The Player's Passion

Studies in the Science of Acting

Joseph R. Roach

Ann Arbor

The University of Michigan Press
Preface

The actor's body constitutes his instrument, his medium, his chief means of creative expression—that is a commonplace on which performers and spectators alike have readily agreed. A corollary to this point, however, the one that I propose to examine here, is less obvious, but equally pertinent: conceptions of the human body drawn from physiology and psychology have dominated theories of acting from antiquity to the present. The nature of the body, its structure, its inner and outer dynamics, and its relationship to the larger world that it inhabits have been the subject of diverse speculation and debate. At the center of this ongoing controversy stands the question of emotion. Even when the special complications raised by theatrical representation are set aside, the question of emotion tends to defy settled conclusions. Emotions are common to everyone's experience, yet they are notoriously difficult to define. As William James put it in the title of a celebrated essay, "What is an Emotion?" In the history of science, substantially different answers have been proposed to James's question as theories have changed to fit new psychophysical discoveries. The following chapters explore the revolutionary influences that these changes have exerted on theatrical theory from the Galenic physiology of the passions in the seventeenth century to the conditioned reflex of the twentieth.

My larger purpose is to broaden the framework in which theater historians generally conceive of their discipline. The history of the theater is a history of ideas. In that respect, it need not defer to the history of art, music, or science. When an actor takes his place on a stage, even in the most apparently trivial vehicle, and his audience begins to respond to his performance, together they concentrate the complex values of a culture with an intensity that less immediate transactions cannot rival. They embody its shared language of spoken words and expressive gestures, its social expectations and psychological commonplaces, its conventions of
truth and beauty, its nuances of prejudice and fear, its erotic fascinations, and frequently its sense of humor. Whenever this isn't so, the actor will fail. The theater exists at the center of civilized life, not at its peripheries. Specialists in other fields acknowledge this centrality. When a social historian such as Richard Sennett writes The Fall of Public Man or an art historian such as Michael Fried brings forth Absorption and Theatricality, he demonstrates the crucial importance of the theater in the intellectual history of his own discipline. Theater historians would do well to exhibit such confidence. No fact or set of facts in theater history—this bit of business in that theater on such-and such a date—can have meaning in isolation. It didn't at the time, and it can't possibly now. One challenge for the historian, then, is to present the relevant evidence in a coherent argument that does not cut the theater off from its larger historical context.

A history of the theatricalization of the human body, which this study aims to be, could be approached from several points of view. The influence of art, fashion, religious mores, etiquette, deportment, each might be fruitfully considered in establishing what Lichtenberg called a "semiotics of affects" for the theater of a given period. I have deliberately narrowed this field by concentrating on how the inner workings of the actor's body have been variously understood by critics and theorists who knew something about the physiology of emotion. My argument often turns on the language of the theorist himself because his phraseology reveals the scientific source of his assumptions, and for this reason I have had to quote extensively, often from apparently remote disciplines.

Although some of the issues that I address will seem familiar, they need to be reevaluated in the context provided by the sciences. Historians of the seventeenth-century theater, for instance, have long recognized the importance of rhetoric and oratory in relation to the actor's art, but they have yet to grasp the full significance of the relation between rhetorical doctrines of expressiveness and ancient medicine. Historians have also documented extensively the revolution in acting effected by David Garrick. Previous accounts of the genesis of his style, however, need to be revised in light of the scientific revolution of which his celebrated naturalness was a direct consequence and expression.

Garrick, indeed, lived at the decisive moment in the development of theatrical theory. The modernization of the physical sciences, their subsequent disentanglement from ancient authority, helped eighteenth-century theorists for the first time to interpret the actor's emotion from outside the framework of classical rhetoric. At the same time the growing secularization of enlightened science extricated empirical investigations of vitality from obfuscating issues like soul. The time-honored philosophical

and scientific issue of the relationship of mind and body—whether answered by interactive dualists, occasionists, parallelists, or monists—underlies crucial questions of daily professional significance to the actor, among them movement, gesture, characterization, motivation, concentration, imagination, and memory. I want to demonstrate how the revolutionary achievements of eighteenth-century theory, outstandingly those of Denis Diderot, seemed to promise answers to those questions by approaching the actor's body as a physical instrument, like a piano or a clock, whose capacities and limitations can be objectively analyzed and whose mind and body comprise a material continuum, subject to physical laws in its entirety.

