

## Muses, Spooks, Neurons, and the Rhetoric of “Freedom”

Harold Fromm

For my part, when I enter most intimately into what I call *myself*, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never can catch *myself* at any time without a perception, and never can observe anything but the perception. . . . If anyone, upon serious and unprejudiced reflection, thinks he has a different notion of *himself*, I must confess I can reason no longer with him. . . . He may, perhaps, perceive something simple and continued, which he calls *himself*; though I am certain there is no such principle in me.

—David Hume, *Treatise on Human Nature*, 1739

### I. Muses, Spooks, Neurons

IN THE BEGINNING, THE ANCIENTS talked about the Muses; later on, John Milton spoke of the Creator Spiritus; while W. B. Yeats had us rolling on the floor when he spoofed us with spooks, who brought him images for his poetry through what he called, more aptly than he realized, automatic writing. But all of them were onto something: they realized they hadn't a clue as to where their creativity came from; it all seemed so magical, so implausible, so involuntary. For how could a self freely will ideas, metaphors, images or anything else into existence? To will them, it would have to know them, to hold them all in an omnipresent memory—or at the very least hold them in a mega-index, a veritable Google, of all the brain's contents, which it would need to know by heart—and experts report there are at least fifty billion neurons—and maybe 150 billion—storing the data of our lives. But “we” don't choose the items in our so-called stream of consciousness anyhow—they come unbidden, they “enter our mind,” so what good is an

index? As for the self, forget about anything more than a virtual self or a self effect, unless you can entertain the idea of a spooky homunculus dwelling in the pineal gland, a “central meander,” to use Daniel Dennett’s derisive term, who watches the movies, the stream of consciousness, being shown in the brain’s Cartesian Theater, and pulls it all together into meaningfulness.<sup>1</sup> An organizing center of consciousness, moreover, would make the rest of the brain superfluous, since the center, the “I,” would already be a brain unto itself, knowing everything we attribute to the myriad other faculties, for how else could it request their data? So a self would entail an infinite regress of explanations to account for *its* knowledge, a pre-self that tells the self what it knows, and a pre-pre-self to inform the pre-self, and so on. And the free will that supposedly animates the imaginary self? It can only be an oxymoron. How could a purely virtual self, empty of motivations, no more substantial than the projected image of a movie onto a screen, make choices from the blankness needed to be “free” of predispositions? “Choices” stem from *unchosen* motivations, and the “self” may already have fifty billion of them. (Do “we” choose who will arouse us sexually, what foods will stimulate our appetites, what thoughts will enter our heads?) Without motivations, there wouldn’t be any behavior at all. Why get up and cross the room for no reason at all? Why express a thought that just presented itself? Why go into a rage when nothing has happened to send you into one? Daniel M. Wegner, in *The Illusion of Conscious Will*, has a great deal to say on this subject:

The fact is, each of us acts in response to an unwieldy assortment of mental events, only a few of which may be easily brought to mind and understood as conscious intentions that cause our action.<sup>2</sup>

We perceive minds by using the idea of an agent to guide our perception. In the case of human agency, we typically do this by assuming that there is an agent that pursues goals and that the agent is conscious of the goals and will find it useful to achieve them. All this is a fabrication, of course, a way of making sense of behavior. (146)

Actions and their meanings are stored separately in memory. Otherwise, we would always know exactly what we intend and never suffer the embarrassment of walking into a room and wondering what it was we wanted there. (166)

[I]ntentions are often matters of self-perception following action, not of self-knowledge prior to action. . . . (175)

This position becomes all the more cogent in view of empirical findings of the cognitive neurosciences to the effect that desires are registered in

the brain microseconds before they occur to consciousness and will, a phenomenon of which Wegner, among others, gives an account. Since the publication of Wegner's book in 2002, the matter has been presented in minute physical detail by David M. Eagleman in an article appearing in 2004: "Human brain studies using electroencephalography (EEG) have long suggested that some part of your brain was already moving toward [your] decision well before you were aware of it," that is, before you were aware of making the decision!<sup>3</sup>

As for "free will," it could only mean being constrained into stasis by sheer vacuity, the freedom to be an undifferentiated lump with no predispositions, certainly no unconscious "intentions" that one simply acts out and later explains. Free will, an absurd concept that has been bandied about for centuries, would be no will at all, unconscious or otherwise.

