. The *Examiner* suggested that the novel “recalls the memorable performance of *Gulliver’s Travels*,” but went on to say that it was “too abstract, too thickly studded with argumentative expostulation and not sufficiently translated into the concrete forms of daily life to rival … Swift’s satire” (“Erewhon” 432). The *Athenaeum* condemned it as a “slovenly” and “inconsistent” satire (492). The *Saturday Review* praised “a good many ingenious remarks and some caustic hits in the book,” but complained that “on the whole the allegory seems too farfetched and complicated to have the desirable brilliancy of effect” (508). Without any real depth of characterization or some modicum of realism with which to anchor the narrative, these reviews concurred, readers could not be engaged long enough to laugh at the absurdity of foreign manners, let alone to recognize them as their own.

Yet this poverty of character and narrowness of reach can serve as a route into the rather complex colonial politics of the novel. One formal way of reading *Erewhon* as critical toward colonialism is through its sophisticated manipulation of genre. As David Amigoni has pointed out, the novel uses satiric defamiliarization to challenge assumptions about sovereignty and the human that come from Darwinian evolutionism as much as from racial anthropology.¹⁴ Focusing on the utopia form specifically, Sue Zemka has compellingly argued that Butler upturns a tradition whose roots are profoundly humanist in order to undermine a metaphysics of the human upon which colonial ideology rests. Despite opening scenes that deploy familiar colonial tropes of pastoral harmony through the enclosure of wild lands and the distinctions between civilized and savage, subhuman peoples, she points out, subsequent chapters repeatedly

undermine the ontological distinctions that justify colonial expansion. In particular, the chapters on vegetarianism (in which the Erewhonians risk starvation when they speculate on the suffering of vegetables as well as animals) and in “The Book of the Machines” (where the boundaries between human and machine bodies becomes entirely porous) undo the privileged category of the human. “The figure of the human succumbs to a catastrophic collapse of its structuring antimonies” in a context wherein the question of what constitutes the human carries an enormous charge (Zemka 465). In what others have celebrated in the novel as the shattering of the discrete categories of organism and machine, Zemka identifies an implicit critique of the colonial project. The defeat of humanism is signaled in what Gilles Deleuze and Felix Guattari identify as the desiring machine of *Erewhon*, in which both bodies and machines are engineered through an incorporation of the other.¹⁵

Yet *Erewhon* also reminds us that in the relationship between technology and empire a new kind of human subject appears whose autonomy, value, and power over others—especially other humans—is predicated on the antihumanism of the machine age. Read this way, the novel does not celebrate the collapse of human-non-human distinctions at all. Instead it recognizes in that collapse how the dethroning of discretely human agency is bound up with acts of enclosure and dispossession brought about by the expansionist pressures and technological affordances of industrial capitalism. Although far from overtly anti-colonial, *Erewhon*’s famously hard-to-pin-down satire in combination with its “poor” form, or literary “minorness,” indicates ambivalence toward the richer narratives that entwine humans and non-human objects within immense social networks.

Strikingly, given that the novel establishes a colonial setting that it later seems to forget, reviewers either ignored or, like the *Athenaeum*, outright praised the opening chapters that precede the narrator’s discovery of Erewhon. These chapters, which unabashedly applaud the heroic settler spirit, describe Higgs’s experiences on a Canterbury sheep farm and his journey into the mountains in search of new grazing land. Based largely on Butler’s own experiences as a short-term colonist in New Zealand between 1860 and 1864, this section draws on real events from settler history. In the 1850s, the Crown opened “waste” lands for farming, a signature act of enclosure in the new colony. Although most of the available runs had been spoken for by 1860, remoter areas, particularly further west in the MacKenzie country, held out the promise of yet undiscovered grazing land. Higgs, like Butler, becomes an explorer in this region in hopes that “if I could only find workable country, I might stock it with borrowed capital, and consider myself a made man” (“A First Year” 7).