In assessing the impact of eighteenth-century science on subsequent theories of acting, I have been guided by Thomas Kuhn's seminal study of the sociology of scientific ideas, The Structure of Scientific Revolutions (1962; rev. ed., 1970) and Michel Foucault's Les mots et les choses (1966), translated as The Order of Things (1970). I apply Kuhn's concept of a paradigm and Foucault's of an episteme in a general way without claiming that the actor's art is per se a science, though many of the actors and theorists discussed here have made that claim. Rather, scientific models have so thoroughly permeated acting theory that its history has inevitably developed in ways analogous to the structure that Kuhn outlines for the history of science and that Foucault develops for the history of knowledge generally.

Kuhn and Foucault reject the view that knowledge steadily progresses by accretion. Kuhn describes instead a revolutionary process whereby long prevailing theoretical networks are replaced by incompatible new ones. Ptolemaic astronomy, for instance, was such a paradigm of the cosmos until the Copernican revolution supplanted it by positing a new location for the sun. Any paradigm has anomalies—facts which refuse to fit the theory. As a group of practitioners in any field continues its investigations, anomalies tend to proliferate. When such unsolved puzzles have multiplied to the point at which they subvert confidence in the paradigm, a crisis will develop. If, at this time, there appears a competing paradigm which will resolve the anomalies, accounting for more of the known facts, then the old paradigm will collapse and the new one will be adopted. This new model then becomes the basis of normal science, whose puzzles will occupy its practitioners indefinitely or at least until the next crisis occurs. Foucault, though differing in important respects, shares with Kuhn the idea that the history of science is discontinuous. He views it as a succession of essentially isolated episodes, each internally dominated by a network of theories, interests, and problems, by a way of knowing the world.
Theater historians have much to learn from this way of looking at intellectual history, emphasizing as it does not only what authorities in the past thought about nature, but how they thought about it. When Foucault differentiates between the mechanistic science of the eighteenth century and the discontinuous episteme that followed it and that still dominates our thinking today, he issues a most thought-provoking warning: "Historians want to write histories of biology in the eighteenth century, but they do not realize that biology did not exist then, and that the pattern of knowledge that has been familiar to us for a hundred and fifty years is not valid for a previous period. And that, if biology was unknown, there was a very simple reason for it: that life itself did not exist." Foucault points out that the word biology did not come into existence—that life as we think of it simply could not exist as a mental category—until the early nineteenth century. If nature as we define it did not exist in the eighteenth century, the theater historian is bound to ask what Garrick's critics actually meant when they described his acting as natural.

Also of particular interest to students of theatrical theory is Kuhn's idea of a paradigmatic text. In the early phases of the development of a scientific theory, he explains, a paradigm may emerge from a single work, which therefore dominates a field for generations. Such books, among which Kuhn numbers Aristotle's Physics, Newton's Principia and Opticks, Lavoisier's Chemistry, and Lyell's Geology, take the place of present-day science textbooks in performing the role of transmitting a paradigm. These works show two characteristics. First, they are sufficiently powerful to deflect a group of practitioners away from competing theories and methods of investigation. Second, they are open-ended enough to create a whole new set of problems "for the redefined group of practitioners to resolve." When one views Constantin Stanislavski's An Actor Prepares (1936) in this light, with its American proponents of Method Acting serving as the redefined group of practitioners and emotion memory providing the puzzling anamoly, one can see why Kuhn's description of communities of scientific knowledge might provide an illuminating analogy for the history of acting theory. But Stanislavski's work, as I hope to demonstrate, is only one case in a much larger movement, the major impulse of which was Diderot's Paradoxo sur le comédien (1773).

On the subject of standard scientific textbooks, Kuhn further suggests just how much theater historians could learn from historians of science. He points out that modern texts reflect a distinct historical bias toward the paradigm that they promote. Telescopc discussions of the history of the discipline tend to present it as a triumphant march toward the certain-
night the words, gestures, and movements that the actor embodies are so nearly the same as to be indistinguishable from those of the night before. Vague notions that a given performance is "up" or "down" do not nullify the fact that, barring a major stage emergency or blunder, the actor replicates his performance each night, however violent the passions that he enacts may be, with an astonishing precision of emphasis, reactivating in time and space ornate sequences that have been absorbed into muscles and nerves. Yet every night the actor's experience of his performance is somewhat different; as its vitality fluctuates, the delicate instrument of his mind and body must sense the slightest realignment of forces and adjust accordingly. Thus every actor's experience gives new pertinence to the question that has persisted through the ages: What is the nature of this extraordinary instrument—its memory, its imagination, its capacity for sensation and reflection—that it can accommodate the diversified and even contradictory demands imposed upon it by the art of acting? Some of the most provocative answers to this question, proposed by theatrical theorists in the light of science, are the subject of the following pages.
5