Just what, you may ask, *are* those neurons, also known as "brain cells," to which everything is attributed these days and whose connection with the mind John Donne, to the best of his knowledge, tried to account for hundreds of years ago as "that subtle knot that makes us man," the nexus of body-mind interaction?<sup>4</sup> The conjunction of neo-Darwinism, evolutionary psychology and biology, the cognitive neurosciences, and the extraordinarily sophisticated machines for brain exploration devised by high technology has thoroughly and finally overturned—except in popular culture and religious superstition—the Cartesian dualism that dominated Western thought for so many centuries. Those more than fifty billion miniscule brain cells interact via their threadlike dendrites and axons to produce one million billion connections known as synapses. Neurons are said to "fire"—by which is meant that an electrochemical transmission takes place across these synapses when triggered by stimulation from everywhere in the body and from different areas of the brain itself. One of the great mysteries thus far unsolved is the nature of neuronal storage. Although the neurons are referred to as "the message-carrying cells of the brain," just what is it that's being carried or stored? The consensus is: neither images nor "ideas," which is to say that the brain is not a repository of representational materials. Unlike a vinyl LP inscribed with a visual analog of the sound that has been recorded—a real "representation"—the neuronal storage of the brain is like a digital compact disc, insofar as the storage medium (ones and zeros in the case of CDs) has no resemblance to what is finally produced (a "scene" in consciousness), only coded instructions for producing it. This effectively destroys the classical dualism of a head full of pictures, ideas, and sense data that are organized and overseen by a little guy inside. (And how was *his* consciousness presumed to derive *its* content? From littler guy number two, ad infinitum?)

The model now holding sway in the neurosciences establishes that consciousness is produced ad hoc over and over again each microsecond by some of the million billion synapses that undergo incessant firing. The smooth continuity of conscious experience is an illusion like one's sense of the continuity of sound produced by 44,000 digital samplings per second in the recording and playback of a compact disc. Just as our brains are not constituted to detect the 44,000 interruptions of sound between the samples, they are not constituted to be aware of the pointillistic or pixilated (I grasp for words here) nature of consciousness, any more than they can notice the saccades—constant jerky refocusings of the eyes in vision—that finally yield an apparently smooth visual panorama. Even in the case of memory, we do not in acts of recollection re-view old images that are merely retrieved from the brain as whole cloth. Rather, what is recalled is reconstructed ad hoc from its electrochemical source, producing results that are never exactly the same twice. How this constant movement, firing, and assembly produces final coherent awareness remains as mysterious to us today as the workings of John Donne's subtle knot. As Gerald Edelman phrases the question: "How can it be that, despite the absence of a computer program, executive function, or superordinate map, up to thirty-three functionally segregated and widely distributed visual maps in the brain can nevertheless yield perception that coherently binds edges, orientations, colors, and movement into one perceptual image?"<sup>5</sup> If he is unable to supply a definitive reply, one thing seems pretty clear nonetheless, to use Edelman's words: "The world is causally closed—no spooks or spirits are present—and occurrences in the world [in other words, the activity of the body] can only respond to the neural events constituting C [the neural actions of the brain]" (78–79). Or, as Dennett succinctly puts it: "Where does it all come together? The answer is: Nowhere. . . . There is no one place in the brain through which all these causal trains must pass in order to deposit their content 'in consciousness.'"<sup>6</sup>

This picture of consciousness is hardly revolutionary. One reads with astonishment the prescient account given by Thomas Henry Huxley with the vocabulary available to him in 1874:

It is quite true that, to the best of my judgment, the argumentation which applies to brutes holds equally good of men; and, therefore, that all states of consciousness in us, as in them, are immediately caused by molecular changes of the brain-substance. It seems to me that in men, as in brutes, there is no proof that any state of consciousness is the cause of change in the motion of the matter of the organism. If these positions are well based, it follows that our mental conditions are simply the symbols in consciousness of the changes which take

place automatically in the organism; and that, to take an extreme illustration, the feeling we call volition is not the cause of a voluntary act, but the symbol of that state of the brain which is the immediate cause of that act. We are conscious automata, endowed with free will in the only intelligible sense of that much-abused term—inasmuch as in many respects we are able to do as we like—but none the less parts of the great series of causes and effects which, in unbroken continuity, composes that which is, and has been, and shall be—the sum of existence.<sup>7</sup>

Although Edelman cites Huxley with approval, he does not go along with the automata remark. Rather, he concludes: “The very richness of core states provides the grounds for new matches to the vicissitudes of the environment,” rejecting the view that people are simply “Turing machines,” that is to say, computers (85).

