

# Of Writing Machines and Scholar-Gipsies

Christopher Keep  
University of Western Ontario

**T**HE VANCOUVER ART GALLERY recently mounted an exhibition entitled *The Uncanny: Experiments in Cyborg Culture*. Proceeding in a roughly chronological manner, the exhibition provided an overview of some of the many ways which the melding of human and machine has been imagined in both the fine arts and popular culture, from the nineteenth century to the present. The visitor to the Gallery was greeted at the outset by a cherubic mechanical boy, dressed in a red satin waistcoat and matching hat that one imagines would have looked very fashionable in 1810, when it was made. The automaton stood at a small writing desk, a stylus poised over a blank sheet of paper. The story goes that when it was donated to the Franklin Institute in 1928, the machine was little more than a box of loose parts, having been recently destroyed in a fire. Automatons from the late-eighteenth and early-nineteenth century were designed to reproduce some distinctly human action, such as playing chess, or dancing a jig, but in its present condition there was no way to predict what this one was meant to do. Over the next months, the complex arrangement of wheels and gears was painstakingly reassembled. Finally, it was wound up and let go. To the amazement of those present, the machine bent over its piece of

**CHRISTOPHER KEEP** is an Associate Professor in the Department of English at the University of Western Ontario. He has published articles in *Victorian Studies*, *Victorian Review*, *Novel*, *Nineteenth-Century Contexts* and in several collections of essays. He is currently working on a book-length study of literature and the emergent information economy of the nineteenth century.

paper and composed a poem in French, before concluding with the phrase, “Écrit par L’Automaton Maillardet” (Grenville 14).

Visitors today seemed no less surprised by Maillardet’s automaton, the exhibit drawing, at least on the day I was in attendance, a great deal more attention than the cubist paintings of Leger and Picasso, or the video installations showing sequences from Fritz Lang’s *Metropolis* and Paul Verhoeven’s *Robocop*. We expect a computer to play chess, or a metallic policeman to wield a rapid-fire rifle, but writing is somehow different. It suggests the presence not of a program but of a person, one whose actions are the free and spontaneous expressions of some deep reserve of selfhood, an inwardness or depth of being which is capable of reflecting on itself as a self. The very appearance of writing, as Plato suggests in the *Phaedrus*, is always marked by the trace or outline of a living presence, the unique individual who is both the source and origin of the enunciative act. No wonder, then, the interest of the crowds in Maillardet’s automaton, and its precocious claim to authorship. There is a certain audacity to the act of signing its poem, and not only because “L’Automaton Maillardet” is less a proper name than it is a kind of brand or corporate logo. What we recognize in this performance is not so much the machine’s failure to be human, as something of our own, the automaton’s efforts to establish itself as the origin of expression mirroring our own need to assure ourselves that it is we that write words and not words that write us. The small flourish of the pen as the automaton signs its name seems strangely familiar.

To someone who is interested in the relationship of technology to the study of literature, what was most surprising about this representation of the writing machine was its evident delight in its subject matter. Evoking little of the fear or dread that one typically associates with the uncanny, Maillardet’s automaton stands in marked contrast to the dominant tone of much of the contemporary debate concerning the effects of technology on the practices of reading and writing. In his study of the decline of book culture, *The Gutenberg Elegies*, Sven Birkerts places the blame for the current state of literacy on the computer, and the highly mediated forms of social interaction that result from networked communications. Following a line of argumentation first developed by Marshall McLuhan, Birkerts claims that the sequential nature of print, in which the reader must gather meaning in a cumulative manner as she proceeds from the left to the right margin and from the top to the bottom of the page, has given way to the instantaneity of the electric circuit. In the hypertextual space of the internet one does not so much read as respond, clicking through disjunct fragments of information in an associative, multi-lateral fashion.