Like Butler, too, he proves to be a temporary resident of the colony, what James Smithies calls a “transnational entrepreneur” (211). According to Smithies, the transnational mobility of middle-class Victorians—the quite rapid movement that many undertook back and forth between metropole and periphery—betrays the too frequent assumption that Butler “was living in a frontier society consisting solely of pastoralism and wide open spaces” (212). By the 1860s, New Zealand was both industrialized—a railway system, a telegraph line, and a major bridge were all in the process of construction in the Canterbury settlement when Butler arrived—and integrated into a global economy in which sheep’s wool, in particular, had considerable currency.¹⁶ Despite having roughed it in the wilderness, the made man is profoundly embedded in a highly technologized imperial economy.

Also belonging to these early sections is the novel’s lone Māori character, Higgs’s unreliable guide, improbably named “Chowbok.” Chowbok is a creation of Victorian racial anthropology: “grotesque,” “fiendish,” excessively superstitious, and close to primitive nature (13). His character signifies a familiar distinction between the fully human landed settler and the subhuman or nature-bound landless native, a false characterization that in turn serves to justify enclosure. This characterization also invokes particular events in New Zealand’s colonial history, specifically Māori/Pākehā (settler) relations and the expropriation of Māori land. From the 1840s on, large, loosely demarcated areas that were not heavily cultivated by Māori became the subject of systematic blanket purchases wherein the Māori claim was resigned in return for trifles. These purchases were legitimized through negotiations with chiefs that Crown officials erroneously asserted were speaking for all claimants. Māori—whose concept of ownership and land rights was more complex and dynamic than the European one of fixed, individual property—assumed that they still had hunting and fishing privileges on these lands until the fencing of plots and the draining of swamps and wetlands made these impossible.¹⁷ At the very time that Butler was becoming a made man in Canterbury, wars in the North Island’s Taranaki and the Waikato were challenging Crown land claims and the undermining of communal ownership. In his letters home, later published as *A First Year in Canterbury Settlement* (1914), virtually Butler’s only comment on indigenous New Zealand was that “there are few Maoris here; they inhabit the North Island, and are degenerate in this, so they may be passed over unnoticed” (127).

Yet as indifferent as the novel appears in these early chapters to the devastating effects of enclosure, settlement, and colonial trade on the Māori economic base, it never quite forgets them. By the end of the story, Higgs’s colonial scheming threatens to reduce the Erewhonian race to utter dispossession, while

he leaves Erewhon with his confident entrepreneurial spirit of adventure intact. What enables us to read this contrast satirically are the intervening chapters in which the notion of human autonomy is so completely undermined that even the humanness of the settler may seem uncertain, echoing the fear that Butler had revealed in his New Zealand journals about becoming identified with his animal charges. At least temporarily enthralled by the history of Erewhon's manners, Higgs reproduces lengthy passages from Erewhon's revered "The Book of the Machines," asking "where does consciousness begin and where does it end? Who can draw the line? Who can draw any line? Is not everything interwoven with everything?" (234). Not only are we unable to establish a firm boundary between humans and other life forms, but also the cognitive talents that we identify as evidence of our evolutionary superiority over other creatures depend on machine technology. Moreover, machines are becoming indistinguishable from living things: while primitive tools like the axe and the hammer "received their impressions through the agency of man's senses" and were fed through his stomach, steam-driven machines begin to eat and breathe and act upon the world independently of their human hosts (239). If we try to separate animals from machines by declaring that the latter cannot reproduce, we run quickly into the objection that, while they require the intervention of human agency to do so, so too does the clover require the agency of the bee. In addition to the dreadful spectacle of machinate pseudo-humans in "The Book of the Machines," chapters on "Rights of Animals" and "Rights of Vegetables" (added to a later edition of the novel) also draw attention to the blurring of human/non-human boundaries. As Philip Armstrong has noted, these chapters fictionalize Butler's peculiar brand of Lamarckism, in which the development of all life forms is connected through unconscious ancestral memory, thereby bringing human and non-human into evolutionary proximity.