Against a background such as this, it is instructive to reconsider one of the shopworn truisms of the past fifty years of orthodoxy in the humanities. Roland Barthes and Michel Foucault, for example, wrote about the disappearance of the author, but all they really meant, in keeping with their Marxian line, was not that the writer is dissolved into neurons but that the writer, like everyone else, is socially constructed, simply a mouthpiece for social programs: in brief, the Standard Social Science Model, innocent of the evolved brain-centered predispositions from millions of years of primate and hominid existence, as described by Leda Cosmides and John Tooby in their landmark article “The Psychological Foundations of Culture.”<sup>8</sup> But the cognitive neurosciences suggest something far more radical: the author as a “self,” like every other kind of self, really doesn’t exist at all. The author is not *constructed* by society; rather, “the author” is constructed by fifty billion involuntary neurons with a vast prehistory, constantly *reformulated* by culture. The author, as a disembodied self, a locus of creativity, is a phantom. Maybe we should speak of “the author effect” or the virtual author.

To flesh this out as an author—or author effect—I would like to do a sort of Cartesian Meditation based on two highly creative critical essays written by the virtual “me” as virtual author. Of the many retrospectives I have written on a writer’s oeuvre, the one called “Sylvia Plath, Hunger Artist,”<sup>9</sup> like many of the others, was set off by the publication of a new biography, although three or four already had been published. Typically, to produce a retrospective essay, “I” go through three stages: reading/research, thinking, writing.

So, for starters I had to read the three previous biographies that preceded the newest one, then all of Plath’s work that I had not previously read (including her journals and letters home to her mother), and finally a generous sampling of the critical literature. Fine. But who

was the reader of all this? An imperial, self-determining but somehow unprejudiced, blank consciousness that applied its empty, undesiring self to totally transparent texts that simply said what they mean? Transparent to whom? The virtual self doing the reading can only read through an immensity of accumulated baggage, sometimes referred to as “filters.” This baggage consists not only of genes but of the year and place of one’s birth, one’s parents, one’s education (all the books one has ever read, all the movies seen, music heard, newspapers and websites examined), the time and place in which one lives, one’s temperament, bodily states, and infirmities, desires, tastes, traumas, joys. Had I been born only twenty years ago, I would doubtless have a very different response to nose rings, hip-hop, TV, computer games, Beethoven’s quartets, Albert Camus, Lionel Trilling, and so forth, and the lenses through which I read the Plath writings would have revealed very different texts from the ones I actually experienced as a venerable me. This is not to take the deconstructive view that there is no text but only to suggest that texts are instructions for reading, not finished substances, and your ability to follow the instructions depends on the contents and disposition of your mental storage facility. Had I been born in Iraq and learned English there, would my intellectual, emotional, aesthetic, and moral responses to Anglophone literature be the same as they are now? In sum, unbeknownst to me, my takes on everything I read for the Plath essay had already been inscribed in my neurons for potential involuntary retrieval later on as thinking and writing.

As for the thinking, a lot of it is going on as my virtual self reads all the books through its accumulated filters or baggage. What I take in, what I dismiss, what touches the deepest areas of my psyche—to some degree I am aware of it, or there is an awareness of it, if not from a me. But when the reading is finished, as I mow the lawn, drive the car, or brush my teeth while consciously ruminating about Plath’s life and works, a whole other order of thinking is going on in another inaccessible realm about which I haven’t a clue. This order will not come into obvious play until I sit down at the computer and watch, with a certain sense of surprise, the seemingly unpremeditated thoughts that pour out onto the page. Or, to borrow a question from E.M. Forster’s *Aspects of the Novel*, “How can I tell what I think till I see what I say?” And if the “I” is not the cause but the effect of inscribed neurons, it can be said without too much self-disparagement that as a writer “I” am truly asleep at the wheel, a dreamer, the driven rather than the driver, taken for a ride by an autopilot.