The result, Birkerts claims, is a flattening of experience itself. The perpetual “now” of computer time, where one is always “on-line,” is antithetical to a sense of history and its corollary, the private, insular self that comes of time conceived as duration. If our students find it increasingly difficult to read a novel by Henry James it is because they no longer possess the deep interiority, the capacity for reverie, that Birkerts associates with the very notion of being human:

I do not anticipate a future utterly without books, or bereft of all discourse about ideas, or entirely given over to utilitarian pursuits. No, what I fear is a continued withering-away of influence, a diminution of the literary which brings about a flattened new world in which only a small coterie traffics in the matters that used to be deemed culturally central. My nightmare scenario is ... of efficient, prosperous information managers living in the shallows of what it means to be human and not knowing the difference. (194)

Birkerts seems to have forgotten that the book was itself an elite technology, available only to “a small coterie” for much of its existence, and in many places still is. Moreover, it is not quite clear how the reading of print-based literature once brought us into contact with what he calls “the primal terms of existence,” those “terrors and agons” now “banished outside the pulsing circulation of data” (194). Are books less forms of mediation than computer screens? Can printed signs claim a greater proximity to their referents than their electronic counterparts? What is clear is that the decline of print culture, and the form of subjectivity associated with it, come to him as a betrayal of some essentially human qualities. It is a concern that he shares with Neil Postman, who claims that “the uncontrolled growth of [communications] technology destroys the vital sources of our humanity. It creates a culture without moral foundation. It undermines certain mental processes and social relations that make human life worth living” (xii). Like Birkerts, then, Postman assumes that networked communications are a radically new phenomenon, resulting in an epistemic break with the past, and endangering the very possibility of a moral life.

It would be easy to dismiss such comments as mere nostalgia for the golden age of print, if it were not for the simple fact that much of what is said here does seem to accord with the experiences of many teachers and researchers in the humanities. We might wince at the apocalyptic tone that Birkerts and Postman adopt, but somehow what they say still rings true. Certainly the nightmare of a world given over to “efficient, prosperous information managers living in the shallows of what it means to be human”

I am become  
a machine. It's  
a comforting  
thought, in a  
sense ...

will sound suspiciously familiar to anyone just coming from a meeting with central administration. In an institutional context where increasing class sizes, graduate supervision, and administrative duties consume not only the time of tenure-track faculty, but often ensnare limited-duties faculty as well, there is the sense that what we teach in the classroom is secondary to the activity of sorting, evaluating, and assessing. Such, at least, is the argument of Evan Watkins, who adopts Marx's concepts of "concrete" and "abstract" labour to distinguish between the kinds of work which have value within an English Department, the ability, for example, to note the fusion of contradictory ethical claims in *Paradise Lost*, and those which circulate without. The "abstract labour" of an English Department, then, is its role in the circulation of values that maintain a set of social relations, a form of labour in which we produce not so much interpretations of specific texts as a variety of statistical data that allow certain individuals access to desired social and economic opportunities while barring others. University teachers, in this sense, are very much a "labour force," "a large body of people who in the gross number terms of grades generate over and over, like the 'intellectual assembly line' to which it's often been compared, the discriminations on which economic opportunity depends" (6). As workers on the intellectual assembly line, our most pressing danger, as Marx foresaw, is that in our increasing subordination to the procedures of the institution, we become less human and more mechanical.

There are days when this certainly seems the case. When I arrive in my office having just finished grading a stack of essays, only to find another handful jammed under the door, I can hear the creaking of the gears and wheels in my head as the metal oxidizes and the rust takes hold. I am become a machine. It's a comforting thought, in a sense, allowing one to explain the inequities of our material conditions of work by way of a strangely beguiling myth of man's fall from a former state of grace. It's a myth that has little changed from Blake's major prophecies to the Wachowski brothers' *Matrix* trilogy. Once upon a time, it suggests, we were human, but the machines have usurped our place in the order of things and subordinated our labour to theirs, holding us in thrall by blunting our awareness of our forgotten humanity. The exact reasons why this myth should have remained so potent for so long, especially in the humanities where we've become used to exploding myths of all sorts, would require quite another essay than this. But let me, as my contribution to this Readers' Forum, suggest something of the dangers of falling too heavily under its spell, of accepting, indeed, aggressively enforcing our difference from the machinic in order to pose as the guardians of the

human. The opposition of the human to the machine, I will argue, is not a natural feature of the intellectual landscape, however much it might appear so at present. Far from endangering literary studies, the machine, and its carefully orchestrated threat to the book, was essential to the discipline's institutionalization, helping it to secure a valued position within the curriculum. The dilemma we face today, then, if we accept the proposition that the cultural authority of the humanities is in decline, is not so much of the study of literature having fallen prey to the debilitating effects of technology, but of our lingering devotion to an idea of the "human" that is increasingly anachronistic. Such devotion threatens to leave the humanities, much like Arnold's Scholar-Gipsy, struggling to find a means of approach to the cultural condition of modernity.