So if it reveals that all entities—both organic and non-organic—emerge and reproduce within a mighty web that connects them all, why doesn't *Erewhon* attempt a greater map of what Eliot calls "inevitable kinship"? The answer can perhaps be found in the second chapter focused on "The Book of the Machines," which records a rejoinder to the position outlined in the first (hereafter referred to as the work of "the second author"). This second author has challenged the arguments that machine technology threatens the dominance of the human species, and argued instead that human inventions are so entwined in man's physical being that they should be regarded as "extra corporeal limbs" (267). A man who digs with a spade has an artificially extended forearm; "an organ commonly called an umbrella" protects us from the rain; a man's memory "goes in his pocket book" (269). Yet it is not only objects

that are, as Martin Heidegger would say, “primordial” and “ready-to-hand” that should be seen as limb extensions, but also those that may exist remotely from the body (98). While “lower animals keep all their limbs at home in their own bodies . . . many of man’s are loose, and lie about detached, now here and now there, in various parts of the world” (*Erewhon* 267). They may even be communally owned limbs, “for a train is only a seven-leagued foot that five hundred may own at once” (268). What is unique to human beings among animals is a machinate corporeality, the result of deliberate foresight and self-modification that has made civilization possible, thus further distancing us from our animal relatives, and also from those members of the human species whose tool-use entails less extension. Not only, therefore, are civilized men able to stretch their bodies out across the globe and through the engines that draw remote regions of the empire together—mobilizing labor and consolidating capital—but also their very particular kind of humanness originates in the abstraction of machine-enhanced labor power in the global marketplace: “it was this [second] writer,” Higgs adds, “who originated the custom of classifying men by their horse-power” and divides them into categories of “genera, species, varieties, and sub varieties . . . which expressed the number of limbs which they could command at any moment” (269). In *Life and Habit* (1878), Butler argues that organic personality emerges out of inherited memory, through “vast” and “infinite” repetitions that create types and organize the reproductive script in nature (50). The machinate human personality, by contrast, is spread across the planet through newly enclosed and commercially networked spaces of empire.

This affirmation of a machinate humanity seems to earn Higgs’s approval. But it prompts the reader’s discomfort, particularly as it becomes associated with Higgs’s own entrepreneurial designs. These are revealed in all of their hypocrisy at the end of the novel. Having successfully escaped from Erewhon and returned to London, Higgs develops a scheme for the combined servitude and conversion of the Erewhonians. Sugar plantation owners in Queensland, he reflects, are “in great want of labour” (316). By luring adventurous Erewhonians there with the promise that they can amass great fortunes, he will earn a sizeable enough dividend “which might be spent in repeating our operation and bringing over other cargoes of Erewhonians, with fresh consequent profits” (316). The success of this undertaking would be assured by the expedience of shipping them across the Tasman in conditions that recall those of the Atlantic Passage: “a cargo of seven or eight hundred. . . . packed closely and fed at a very reasonable cost” (316). At the same time, they would “benefit” from the religious instruction, “whereof they stand so greatly in need,” provided by their employers. Indeed, other Christian

colonies might be served in the same way, since “the supply of Erewhonians would be unlimited” (316). The novel concludes by inviting applications for shares in the “Erewhon Evangelization Company Ltd.,” and by revealing that Chowbok has become a Christian missionary, bringing Higgs “some satisfaction that [his] own efforts might have contributed to the change that had doubtless been wrought upon him” (320). The suggestion that “saving souls” and “filling pockets” are one and the same project—particularly given that Butler fled to the colonies in order to escape familial expectation that he would take orders—brings the satiric target of “The Book of the Machines” more clearly into focus (317). Higgs’s revelation at the end of his narrative—that the whole account of Erewhon has been an elaborate advertisement to potential shareholders—suggests that his hypocritical entrepreneurial designs have been a target of Butler’s mockery all along.

Where the great Victorian novel represents the tangle of human and non-human beings through the intertwining of agencies that gives depth and complexity to human characters, or that animates non-human ones, *Erewhon* highlights a modern form of human autonomy that is nonetheless bound closely to the machine. The “machinate mammal” is the made man: a being abstracted into the profits that he draws from his land or other colonial ventures, and that he multiplies through the trading networks of the empire (*Erewhon* 267). At the same time, he extends himself through technologies that enable the rapid movement of goods and money across great distances, and that draw the farthest reaches of that empire into one magnificent network. As a man of business, then, Higgs is marvelously disembodied: he is a specimen of what the second author calls “those mighty organisms … our leading bankers and merchants [who] speak to their congeners through the length and breadth of the land in a second of time; [and whose] rich and subtle souls can defy all material impediment.” In contrast, the poor and dispossessed remain “clogged and hampered by matter, which sticks fast about them as treacle to the wings of a fly.” These lesser beings are immune to the transformative power of steam, track, or telegraph; their “dull” ears “must take days or weeks to hear what another would tell them from a distance, instead of hearing it in a second as is done by the more highly organized classes” (270). Applauding how the train has become an adaptive extension of the body in the figure of the made man, the second author concludes:

Who shall deny that one who can tack on a special train to his identity, and go wheresoever he will whensover he pleases, is more highly organized than he who, should he wish for the same power, might wish for the wings of a bird with an equal chance of getting them; and whose legs are his only means of locomotion? (270)

Although he suffers no Gulliver-like humiliation at the end of *Erewhon*, Higgs too becomes the object of his author's satire as the profit-lust of the made man, harnessed to the networking technologies of imperial commerce, so clearly feeds on the primitive, sluggish bodies of the poor and the colonized.

Latour uses "The Book of the Machines" as a parable for the silencing of the non-human in rather the same way that Karl Marx compresses Daniel Defoe's *Robinson Crusoe* (1719) into an allegory for the pre-social determination of value in *Capital: Critique of Political Economy* (1867). In order to produce these accounts, both Latour and Marx have to forget the presence of colonized and classed subjects in narratives that combine the projects of enclosure and global commercial enterprise. These are, for Butler, the matter-heavy, primitive bodies of those who cannot participate in the profit-making extension of limbs from the commercial core into the industrializing peripheries of empire. They are specifically and historically *not* entangled with the remote, machinate non-human. As much as giving voice to the passions of machines may deepen and broaden representations of the social in the great novel of the North, Butler's "The Book of the Machines" reveals how, in a small country in the South Pacific, machine life can quickly transform into colonial capital, separating the disembodied and powerfully networked colonizer from the bodies of forced laborers and increasingly landless peoples.

In *Reassembling the Social: An Introduction to Actor-Network-Theory* (2005), Latour again praises *Erewhon* for drawing attention to the role of non-humans in social networks where they ordinarily remain invisible or muted. Butler, he suggests, alerts us to the value of "good" texts, those that "take into account at least some of the many quirks of their recalcitrant objects" (125). Above all, a good text "traces a network" in which every participant, human or non-human, is an actor (128). Yet through its complex satiric layering, *Erewhon* offers a caution. In our enthusiasm for the great novel's exquisite tracing of network and its patient attention to the non-human, Butler warns, we may forget to read for histories of dispossession and dehumanization in which networks themselves remain far from innocent.

University of Kansas

NOTES

I wish to thank Rae Greiner, Ivan Kreilkamp, Kathryn Conrad, and my anonymous readers for their enormously thorough and helpful feedback on earlier drafts of this essay.

1. See also Grossman, Gibson, Brake, Hensley, Worth.

2. See Freedgood, 1–29.

3. See Isobel Armstrong.
4. I combine studies of “objects” and “things” here, but these are philosophically distinct. Latour proposes that we recognize the webby nature of both, challenging Heidegger’s distinction between the “thing” (as a form of gathering that reveals being) and the “object” (which is held in standing reserve by the regime of modern technology). Latour asks “what would happen … if we tried to talk about the object of science and technology, the *Gegenstand* [the object; literally, a “standing against”], as if it had the rich and complicated qualities of the celebrated *Thing?*” (“Critique” 233). In Brown’s very different account, “things” are former objects that have ceased, even momentarily, to work for us either as shapers of subjectivity or circuits of production, distribution, and consumption (4). On the application of thing theory to Victorian Studies, see Boehm, Sattaur.
5. See Neill, 87–88.
6. See Van Ghent.
7. See Deleuze and Guattari, 284–86; Ketabgian, 55.
8. See Sussman, *Victorian Technology*, 38.
9. See Schivelbusch.
10. Eliot’s self-consciously shorter works, like *Silas Marner* (1861) or *The Lifted Veil* (1859), are equally “serious” in their concentration on the failure of sympathy (see Neill, 107–21).
11. See Greiner, 1–23.
12. See Lamb.
13. While the narrator is not named in *Erewhon*, he is named in *Erewhon Revisited* (1901). I identify him as “Higgs” here to minimize any confusion that might arise in my discussion of “The Book of the Machines,” in which he is summarizing the writings of two Erewhonian authors.
14. See Amigoni, 149–50.
15. Sussman has described how Butler simultaneously recognizes the animalization of the machine and the machine as the principle mode of human development. See *Victorians and the Machine*, 135–61.
16. See Philip Armstrong, 442.
17. See Orange; Anderson et al., 246–48.