As for the writing process, there are two types of writer I am aware of: Type A sits in an easy chair with a yellow legal pad and pencil, eking out, sentence by agonized sentence, over the course of one disciplined day

after another, a page or two of writerly produce at each long session. Type B, and that's me, couldn't possibly produce more than a few uninspired sentences by sitting down at the computer in cold blood. Like the high dew point that triggers monsoons in Tucson, my home, a moment of high psychological "do" point is required for me to sit down at the keyboard and precipitate. But when that moment arrives, a torrent of prose starts to flow from my head, through my fingers, onto the keyboard, amazingly coherent and organized though nonetheless needful of editings to produce a final draft. After about an hour or two of this, I find myself completely exhausted, drained, unable to write another word. A good day is two pages. The next day, I pick up where I left off, first doing some editing of the previous day's output and then continuing on for another couple of hours until debility sets in. Eventually, I have an almost final draft, a complex web, full of interrelations, allusions, ideas I didn't even know I was thinking, a point of view that sometimes takes me by surprise. So *this* is what I thought of the writings of Sylvia Plath! So *this* is what I made of those four biographies! And the overriding question is pretty clear: where the hell has it all come from? Not from "me," for a phantasm can't generate a thing. How could "I" have been the creative intelligence that produced the final essay when I had only the vaguest premonition of what those unmannerly, secretive, and unforeseeable neurons were up to? What they don't "tell" me I can't know.

And where did the actual sentences come from? Not from consciously measured prose poured from precisely calibrated alembics under "my" control. But from Geoffrey Chaucer, William Shakespeare, Robert Herrick, Sir Thomas Browne, Henry Fielding, Alexander Pope, Samuel Johnson, Jane Austen, Matthew Arnold, Virginia Woolf, Tom Wolfe, Saul Bellow, and all the rest of them, not to mention academic criticism and philosophy, scholarly journals, newspapers and periodicals, pop culture, a whole range of models that infiltrated my psyche unbeknownst to "me." A lifetime of unwitting absorption of syntaxes and dictions, locutions and lexicons (can you hear that convoluted echo of Sir Thomas Browne, the Miltonic periodicities of William Wordsworth, the obstreperancies of Bernard Shaw, the demotic epithets of Tom Wolfe?), a workshop of molds into which my thoughts effortlessly conformed themselves. Born twenty years ago and brought up on TV, the Web, and the movies, not even reading the newspapers, would I sound more like a dithering Ozzy Osbourne and his wacko family? Or am I an imperial self-directed consciousness, an image of God, freely willing Somethings out of the Nothing?

In 1996, after a 3,000 mile auto trip, from my home at that time in Chicago's suburbs, to Tucson, to Los Angeles, Sacramento, Reno, and

back to Chicago, I experienced an uncanny case of what used to be called inspiration from the muses that issued in the essay “Ecology and Ecstasy on Interstate 80.”<sup>10</sup> A contrapuntal interweaving of ecology, technology, and the arts, it drew to a close as I described my homebound traversal of Iowa on I-80, listening to the Metropolitan Opera, observing the budding landscape of early spring, and thinking about the technology that was bringing *Die Walküre* to me live from New York in my speeding car. One particular sentence, actually a mere phrase, from the final page can serve as a startling instantiation of my thesis, namely (in case you missed it), that the creative writer (or creative anybody—or just any old slob) is a passive agent of neuronal storage, energy, and organization. It reads as follows: “As I reached the Quad Cities area and began the crossing of the Mighty Mississippi—with due regard for the river-defining technologies of Mark Twain, T. S. Eliot, and the Army Corps of Engineers—signs of spring were definitely in evidence, buds were opening, the air was warming, and Sieglinde was singing the most rapturous passage in all of *The Ring*” (77). The river-defining technologies of Mark Twain, T. S. Eliot, and the Army Corps of Engineers? Fantastic! Who could have thought up such a thing? It was conceived and written in a matter of seconds as part of my daily hour or two of manic output and was definitely not teased with effort out of my fifty billion neurons by a brilliantly Googliferous “me.” Just where on earth did it all come from?