Second Nature: Mechanism and Organicism from Goethe to Lewes

Habit creates second nature, which is a second reality.
—Stanislavski, Creating a Role (1961)

In "The Actor and the Übermarionette" of 1908, Edward Gordon Craig insisted that the normal human body had utterly failed as the instrument of theatrical art. "The whole nature of man," he wrote, "tends toward freedom; he therefore carries the proof in his own person, that as material for the theatre he is useless." Spontaneous bodily sensation can only enslave the actor's mind. Random impulse trivializes his movements into accidents, and accidents negate art. Because of the human organism's unpredictable disposition and its corresponding indisposition to technical control, Craig banishes both the actor's ordinary vital tissue and its inspiring breath of emotion from the stage. As a stand-in he offers the "super-puppet," an automaton whose idiosyncrasies have been annihilated by technique. In Craig's utopian vision a new ensemble of Übermarionetten is to repopulate the theater after all the mortal actors have taken Eleonora Duse's advice and died of the plague. Drawing on the widest range of authority to support his modest proposal for a truly modern art, Craig approvingly quotes Gustave Flaubert on the duties of authorship: "Art should be raised above personal affection and nervous susceptibility. It is time to give it the perfection of the physical sciences by means of a pitiless method." Like the mot juste, super-puppet offers an ideal of machine-tooled precision.

The highly charged overstatement of Craig's essay has blinded readers to its proper place in an ongoing controversy. Hailed as a revolutionary anticipation of the "abstract man" and the "mechanical man" in twentieth-century art, "The Actor and the Übermarionette" in fact perpetuates a pattern of radical statements on the actor's art made in light of nineteenth-century science. In 1801–02 the word biology appeared simultaneously in the works of Lamarck and Treviranus. If we follow Michel Foucault and see in this event a sign of the emergence of the modern concept of life, we can understand the reasons for the celebrity of Diderot's Paradoxe sur le comédien at its publication in 1830 and its secure place at the center of theatrical controversy thereafter. As Diderot specifically anticipated, the lines of modern theatrical argument paralleled and overlapped the historic contention between biological vitalists and mechanists, a collision and at times a confusion of viewpoints that had more complicated implications than those increasingly obsolete terms could depict. At root the question came down to this: Is the actor's bodily instrument to be interpreted as a spontaneously vital organism whose innate powers of feeling must somehow naturally predominate? Or is it best understood as a biological machine, structured by and reducible to so many physical and chemical processes, whose receptivity to reflex conditioning determines its behavior?

On the ancient grounds of spontaneity, therefore, a new battle was inextricably joined, and from this struggle modern concepts of acting emerged. At one extreme adherents of mechanism threatened to abandon the human body as the material of theatrical expression or, at least, to transform it so utterly as to eliminate its behavioral unpredictability. Beginning with the Romantics, theorists from Heinrich von Kleist to L. Moholy-Nagy were driven to mechanism by the invention of life. If organisms are inherently spontaneous, infinitely variable, and as mobile as Diderot's diaphragm, then Craig has grounds for saying that unless stern measures are taken, whatever happens live onstage is in danger of happening by accident. At the opposite extreme—according to a viewpoint that did not fully emerge until the 1960s—radical vitalists rejected first the dramatic text and finally the preconceived structure of the theatrical event in order to minimize the need to constrain the performer's spontaneous impulses. In the following chapters we will see how the principal modern opinions on acting, beginning with Goethe, continuing through Stanislavski, and still accumulating in our journals and theatrical laboratories today, follow Diderot in mediating between the two camps, wary of both, yet borrowing from each in turn.

But within this general framework there are more specific concerns that must be addressed. Diderot's theory of sensibility anticipated three issues in nineteenth-century biology of immediate relevance to acting. The first is the emergence of evolutionary theory, which defined the emotions
as involuntary phenomena in both man and animals alike. This leads us from d’Alembert’s dream to Goethe, and, through the work of Sir Charles Bell, directly to Charles Darwin’s *Expression of the Emotions in Man and Animals* (1872). Darwin’s treatise in turn heavily influenced William Archer’s * Masks or Faces*? (1888), which posed Diderot’s question to a generation of actors and ultimately accepted Diderot’s answer on their behalf. Archer’s attempt to refute the Paradoxe ends with his appropriation in the name of Victorian science of most of its contents, especially the idea of double consciousness. Second, and perhaps more significant, was the growing conviction that mind and body are organically inseparable and comprise not a duality, but a continuum. Monism became a major premise of nineteenth-century psychophysiology and of twentieth-century acting theory. This trail leads us from the *homme machine* to the dual-aspect monism of George Henry Lewes, the subsequent formulation of the James-Lange theory, and, later on, the development of Russian Reflexology as an objective science of behavior. It culminates—as succeeding chapters will show—in the works of Meyerhold, Grotowski, and contemporary actor-training theories based on self-use systems. The third and final issue is the role played by unconsciousness in feeling and action. The discovery of the unconscious revolutionized the theories of the imagination, but it also incorporated the emerging concept of conditioned reflexes into the doctrine of spontaneity that Stanislavski called “second nature.” The theory of the creative unconscious leads directly from Diderot to the preface that François-Joseph Talma provided for Lekain’s memoirs, the *locus classicus* of a deflected text, which was read and admired by Lewes and Stanislavski among others.