The conception of the human as a form of *technē*, that is to say, as something crafted or made with the aid of an instrument, reached its apogee in the early-eighteenth century, when the fabulous automata of Jacques de Vaucanson toured the world to great acclaim. Vaucanson was drawn to construct his clockwork mechanisms through his interest in anatomy. Following the work of William Harvey, which described the heart as a kind of pump, forcing blood through the arterial network by means of pneumatic pressure, Vaucanson set out to construct an *anatomie mouvante*, a three-dimensional model of the entire human form that would faithfully recreate its various actions and motions by means of an elaborate clockwork mechanism. The project was intended as a contribution to medical science, but Vaucanson had difficulty in raising the necessary funds for his *anatomie mouvante* and thought to elicit interest by constructing a series of less ambitious automata for public display. The first of these was a life-size flute player that was presented at the Académie des Sciences in 1738. Described by Christof Assendorf as a "miraculous contrivance—an intricate mechanism in which a set of bellows driven by a clockwork supplied air to a flute," the figure was able "to produce tones just like a human flautist through the movements of fingers, lips, and tongue" (7). Vaucanson used it principally to illustrate the ways in which the forced passage of air through the nasal cavity and the mouth was responsible for the production of sound, but the public delighted in its rendition of popular tunes of the day, the machine's precision playing rivalling that of the finest virtuosi. The inventor followed its success with what was to become the most famous of the eighteenth-century automata, a mechanical duck. First demonstrated in 1739, this automaton could waddle up to its plate, pluck up a fish, eat, digest, and even excrete its food with the aid of an elaborate intestinal network, the first such apparatus to employ rubber hose. A true marvel

of mechanical engineering—each of its wings alone consisted of over four hundred moving parts—the shitting duck was the sensation of Europe and made Vaucanson a wealthy man.

Vaucanson's automata were more than popular entertainments, however. They were part and parcel of a general interest, especially among the scholars and artists of the seventeenth and eighteenth centuries, in the capacity of human reason to account for the operations of nature. Animal automata, for example, were cited by Descartes as an influence in his discussion of *la bête machine*. Arguing that there were two orders of being, that of mind and that of matter, each wholly distinct from the other, Descartes insisted that we have no more reason to presume that the body's movements are "controlled by our will than we have reason to think that there is a soul in a clock which makes it tell the time" (315). Julian la Mettrie, having witnessed Vaucanson's mechanical flautist, went one step further. Where Cartesian dualism was careful to preserve a space for intellection outside of the purely mechanical domain of nature, La Mettrie claimed that there were not two orders of being, but one, that of matter. Psychology was, by this reasoning, as much an effect of mechanical operations, as was physiology. Just as the latter functioned automatically, with the senses reacting to the irritation caused by sensory stimuli, so too did the mind. "Let us then conclude boldly," he wrote in *l'Homme machine* (1748), "that man is a machine, and that there is in the whole universe only one diversely modified substance" (39). There is no sense here that admitting the mind to the mechanical world of the body has deprived the subject of some essential human quality. Quite the opposite: La Mettrie claims that reason and sensation, or mind and matter, are united in the materiality of the world, a place made more human by a willingness to live independent of any need to explain its motions by recourse to divine essences and supernatural agents working to preordained ends.

The Vancouver Art Gallery, then, was right to identify Maillardet's writing machine as marking a significant moment in the conceptualization of the relation between humans and machines. It was, however, not so much an *etios*, a point of origin, as a *telos*, an end. If it had been possible in 1748 to celebrate the "made-ness" of humans, even to assert it as the distinctive quality of being human, such was not the case by the time Maillardet's mechanical poet first took to the pen. Following the exposure in the late 1760s of von Kempelen's chess-playing Turk (the intelligence displayed by the device turned out to belong to a talented dwarf concealed within its workings), automata were increasingly consigned to the country fair circuit; while they continued to be popular with the masses, they ceased