About forty years prior to the act of composition, I had read some of Mark Twain’s writings about his early life as a pilot on the Mississippi and the technological skills that were needed to do the job. I had neither read nor thought about these writings ever since. Between twenty and thirty years before 1996, I had read Eliot’s *Four Quartets* several times, always associating his words about the river as a great brown god with his birth in St. Louis and his early proximity to the Mississippi, which is not mentioned by name. And perhaps half a dozen years before the day of composition, I had read John McPhee’s brilliant book with the ambiguous title *The Control of Nature*, one of whose three essays was about the ongoing but ultimately futile attempt of the Army Corps of Engineers to keep the Mississippi from wandering out of its government-approved riverbed. No consciously controlling “me,” however brilliant, could possibly have ferreted out these deeply buried and scattered inscriptions in my brain, old thoughts that had not surfaced in years but which now organized themselves within seconds to serve the turn of the automatic writer who was producing these sentences. Those dusty old neurons are smarter than “I” am, putting Google to shame.

Am I going so far as to say that what I write is totally outside of “my” control? Not exactly: I see what “I” have written, it gives “me” new ideas,

improvements are possible, changes can be made (these quotes around pronouns are becoming oppressive). But when I read my own writing, when I see what I have written, I am still the reader reading through his own filters, carrying his own baggage. The thoughts for improvement that occur to me are as much the product of my neuronal history as any other thoughts. That's why I need feedback from my friends, who read through different filters. Do I feel trapped within involuntary paradigms? Certainly not. Without a psychological history and an affective shape I'd be nothing, a vacuous airhead. The desire to improve my performance is not a self-created desire, since the virtual self can't create anything; as an insubstantial phantasm it has no powers of agency at all. Should I be taking credit, then, for writings I didn't write? Strictly speaking, no. But everyone else is doing it. Why not me? We are all playing the same game because there's no other game in town.

## II. The Rhetoric of "Freedom"

I will be asked if I think people are trapped in changeless paradigms not of their own choosing. Not of their own choosing, yes and no: it depends on what you mean by "their." The self cannot initiate a thing, because the self is an effect, initiated elsewhere like characters on a movie screen. On the other hand, we're changing all the time, growing, learning, maybe improving. But the will to change is not generated by a self. It comes from involuntary sources, either internal or external, though even external sources are finally internal, inscrutable, neuronal. When I eat a tasty new dish at a restaurant, there is no "I" that determines (in a causal sense) that the food is pleasing to me. "I" find, discover, recognize it, as pleasing. There is no choice or willing involved. Nor when I respond sexually to Person A but not to Person B is it a matter of choice: I recognize the tingles in the flesh, the heat, the increased heart rate, the stirrings in the genitals, and my behavior is influenced accordingly toward A but not toward B. When a friend gives me a lecture on how I should respond to a poem, a person, a theory, there is no "I" that wills the lecture to be convincing. Rather, I find myself convinced or unconvinced. If a certain odor of flowers, sweat, or food should happen to accompany one of these lectures by sheer fortuity, a reinforcement or repulsion totally unwitting to me could very well take place that "I" have nothing to do with. What, dear reader, is convincing you that I am mounting a persuasive argument right now—or that I am merely full of crap? Is it because you are a superior intelligence, a scholarly reservoir of judicious knowledge, an infallible sensibility that is *choosing* to find me convincing or not—or because your

private biochemical planets happen to be in the right conjunction for receiving or rejecting this particular attempt at persuasion? After all, yesterday's purportedly loony tunes are now fully naturalized and they "go without saying," even for you, who no longer make disparaging remarks about blacks, Jews, women scholars, or queers. This change in your attitudes is not the result of your superior moral intelligence or sensitivity, of your splendid transcendent consciousness making enlightened choices. It's the cultural ethos, the ambient air, the mental environment of your particular cohort as it all does its work along your domesticated wires—and now you "find yourself" with newfound enlightenment. (Bully for "you.") Teenagers born after your dispensation are "enlightened" in many of these matters from the start. Is that because they are wiser and more judicious than you? Capable of making more civilized "choices"?