All three issues—evolution, monism, and the unconscious—flourished in a scientific context transformed by the idea of organismism, but paradoxically devoted to the investigations of the mechanisms whereby living creatures respond and endure. Modern concepts of what acting ought to be resulted from the interaction of Diderot’s paradox with these basic elements of nineteenth-century scientific thought. The theoretical context in which such thinking developed was provided by an aesthetic founded on ideals of organism and vitality.

It is a commonplace that the late eighteenth-century revolt of *natural philosophie* against the mechanization of nature transformed the theory of creativity. In Romantic poetics, models of organism clearly predominated over those of mechanism in the depiction of the artistic imagination. Poets and critics exalted the poem as plant, spreading its tendrils organically as directed by invariable inward yearnings. The botanical definitions of *spontaneity*—coming freely without premeditation or effort, growing naturally without cultivation or labor—seemed the most appropriate terminology to apply to the work of art. The distance Coleridge finally placed between his mature formulation of the “secondary imagination” and his early enthusiasm for David Hartley is but one instance of the general success of vitalistic interpretations of imaginative life. Organic processes attained the stature of fundamental explanatory principles, which were then projected onto the forms and forces of inanimate nature, reversing the mechanical metaphor of Cartesian physiology and biologizing the world picture. Variety, spontaneity, and fluctuating responsiveness now characterized the natural order in a way that gave *life* and *organism* something approaching their current meanings. This new science of life seemed to stand firmly behind Wordsworth’s famous definition of creativity in the Preface to *Lyrical Ballads* (1802): “all good poetry is the spontaneous overflow of powerful feelings.”

As Wordsworth digs more deeply into the question of spontaneity, however, another network of assumptions begins to emerge. His preface contains an oft-neglected series of qualifications and complications that turn the word *spontaneous* inside out and stand it on its head. “For our continued influxes of feeling,” he explains, “are modified and directed by our thoughts, which are indeed the representative of all our past feelings; and so by repetition and continuance . . . such habits of mind will be produced, that, by obeying blindly and mechanically the impulse of those habits, we shall describe objects, and utter sentiments of such a nature, and such connection with each other,” that the audience will be both enlightened and moved (*Prose Works* 1:127). Far from the musings of a self-indulged poet waiting for the winds of divine inspiration to sweep through his soul, Wordsworth’s turn of phrase—repetition, habit, blind obedience, modified feelings, directed thoughts, mechanical impulses—would seem more at home in the lexicon of eighteenth-century psychophysiology. It could take its place along side Robert Whytt’s “reflex consciousness” or David Hartley’s “secondary automatic motions.” It also shows an affinity to the mental gymnastics performed by Diderot’s Clairon, summoning up a phantasmic body stirred by imaginative passions. Like Wordsworth’s poet, the actress draws upon the “collection” of decaying sensations retained unconsciously by her memory and rematerialized by repetition. For both Diderot and Wordsworth, *spontaneous* and *automatic* describe the same set of phenomena, a coincidence of meaning that evokes not the free overflow of emotions but their progressive canalization into habit. For both, the mind “in tranquillity” recollects the body’s past feelings. Reflection shapes memory into an expressive illusion—an illusion of feelings spontaneously overflowing as if for the first time. This is not Nature, then; it is second nature.