to exercise the influence on the intelligentsia that they had for Descartes and La Mettrie. Goëthe, for example, records his surprise at discovering Vaucanson's famous creations, once the toast of Europe, languishing in the possession of a collector in 1805. "They were in the most deplorable condition," he writes. "The duck was like a skeleton with digestive problems" (qtd. in Strandh 179). With the rise of industrialization and the emergence of the forms of "abstract labour" that characterised the social relations of the factory system, the machine increasingly appeared as a threat to the idea of the human. For critics like Carlyle, the steam engine was more than simply a novel means of production, one which would greatly reduce manufacturing costs while simultaneously improving speed and efficiency. Such improvements, he argued, were but the outward effects of a much more pervasive transformation of the ways and means by which people understood their relationship to both other people and themselves. "Men are grown mechanical in head and heart, as well as in hand," he writes. "They have lost faith in individual endeavor, and in natural force, of any kind. Not for internal perfection, but for external combinations and arrangements, for institutions, constitutions—for Mechanism of one sort or other, do they hope and struggle" ("Signs" 25). Turned toward the outward, to the material facts of life, the mechanical world has abandoned the deep inwardness, that capacity for reverie that Birkerts would later identify as characteristic of book culture. Such a world, Carlyle argued, was inimical to human feeling; as his literary alter-ego, Teufelsdröckh, puts it, the universe has become but "one huge, dead, immeasurable Steam-engine, rolling on, in its dead indifference, to grind me limb from limb" (*Sartor* 89). The human was now no longer defined in opposition to nature, but to the machine. It was all that an automaton was not, imperfect, mutable, emotive, intuitive, spontaneous, and organic.

Retreating from the materialism of the writing machine, the nineteenth century entrenched an idealist concept of the human at the heart of the study of literature. As the humanities sought to redefine themselves in light of the growing emphasis on the natural sciences, and the demand that university education be directed toward those skills of greatest use in the modern world, the value of the study of literature was increasingly defined in terms of its ability to "humanize" the mechanism-loving masses. The chief architect of this new ideological program was Matthew Arnold, an Inspector of Schools, and the first Professor of Poetry at Oxford to lecture in English rather than Latin. Arnold shared Carlyle's sense that the greatest dilemma facing Britain was the mechanization of its social relations. "Our modern world," he writes in *Culture and Anarchy* (1869),

“is, to a much greater degree than Greece or Rome, mechanical and external, and tends to become more so” (209). Arnold strategically posited “culture” as the only effective bulwark against the anarchy wrought by mechanisation. “Culture,” in this sense, is more than simply “a smattering of Greek and Latin” (204). It is a certain manner of perceiving things in a disinterested and objective manner, as they are in and of themselves, and not as they appear through the lens of self-interest. Such a capacity cannot be achieved through some external mechanism; it is rather an inward condition of the mind and spirit: “[n]ot a having and a resting, but a growing and a becoming, is the character of perfection as culture conceives it” (208). The great men of culture, then, have been those artists and writers who have “*humanised* knowledge; because they broadened the basis of life and intelligence; because they worked powerfully to diffuse sweetness and light, to make reason and the will of God to prevail” (227). This latter point is worth dwelling upon. Where John Henry Newman, in his *Idea of the University* (1851), had argued that the study of letters is an end in itself, Arnold insists that the men of culture have an obligation to disseminate their enlightened sense of proportion, balance, and harmony as broadly as possible. Of particular concern, in this regard, are the Philistine middle classes. Those who crowded into the Crystal Palace to witness the first international exhibition of steam engines, dynamos, and manufactured goods in 1851, those who still marvelled at the liveliness of machines, were not yet properly equipped to take up the governance of the nation. Not surprisingly, then, English was first institutionalized as an academic topic in the Mechanics’ Institutes, working men’s colleges, and extension lecture circuits established in the nineteenth century to educate industrial workers; hardened by their interactions with machines, such men were a kind of test case of the power of English to civilize the working classes (Eagleton 26–27).