I want to call these generative forces—and many others—rhetoric, going far beyond classical ideas about persuasive speech. There is a world of unwitting persuasions, not in the sense of carefully articulated vehicles of writing or speech (which produce their own powerful influence), but a word here, a gesture there, a new friend, a phrase in the newspaper, a traumatic event, all totally serendipitous, that alter our baggage, reconstitute the screening mesh in our filters, changing our perspectives and desires. These are relatively "conscious" rhetorical messages, but persuasions extend far beyond these to realms exceeding our grasp, realms that do not involve a *composer* or a sender but only a *receiver* of persuasions via an indigenous system of neuronal rhetoric (a replacement for the synthesizing little Cartesian guy in one's head) whose logic we are only dimly able to discern. It is the machinery of reception that produces this rhetoric, turning unwitting and chaotic experience into meaningful messages or narratives. (Think, for example, of the elaborate narrative structures of dreams. Is the waking "stream of consciousness" any more under the control of an agent-self than those?) Contrary to the postmodern assumption that there is a knowing subject whose total experience consists of acts of textual (in the broadest sense) understanding, the knowing subject is as much a fiction as the self, a putative free-floating consciousness that is somehow disconnected from an elaborate neuronal system to which everything else is addressed, not in the form of constructed rhetorical "texts" but as smell, touch, sight, sound, tastes, events, as well as words, not to mention internally generated feelings with a life of their own apart from conscious thought and from which consciousness emanates. The real addressee of this rhetoric is not a deciding, weighing, subject/self/person that is "persuaded" by textualized ideas (whether verbal or otherwise) but an involuntary, inscrutable system of preconsciousness

that generates meaning. (Sigmund Freud had a go at it, but his mythologies required more faith than the Holy Ghost.) This system is now slowly being made visible as brain activity by means of advanced technological procedures such as MRIs, corroborating Wegner's claims about the disconnect (and delay) between the initiating brain activity and the illusion of will attributed to virtual "selves" and "subjects" who attempt to produce *ex post facto* explanations of what they have experienced. Phenomenal experiences are processed as a neuronal rhetoric, laden with meanings, ideas, and affect, as persuasive as carefully composed speech or writing, if not more so.

The events of 9/11, for example, have had the profoundest effects on the feelings, attitudes, and deepest emotional core of millions of people throughout the world, unalterably changing their psyches. The destruction of the Twin Towers was, in my sense, a rhetorical event, triggering a vast spectrum of altered "being in the world" (in the Heideggerian mode). The panoply of television programs, sitcoms, video games, sports, commercials, images, events, and sounds has the profoundest of effects on the sensibilities of children, adolescents, and adults who view them. The sordidness of corporate CEOs, the mendacities of the Bush regime, the photo of a corpse on a dusty roadway in Iraq, a sentence that slipped out of the mouth of a friend that turned one against him forever—the examples are infinite. These rhetorical triggers generate the psychological evolution of human societies and individual persons. (Richard Dawkins calls them memes, but his working out of the concept strikes me as an imperfect analogy with genes.)

I want to connect these triggers with the idea of human "freedom," while retaining the point of view that "free" is a nonsense term suggesting that something can exist outside a chain of causes or take place without antecedents. "Freedom" in that sense would be madness, chaos, moral entropy. We say we "know" other people—because they are more or less predictable. To have a character, to be relatively predictable (at least enough to qualify as a "person" or a "thing") is the nature of sensible materials that exist in time. If I *know* that Phyllis will like this dress I am buying for her, I also "know" that Phyllis is not "free" to like just anything, that Phyllis is a congeries of qualities that excludes other qualities. She is a determinate selection from the totality of material possibilities. If she were "free" she wouldn't be Phyllis at all but, rather, an amorphous lump of nothingness—and I wouldn't have a clue about what to buy for her. (Of course, I can never know her totally, since there is no totality in an open-ended process.) We complain when people are unfathomably unpredictable, we whine that they lack "character," that is, determinateness, since to be *for us* is always to be *as something*—and something that we can recognize, categorize, domesticate. *But human*

*unfreedom is the very condition of personhood and identity.* Rhetoric, here extended to include the unwitting reception of happenstance stimuli that generate formalized neuronal narratives, goes to work on all this determinate material, altering, developing, and enriching it. This enrichment, this complexification, is as close as I am able to get to the idea of “freedom.” Through the power of a rhetoric unbeknownst even to ourselves, we are able to influence and change the behavior of other people (and be changed in turn by them) even if “we” are unable to change our own behavior. Thus human beings are “free” to become almost anything their evolutionary inheritance permits—but not anything “they” wish, since the changes are not initiated by a self. Homo sapiens has thus far evolved from slime to primates and thence to a complex, urbane (and sometimes murderous) bourgeoisie. The possibilities look open-ended, but “you” can’t will them into being for yourself. You don’t even know what they are or could be. People are changed, unwittingly, willy-nilly, not by “self,” not by choices, but by rhetoric, in my expanded sense, in the past delivered by muses or spooks but now understood as narrative-generating neurons, as rhetorical as anything produced by Ovid. Think of Dawkins’s cosmic Blind Watchmaker now incarnated phenotypically as the Dumb Rhetorician.