As Wordsworth’s dilemma shows, the paradox of organism and mecha-
trends in virtuosity. Romantic performance embodied a paradox, if not the Paradox. As poets and theorists stressed the primacy of organism and spontaneous vitality in artistic creation, theatrical practice entered an age of unprecedented worship of technical virtuosity. By their very nature, virtuosic displays tend toward the premeditated and the mechanical. In the representative triumphs of early nineteenth-century performance, allied to acting and establishing a context in which Romantic acting may be understood, artists made their reputations by probing the outer limits of physical technique: on the concert stage, Paganini; in opera, bel canto singing; in the dance—most particularly in the dance—the high jetés of Marie Taglioni. Of the latter’s fantastic elevation, her spectral hovering sur les pointes, it was said that the body defied gravity and attained geometry. Its fabulous technique literally and figuratively seemed to lift it above the sublunary sphere inhabited by ordinary flesh. Her audiences, indulging titillating fantasies of her Paganinian diabolism, professed to find in her floating body intimations of the preternatural. Everyone really knows, however, that such flights through the aether begin and end everyday at precisely three feet and six inches, the height of the barre off the rehearsal-room floor. Viewed in broad historical perspective, the Romantic ballet extended into modernity the eighteenth-century aesthetic of the operatic castrato. The ballerina’s body, like the singer’s larynx of yesteryear, is tortured into shapes and launched into physical trajectories that are not in nature. In the absence of suitable automata or in spite of them, repetition of exercises must fix the positions and motions of the dance so indelibly on the artist’s muscles that she becomes capable of transcending artistically extraneous impulses such as pain. The art of the dance is motion recollected in tranquility.

By the early years of the nineteenth century, it had become obvious that the theater, despite the earnest efforts of eighteenth-century mechanical theorists from Aaron Hill to Jelgerhuis, lagged far behind the other arts in developing the universal notation systems, training methods, and established techniques that promise to show the ways whereby the resistance of the body to itself and to art may be reliably mastered. Actors lacked a Code of Terpsichore, a handbook for the mastery of the wayward organism in the cause of expression. This sense of a lack of a fundamental technique, or a science of theatrical art, stirred a defensive reaction of which Craig’s polemic was but one belated manifestation. The earlier recognition of the need for a kind of manual, a specific method to attain second nature, can be seen in the work of Goethe, who was perhaps the last figure in history to survey the realms of science and art with an authority equivalent to Diderot’s.

The extent of Diderot’s direct influence on Goethe is a matter of schol-
arly contention, but their intellectual affinities, particularly in matters of biology and theater, are beyond question. Goethe's insights into the morphology of plants prompted George Henry Lewes, his best-informed biographer, to remark on a phenomenon that could apply equally to the author of the Rêve de d'Alembert: "Biology has peculiar fascinations for the poetical mind, and has seduced several poets to become physiologists." The long chapter on Goethe's contributions to science reveals his biographer's personal enthusiasm for the poet's "clear announcement of biological laws." Lewes especially celebrates his subject's revolutionary understanding of organism. Every living being is a "reunion of being's living and existing in themselves"; its parts have evolved from an original type, but they are differentiated in structure and function according to the economy of the whole; they are subordinated, that is, to the autonomous organization of which they are specialized components in a perpetual process of being rearranged. The key to understanding "organic bodies," therefore, is "development." In order to comprehend the grown, science must study growth. Here relationships founded on adaptation, change, and evolutionary differentiation have replaced the matrix of fixed forms that characterized eighteenth-century taxonomy, even that of Goethe's beloved Linnaean. Although this formulation of life was the achievement of Goethe's generation, not Diderot's, d'Alembert's dream had evoked remarkably prescient images of the impending biosphere: "In this immense ocean of matter there is not one molecule that is just like another, not one exactly like itself from instant to the next... Everything changes, everything passes away—only the whole endures" (Rêve, 117). One can see why such an intoxicating vision of constantly evolving wholeness would appeal to the Romantic artist.

Among the other fascinations of biology to the poetical mind is the concept of the unconscious impulses underlying mental creation in all its forms, impulses that Goethe viewed as microcosmic analogues to the growth and responsive adaptability of organic nature at large. Both Diderot and Goethe saw art and science as compatible disciplines linked by common imaginative processes. In each case these processes refine the raw material of intuition into demonstrable truth and ideal beauty. To attain this refinement, they believed, a certain detachment is required. The dialectic of artistic inspiration and collectedness in Goethe's mature thought emerges from the pages of Madame de Staël's account in a form and with an emphasis remarkably similar to her countryman's thesis in the Paradoxe: "The artist," Goethe is reported to have said, "should conserve his sang-froid in order to excite more forcefully the imagination of his audience." Art is organic process, but the process of organic growth above all follows orderly rules.

In more practical terms Goethe's Rules for Actors (1803) and his tyrannical directorial reign at Weimar essentially harmonized with Diderot's view of the mechanical nature of the actor's bodily art. If anything, the Intendant's prescriptions, owing a greater debt to the rhetorical and painterly tradition, seem more reductive than the philosophe's. Diderot left to the actor much of the creative freedom that Goethe usurped by directorial fiat. He argues that rules of action, gesture, and posture should be incorporated into habitual actions until they become "second nature." When Diderot wrote of Clairon manipulating the great "puppet" of her character, he attributed the work of art to the actress. In rehearsal she fashioned the doll from the materials supplied by her imagination and the poet's. In performance she exerted virtuosic control over its every expressive turn. She moved inside her creation, altering its shapes and movements with the economy of a master puppeteer. Goethe, on the other hand, placed the strings of the marionette in the director's hands.