The pursuit of “sweetness and light,” however, was premised for Arnold, as for Birkerts and others today, on its radical separation from the deadening effects of mechanisation. Culture was opposed to the forces of mechanisation; it exists both prior to and beyond the modern world, and from such a vantage is able to act as a counter-weight to the fragmentation effected by industrialization. As Bill Readings argues in his astute analysis of the university’s service to the nation state, “Culture continues to name the lost ideal of organic wholeness, while society is henceforth a merely mechanical process of civilization” (80). The machine thus emerges not simply as the “other” to culture, the means by which the latter gathers its specificity in and through its relation with the former. It is, rather, a danger

or a threat to the values of culture: the playful enactment of human actions that characterised the automaton thus gives way to the menacing visage of the “robot”—a term first coined by Karel Čapek in his play, *R.U.R.* (1921). And modernity itself, the product of machines, appears increasingly as a malady or disease afflicting humankind, rendering it either decadent and immoral, as in the work of Nordau, or sick and neurotic, as in Freud. English studies thus achieves its institutional hegemony only in its complicity with a range of discursive practices that seek to pathologize modernity in order that they might then offer themselves as a cure.

The radical idealism of culture took shape, for Arnold, in the figure of the “The Scholar-Gipsy.” Suffused with the same elegiac tone that marks Birkerts’ book, Arnold’s 1853 poem is a lament for the Oxford of his youth. It recounts the popular myth of a young scholar who, having grown “tired of knocking at preferment’s door,” decided to leave his college and join the Gipsy bands that roamed the pastoral landscape of the Cumner Hills (35). He never returned to Oxford, but could still be glimpsed, many centuries later, wandering the countryside, waiting still to catch the “spark from heaven” that is knowledge (171). It is not, however, the Newmanesque pursuit of knowledge for its own sake that has rendered him immortal, but the manner of his pursuit. Modern men, the narrator ruminates, feel “the lapse of hours” in a way that earlier generations did not. “For what wears out the life of mortal men?” asks the narrator:

’Tis that from change to change their being rolls;  
’Tis that repeated shocks, again, again,  
Exhaust the energy of strongest souls,  
And numb the elastic powers. (142–46)

The fragmented world of mechanical interactions draws us in so many directions, and makes so many competing demands on our attention, that “each half lives a hundred different lives,” but never any one life wholly (169). The Scholar-Gipsy, by contrast, has but “*one* aim, *one* business, *one* desire,” and hence he is exempt from the exigencies of time, removed to the pure, rarified sphere of intellection (152). He is, in essence, a model of the man of culture, one who exists both prior to and outside of the modern world, indeed, outside time altogether, from which vantage he is able to patiently and single-mindedly pursue truth without the aid of technical prostheses like the education system.

What this poem discloses, however, and in sharp contrast to Arnold’s prose essays on the topic, is how untenable such a relationship between culture and mechanisation actually is. If the capacity of culture to pursue

English  
studies thus  
achieves its  
institutional  
hegemony only  
in its complicity  
with a range of  
discursive prac-  
tices that seek  
to pathologize  
modernity.

knowledge is predicated on its exteriority to modernity (I think, in this regard, of the penchant of many North American universities, including my own, for neo-gothic architecture, and the efforts to preserve some symbolic strip of gardens to separate the campus from the city proper), then by what means might the contemporary scholar, as a product of such conditions, approach culture without endangering its purity? Such is the dilemma of the poem's narrator who, having ardently pursued the Scholar-Gipsy through the landscape of his youth, hoping to catch sight of him, suddenly and abruptly breaks off the quest. "This strange disease of modern life / With its sick hurry, its divided aims / Its heads o'er taxed, its palsied hearts" (203–05), he realizes, has also infected both him and his quest. Should he come into contact with the object of his pursuit, should he actually meet up with this emblem of sweetness and light, the contagion might spread, like some nineteenth-century version of SARS, to the thing he most desires, the infection borne not on the air but on the pages of a book. "Fly hence, our contact fear! / Still fly, plunge deeper in the bowering wood! /... Wave us away and keep thy solitude!" the narrator warns (206–10). Culture, he seems to suggest, is so lacking in defenses against infection that the merest touch of the mechanical would be fatal to its delicate constitution.

Such is the double bind of English studies as it comes to technology. We have appointed ourselves defenders of some essential, though often unquestioned, values that we deem "human," but have done so largely by opposing such values to the material conditions of the community of which we continue to be a part, and to which we feel some obligation to be of use. The result is that we often find it difficult to relate our work to that community, and experience a certain sense of being "out of sync" or "behind our time." For some it's a badge of honour not to be able to open an email attachment or to recognize the name of a popular TV or film star that appears as the common knowledge of our students. It suggests something of our high-minded disregard of such mechanical affairs. For others, it might not be pride but a sense of embarrassment or perhaps frustration at the expectation that we should have to "keep up," but however we respond, the sense of alienation remains the same; we are outside the community that we come to instruct. This sense of disconnectedness, or, rather, of the inability to connect, is no private fault or personal failing, I would argue, but a product of our institutionalization as Scholar-Gipsies.