WORKS CITED

- Amigoni, David. *Colonies, Cults and Evolution: Literature, Science and Culture in Nineteenth-Century Writing*. Cambridge UP, 2007.
- Anderson, Athol et al. *Tangata Whenua: A History*. Bridget Williams Books, 2015.
- Armstrong, Isobel. “Bodily Things and Thingly Bodies: Circumventing the Subject-Object Binary.” *Bodies and Things in Nineteenth-Century Literature and Culture*, edited by Katharina Boehm, Palgrave MacMillan, 2012, pp. 17–41.
- Armstrong, Philip. “Samuel Butler’s Sheep.” *Journal of Victorian Culture*, vol. 17, no. 4, 2012, pp. 442–53.
- Boehm, Katharina. “Bodies and Things.” *Bodies and Things in Nineteenth-Century Literature and Culture*, edited by Katharina Boehm, Palgrave MacMillan, 2012, pp. 1–16.
- Bogost, Ian. *Alien Phenomenology, or What It’s Like to Be a Thing*. U of Minnesota P, 2012.

- Brake, Laurel. "Time's Turbulence: Mapping Journalism Networks." *Victorian Periodicals Review*, vol. 44, no. 2, 2011, pp. 115–27.
- Brown, Bill. "Thing Theory." *Things*, edited by Bill Brown, U of Chicago P, 2004, pp. 1–22.
- Butler, Samuel. *Erewhon, or Over the Range*. E. P. Dutton and Co., 1927.
- _____. *Erewhon Revisited Twenty Years Later both by the Original Discoverer of the Country and by His Son*. G. Richards, 1901.
- _____. "A First Year in the Canterbury Settlement." *A First Year in the Canterbury Settlement with Other Early Essays*. Edited by R. A. Streatfeild, A. C. Fifield, 1914, pp. 3–142.
- _____. *Life and Habit*. Trübner, 1878.
- Daly, Nicholas. *Literature, Technology, and Modernity, 1860–2000*. Cambridge UP, 2004.
- Deleuze, Gilles and Felix Guattari. *Anti-Oedipus: Capitalism and Schizophrenia*. Translated by Robert Hurley et al., U of Minnesota P, 1983.
- Dickens, Charles. *Bleak House*. Oxford UP, 1996.
- _____. *Dombey and Son*. Penguin, 2002.
- _____. *Our Mutual Friend*. Penguin, 1971.
- Eliot, George. *The Lifted Veil*. Virago, 1985.
- _____. *Middlemarch*. Oxford UP, 1997.
- _____. "The Natural History of German Life: Richl." *The Works of George Eliot*, vol. 11, P. F. Collier & Son, 1883, pp. 139–73.
- _____. *Silas Marner*. Ann Arbor Media Group, 2004.
- _____. "Silly Novels by Lady Novelists." *Westminster Review*, vol. 66, 1856, pp. 243–54.
- "Erewhon." *The Examiner*, 27 Apr. 1872, pp. 432–34.
- "Erewhon." *The Saturday Review*, 20 Apr. 1872, pp. 507–08.
- "Erewhon, or Over the Range." *The Athenaeum*, 20 Apr. 1872, p. 492.
- Ermarth, Elizabeth Deeds. "George Eliot's Conception of Sympathy." *Nineteenth-Century Fiction*, vol. 40, no. 1, 1985, pp. 23–42.
- Freedgood, Elaine. *The Ideas in Things: Fugitive Meaning in the Victorian Novel*. U of Chicago P, 2006.
- Gibson, Anna. "Our Mutual Friend and Network Form." *Novel: A Forum on Fiction*, vol. 48, no. 1, 2015, pp. 63–84.
- Givner, Jessie. "Industrial History, Preindustrial Literature: George Eliot's *Middlemarch*." *ELH*, vol. 69, no. 1, 2002, pp. 223–43.
- Greiner, Rae. *Sympathetic Realism in Nineteenth-Century British Fiction*. Johns Hopkins UP, 2012.
- Grossman, Jonathan H. *Charles Dickens's Networks: Public Transport and the Novel*. Oxford UP, 2012.
- Heidegger, Martin. *Being and Time*. Translated by John Macquarrie and Edward Robinson, Blackwell, 1962.
- Hensley, Nathan K. "Network: Andrew Lang and the Distributed Agencies of Literary Production." *Victorian Periodicals Review*, vol. 48, no. 3, 2015, pp. 359–82.
- Ketabgian, Tamara. *The Lives of Machines: The Industrial Imaginary in Victorian Literature and Culture*. U of Michigan P, 2011.
- Lamb, Jonathan. "Modern Metamorphoses and Disgraceful Tales." *Things*, edited by Bill Brown, U of Chicago P, 2004, pp. 193–226.