He prophesied the coming of Edward Gordon Craig's "Artist of the Theatre" and, beyond him, the cinema director. At Weimar the actor danced to the regisseur's tune, no longer imitating a model of his own devising, but pressing his body into kinesthetic templates fashioned for him by the director. Under strict coaching Goethe's actor worked to perfect details such as the angle at which his elbow bends and the precise position of the fingers, which should be calculated separately for each expressive pose. The two middle fingers, however, should be held together at all times; the little finger should always remain slightly bent. More generally, sequences of gestures and expressions should be rehearsed in front of a mirror until the actor can depict the entire action of the role with his body alone while he repeats the text silently to himself. Goethe enthused about what Diderot had termed the inner model: "At the same time it must be assumed that the actor has previously made completely his own the character and the entire circumstance of what is to be presented and that his imagination has correctly worked through his material; for without this preparation he will be correct neither in declamation nor in gesture."

Goethe further thought that the stage should be regarded as an empty space into which carefully choreographed figures project beautiful shapes. For the actor's clarity of reference, the stage floor should be divided into a grid, resembling a chessboard, so that he "can determine into which squares he will enter, can note this pattern on paper, and can then be sure that in emotional passages he will not rush here and there inartistically." This brand of stagecraft necessitated meticulous rehearsal during which the director beat time with a baton and after which he imposed fines to penalize haphazard execution. Goethe's rules for the
actor represent for the most part an ethics of rehearsal. In order to offset
the adverse theatrical consequences of organism, they outline a conscious
process of responsible creation.

Audiences and critics have always resisted this view of the theater,
particularly so in the Romantic age. They resisted it even when some of
their favorite performers upheld it explicitly. Daemon "inspiration"
reigned in the popular conception of theatrical genius, not to be put off
by demurs of craftsmanship. Nowhere can this rift between the artist and
the critical public be better seen than in the career of Edmund Kean, by
acclamation the definitive Romantic actor of the English stage. Lund
accounts of the spectators who fainted dead away during his passion-
swept and supposedly improvised tirades make for some of the liveliest
reading in theatrical biography. His audiences craved to find in him some-
ting of the supernatural, some forces at work in him beyond the ordi-
nary confines of flesh and blood. But to understand Kean’s acting on the
basis of these testimonials is like trying to read Coleridge by flashes of
lightning. Of course, the average spectator tends to explain an actor's
methods in terms of the effects he sees before his eyes. This represents
faulty procedure in analyzing the efforts of the artist whose business is
illusion, but it is a perfectly natural mistake for the casual theateregoer
to make. The false penumbra of pathetic sensibility that surrounded per-
formances by Susannah Cibber is one example of such benign misinfor-
mation. Nothing seems to have irritated Kean more, however, than for
critics, who should have known better, to praise him for the "impulse-
siveness" of his acting. Like Diderot, he expected those who wrote profes-
sionally about the theater at least to understand that acting constitutes
a process. He expected them to respect the fact that the actor of integrity
tries his best, within the limits of his daily mental and physical disposi-
tion (and for Kean this did vary), to execute at each performance the model or
conception he has created in rehearsal. When Kean blocked a cross, he
counted the steps. Why should he devote to his art less care than Taglioni
gave hers? In tones of a craftsman whose intelligent mastery of his mat-
erial has been frivolously dismissed as inspiration, he complained bitterly
to Garrick’s widow: “These people don’t understand their business; they
give me credit where I don’t deserve it, and pass over passages on which I
have bestowed the utmost care and attention. Because my style is easy
and natural they think I don’t study, and talk about the ‘sudden impulse
of genius.’ There is no such thing as impulsive acting; all is premeditated
and studied beforehand. A man may act better or worse on a particular
night, from particular circumstances; but although the execution may not
be so brilliant, the conception is the same” (AA, 327–28). Kean’s outburst
demonstrates a practical application of Diderot’s inner model, exposing

the naïve understanding of spontaneity by those who would confound the
promptings of second nature with those of the first. Falling away from
the conception reflects not genius, but a lapsed craftsmanship attribu-
table to physical indisposition.