By way of conclusion, let me return, however briefly, to the Cyborg exhibit at the Vancouver Art Gallery. For there was, apart from Maillardet's automaton, one other display that struck me forcibly. It was not listed

in the official catalogue, and our tour guide made no mention of it as we went from room to room. Indeed, tucked away in a small alcove at a remote end of the gallery, it would have been easy to assume that it was something left over from another show altogether. It was a chrome and metal case, seemingly dating from the nineteen-fifties and large enough to contain the body of a person if she or he were lying length-ways, as on a narrow table or hospital bed. Closer inspection of a plaque bolted to its side revealed it to be a life support device typically used in the treatment of polio, what is commonly referred to as an iron lung. The patient's body, from the toes to the neck, was encased in this pressurized chamber which would then assume direct control of the respiratory system, pumping air into the lungs, and allowing them to exhale passively; round windows, like port holes, allowed the action of the bellows to be observed. The study of literature is, I feel, in danger of becoming a mechanism much like this, a life support device for which there is no longer a body. Not because, as in the case of polio, the disease for which it was designed has been cured, but because the disease was only ever a phantasy of our own making in the first place, a discursive tactic in the process of our institutionalization that we have come to naturalize as a given fact. In an age in which, as McLuhan claimed, technology is less an instrument for carrying out a specific task than it is an extension of our own nervous systems, the possibility of maintaining some pure, unsullied space exterior to the machinic order seems increasingly remote. If the humanities are to flourish in a world in which the body no less than the culture itself is thoroughly permeated by the technological, where it is the very means by which we communicate with one another, we need to resist the romantic myth of man's fall into the mechanical and to consider alternative models of the human other than that offered by the idealist tradition. We might begin, like the Vancouver Art Gallery, by revisiting some old ones. The small flourish of the pen as the automaton signs its name seems strangely familiar.

## Works Cited

- Arnold, Matthew. "Culture and Anarchy." *Selected Prose*. Ed. P.J. Keating. Harmondsworth: Penguin, 1987. 202–300.
- . "The Scholar-Gipsy." *Selected Poems*. Ed. Timothy Pelatson. Harmondsworth: Penguin, 1994. 141–47.

- Asendorf, Christof. *Batteries of Life: On the History of Things and Their Perception in Modernity*. Trans. Don Rameau. Berkeley: University of California Press, 1993.
- Birkerts, Sven. *The Gutenberg Elegies: The Fate of Reading in an Electric Age*. London: Faber and Faber, 1994.
- Carlyle, Thomas. *Sartor Resartus*. Ed. C.F. Harrold. New York: Odyssey, 1937.
- . “Signs of the Times.” *Selected Works, Reminiscences, and Letters*. Ed. Julian Symons. Cambridge, MA: Harvard UP, 1967. 19–44.
- Descartes, René. “Description of the Human Body and all of its Functions.” *The Philosophical Writings of Descartes*. Trans. John Cottingham, et al. Vol. 1. Cambridge: Cambridge UP, 1985. 314–24.
- Eagleton, Terry. *Literary Theory: An Introduction*. London: Blackwell, 1983.
- Grenville, Bruce, ed. *The Uncanny: Experiments in Cyborg Culture*. Vancouver: Arsenal Pulp, 2001.
- La Mettrie, Julian Offray de. “Machine Man.” *Machine Man and Other Writings*. Trans. Ann Thomson. Cambridge: Cambridge UP, 1996. 1–39.
- Postman, Neil. *Technopoly: The Surrender of Culture to Technology*. New York: Vintage, 1993.
- Readings, Bill. *The University in Ruins*. Cambridge, Mass.: Harvard UP, 1996.
- Strandh, Sigvard. *A History of the Machine*. Trans. Ann Henning. New York: A and W, 1979.
- Watkins, Evan. *Work Time: English Departments and the Circulation of Cultural Value*. Stanford: Stanford UP, 1989.