- Latour, Bruno. “Agency at the Time of the Anthropocene.” *New Literary History*, vol. 45, no. 1, 2014, pp. 1–18.
- . *Aramis; Or The Love of Technology*. Translated by Catherine Porter, Harvard UP, 1996.
- . *Reassembling the Social: An Introduction to Actor Network Theory*. Oxford UP, 2005.
- . “Why Has Critique Run Out of Steam? From Matters of Fact to Matters of Concern.” *Critical Inquiry*, vol. 30, no. 2, 2004, pp. 225–48.
- Leavis, F. R. *The Great Tradition: George Eliot, Henry James, Joseph Conrad*. George W. Stewart Publishers Inc., 1950.
- Levine, Caroline. *Forms: Whole, Rhythm, Hierarchy, Network*. Princeton UP, 2015.
- Neill, Anna. *Primitive Minds: Evolution and Spiritual Experience in the Victorian Novel*. Ohio State UP, 2014.
- Orange, Claudia. *The Treaty of Waitangi*. 2nd ed., Bridget Williams Books, 2013.
- Plotz, John. *Portable Property: Victorian Culture on the Move*. Princeton UP, 2008.
- Sattaur, Jennifer. “Thinking Objectively: An Overview of ‘Thing Theory’ in Victorian Studies.” *Victorian Literature and Culture*, vol. 40, no. 1, 2012, pp. 347–57.
- Schivelbusch, Wolfgang. *The Railway Journey: The Industrialization of Time and Space in the Nineteenth Century*. 2nd ed., U of California P, 2014.
- Smithies, James. “Return Migration and the Mechanical Age.” *Journal of Victorian Culture*, vol. 12, no. 2, 2007, pp. 203–24.
- Sussman, Herbert. *Victorian Technology: Invention, Innovation, and the Rise of the Machine*. Greenwood Publishing Group, 2009.
- . *Victorians and the Machine*. Harvard UP, 1968.
- Taine, Hippolyte. “Charles Dickens: son talent et ses œuvres.” Translated by H. Van Laun. *Dickens: The Critical Heritage*, edited by Philip Collins, Routledge and Kegan Paul, 1971, pp. 337–42.
- Van Ghent, Dorothy. “The Dickens World: A View from Todgers.” *The Sewanee Review*, vol. 58, no. 3, 1950, pp. 419–38.
- Vermeule, Blakey. *Why Do We Care about Literary Characters?* Johns Hopkins UP, 2010.
- Worth, Aaron. *Imperial Media: Colonial Networks and Information Technologies in the British Literary Imagination 1857–1918*. Ohio State UP, 2014.
- Zemka, Sue. “*Erewhon* and the End of Utopian Humanism.” *ELH*, vol. 69, no. 2, 2002, pp. 439–72.

Copyright of Victorian Studies is the property of Indiana University Press and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.