Kean would do no doubt have taken comfort in an anecdote related by his
French colleague François-Joseph Talma. Playing the pathetic death scene
in Tancred e one night in Marseilles in 1814, Talma experienced a sponta-
neous rush of inspiration, palpitating his nerves at the prospect of his
character’s imminent demise. “Never have I played like this,” he was
thinking ecstasically to himself, when suddenly at the climactic moment,
his final agonized collapse to the stage floor, a blood-curdling shriek
resounded through the auditorium, followed by commotion and uproar.
He instantly deduced that a young woman had fainted at the sight of his
death, a prospect he found so thrilling that he himself swooned as the
curtain fell. When he revived backstage, he set aside all the doubts about
sensibility that his reading and rereading of Diderot’s Paradoxe had
carried. From this moment forth he would play from inspiration rather
than calculation, letting the spontaneous promptings of his soul carry him
whither they might. Later he recounted his triumph at a soirée. A certain
lady, listening intently to his conclusions with an odd mixture of amuse-
ment and embarrassment, invited him to her house the following day.
There she confessed that she was the one who had cried out so piercingly,
but not because of anything she had seen on the stage. She screamed
because her estranged husband had stabbed her during a fit of jealous
rage. The pain had been excruciating, but fortunately the weapon punct-
ured nothing vital—except for Talma’s new theory.

As one might surmise from this story, Diderot’s ironic muse haunted
Talma on stage and off. For a time he evidently had access to a manuscript
of the complete text of the Paradoxe sur le comédien, and he owned the
reprinted version of Grimm’s Correspondance littéraire (1812–13) in which
the “Observations sur Garrick” had first appeared in 1770. If imitation
is the sincerest form of flattery, then Talma’s several straightforward
plagiarisms from Diderot tell us a good deal about how his views of acting
evolved. In a letter written shortly after l’Affaire Tancred e, Talma at-
tempted to pass off the passage on the inner model from the Paradoxe as
his own sentiments on the art of acting, making only minor changes in
phrasing and deleting nothing. As time went by, Talma reshuffled his
views, ostensibly to insist on a greater role for sensibility. His final re-
vised statement on acting came in an essay he wrote for publication at the
head of Lekain’s memoirs, Quelques réflexions sur Lekain et sur l’art
théâtral (1825). Its subsequent influence far exceeds the actual originality
of its arguments. It was translated into English at Henry Irving’s urging
and printed in *The Theatre* for 1877. Irving hailed it as a “vade mecum” of the profession, all the more persuasive and useful to actors because it had been “written by one of themselves” (PA, 42). William Charles Macready’s *Reminiscences* shows its influence in detail. G. H. Lewes cites Talma in several key passages in his important collection of essays *On Actors and the Art of Acting* (1875), and Lekain was among the books that Stanislavski used as a springboard into the System. In assessing the connections that these facts suggest, however, it is vital to recognize the primary influence behind such a “deflected” text: Lekain was central to later theories of acting because of its unacknowledged indebtedness to the *Paradoxe*.

Like many actors who have since written on Diderot, Talma expressed his distaste for the coldness and insincerity he found imputed to actors by the *Paradoxe sur le comédien*. He repeatedly argued for two qualities in the great actor—sensibility and intelligence—and he pointedly championed Dumesnil over Clairon. At the same time, however, he relentlessly pillaged Diderot’s thought for the very substance and, sometimes, for the very language of his theory. Above all, Talma depicted acting as a psychophysical process. The larger process, the actor’s career, begins with a “nervous system” of particular mobility and responsiveness (PA, 49) and ends with a repertoire of roles that have been honed and polished to perfection over at least a twenty-year period, the minimum time an actor requires to master his instrument and his line of business (PA, 51). At the end of this extended period of apprenticeship, Talma believed, Lekain for one had achieved an impeccable technique founded on repetition, habit, intelligence, and memory. His instrument had at last fallen into perfect tune:

> It was then that his acting was fixed on such bases, and was so subservient to his will, that the same combinations and the same effects presented themselves without study. Accent, inflections, action, attitudes, looks, all were reproduced at every representation with the same exactness, the same vigour; and if there was any difference between one representation and another, it was always in favour of the last. (PA, 51)

Talma filched the final sentence here verbatim from the *Paradoxe*, as he had done before, but the most significant borrowing consists of the paradoxical concept itself. Lekain has attained apparent spontaneity by conditioning his nervous system into certain regular patterns of action and response. His actions have become so thoroughly studied that they require no study. His body has been worked and reworked until the merely accidental impulse cannot turn his actions aside from their pre-determined course. Lekain has become an acting machine in much the same way that Taglioni was a dancing machine. As one commentator observed of Lekain, you cannot be spontaneous a second time (PA, 62). This problem developed into one of the central issues in nineteenth-century acting theory, giving rise to William Gillette’s well-known essay “The Illusion of the First Time in Acting” and to a revealing remark made by Henry Irving in his introduction to Lekain, which conceded much more to Diderot’s position than Irving seems to have realized: “The essence of acting is its apparent spontaneity. Perfect illusion is attained when every effect seems to be an accident” (PA, 42–43, emphasis added). Here spontaneity has become part of a prefabricated illusion, and the term loses any semblance of its original meaning.