What other sense of freedom would you like: unpredictable, unmoored, madcap? People are, after all, unpredictable enough, despite all their character-defining predictability, simply because we can never know the ultimate springs of their behavior, what those neurons are up to. Why am I so willing to sit here at my computer and tap this out, what inscrutable need or drive is goading me on? No shrink on earth will ever be able to solve it: his explanation will be the “rhetoric” of a fashionable paradigm, and its narrative will either strike me as convincing or strike me as specious, not because he is “right” or “wrong” but because my unfathomable biochemistry is imprinted in a certain preconscious way that accepts or rejects his story while producing the ongoing “I” that is “me,” which itself has a zero degree of agency.

In sum, just as my literary and critical creations are the music of my neurons (formerly the muses), so is human behavior in general a form of rhetorical music, sometimes heard, more often unheard—but heeded nonetheless. Our behavior is altered by what we hear and read, by what we see, feel, think, smell, however involuntary the alterations may be. We are surely not doomed to a simple repetition of the past, however much our primordial constitutions may lay the tracks on which we move forward. Are we “trapped” and “unfree”? What could *untrapped* and *free* possibly mean? To be is already to be “trapped” in a particular configuration of matter. Are we robots, then, you ask. What would you have me

say? Can you even conceive of an alternative? If we're robots we're pretty damned brilliant robots. What more could anyone possibly want?

UNIVERSITY OF ARIZONA

NOTES

- 1 For an extensive treatment of this subject, see Daniel C. Dennett, *Consciousness Explained* (Boston: Little, Brown, 1991). Dennett's more recent *Freedom Evolves* (New York: Viking, 2003) is an unsuccessful rehash of his earlier writings, described by critics as "bait and switch" because of his quirky redefinition of free will, which enables him to fudge the whole issue, on which we are in substantial agreement, minus the fudge.
- 2 Daniel M. Wegner, *The Illusion of Conscious Will* (Cambridge, MA: MIT, 2002), 145 (hereafter cited in text).
- 3 David M. Eagleman, "The Where and When of Intention," *Science* 303 (February 20, 2004): 1144–46.
- 4 The account that follows is heavily indebted to Gerald M. Edelman, *Wider Than the Sky: The Phenomenal Gift of Consciousness* (New Haven, CT: Yale University Press, 2004). But the enduring influence of several other books has unwittingly commandeered my neurons: Dennett, *Consciousness Explained*; Steven Pinker, *How the Mind Works* (New York: W. W. Norton, 1997); Edward O. Wilson, *Consilience: The Unity of Knowledge* (New York: Knopf, 1998).
- 5 Edelman, *Wider Than the Sky*, 44 (hereafter cited in text).
- 6 Dennett, *Consciousness Explained*, 134–35.
- 7 Thomas Henry Huxley, "On the Hypothesis that Animals are Automata, and Its History," in *Collected Essays* (London: MacMillan, 1893–94; New York: Greenwood Press, 1968), 1:245.
- 8 Jerome H. Barkow and others, *The Adapted Mind: Evolutionary Psychology and the Generation of Culture* (New York: Oxford University Press, 1992). For an overview, see Harold Fromm, "The New Darwinism in the Humanities," a two-part essay in *Hudson Review* 56 (Spring 2003, Summer 2003): 89–99, 315–27. (Available on *Hudson Review's* website: <http://hudsonreview.com/frommSpSu03.html> and at <http://home.earthlink.net/~hfromm>.)
- 9 Fromm, "Sylvia Plath, Hunger Artist," *Hudson Review* 43 (Summer 1990): 245–56.
- 10 Fromm, "Ecology and Ecstasy on Interstate 80," *Hudson Review* 51 (Spring 1998): 65–78 (hereafter cited in text).