Talma’s particular virtue was that he outlined a method whereby rehearsal can purify impulse into art and yet leave room for a periodic refreshment or an overhaul of the role. The method obscures almost as much as it reveals, but in its obvious debt to the *Paradoxe* and in its equally obvious influence on Stanislavski, it represents a crucial passage among revolutionary “deflected” texts:

> In order that [the actor’s] inspirations may not be lost, his memory, in the silence of repose, recalls the accent of his voice, the expression of his features, his action—in a word, the spontaneous workings of his mind, which he had suffered to have free course, and, in effect, everything which in the moment of his exaltation contributed to the effect he had produced. His intelligence then passes all these means in review, connecting them and fixing them in his memory, to re-employ them at pleasure in succeeding representations. . . . By this kind of labour the intelligence accumulates and preserves all the creations of sensibility. (PA, 50–51)

The method outlined here echoes the process of creating the inner model that Diderot attributed to Mlle. Clairon in her *rêverie*. The actor is encouraged to collect the sum total of appropriate gestures and tones and to shape them into a design for the role. Measured against the actor’s career, this design represents the building of an individual character, the smaller process. In Talma’s view, much of this construction of a character happens unconsciously. Its materials derive from outward observation of nature and from the introspective contemplation of emotion through memory. Creative intelligence collects these elements into a truthful fiction. Speaking directly to the point of affective memory, Talma apologizes for secretly observing himself at moments of personal sorrow with the intent of later incorporating his findings into his work (PA, 58).
The theory of the actor’s use of his own personal associations in the construction of a role coincided conveniently with the Romantic heritage of complexity and idiosyncrasy in the development of dramatic character. Character dominated Romantic criticism of Shakespeare, and it helped to promote the concept of a character biography. This interesting idea, which lent itself readily to Antoine’s type of naturalism and ultimately to Stanislavski’s, presumes that each dramatic persona has a life anterior and (if he survives the disease of the fifth act) posterior to the text. It thus becomes the actor’s task, as it had been the task of Romantic criticism in such works as The Girlhood of Shakespeare’s Heroines, to fill in the offstage life of the character through his analysis of the role and his own creative imagination. The question of “How many children had Lady Macbeth?” is one that the modern actress taking the role might reasonably be expected to answer. The life sciences encouraged her to view character as the behavior of an organism with a history, raising difficulties of the sort that would not have troubled her predecessors. Taxonomic review of generalized passions as featured in eighteenth-century acting texts lent itself much more readily to the supposed new-classical universality of types than it did to this kind of individuality. The obsolescence of the generic “Passions” opened the way for revised approaches to characterization based on more complex and up-to-date psychologies, particularly the emerging psychology of the unconscious. At this point the theorist needed to explain how the interior life of the character and the interior life of the actor could somehow be brought together, subtly fusing imagination and memory, character biography and autobiography.

On the subject of characterization, Talma stands between two worlds. His definition of the process of creating the inner model at once nods to neoclassical generality as it looks forward to the moasiclatic particularity of naturalism. He distinguished between memory and imagination in a way reminiscent of Diderot’s Eléments de physiologie, which he could not have known, and the Paradoxe, which he once again paraphrases in ex tento. Talma says that the actor’s imagination which, creative, active, and powerful, consists in collecting in one single fictitious object the qualities of several real objects, which associates the actor with the inspirations of the poet, transports him back to the past, and enables him to look on at the lives of historical personages or the impassioned figures created by genius—which reveals to him, as though by magic, their physiognomy, their heroic stature, their language, their habits, all the shades of their character, all the movements of their soul, and even their singularities. (PA, 49)

As a resource for vivifying the modèle idéal, Talma proposes the storehouse of the actor’s own inner experience, “the impressions his soul has felt” and their impact on his outward behavior, voice, and physiognomy: “He mediates on these, and clothes the fictitious passions with these real forms” (PA, 57–58). Imagination and memory of emotion, therefore, once again emerge as the theoretical bridge between sincerity and art, between inner feelings and outer form.

The issue of the singularities of characterization drew attention once again to the individual resources of the actor’s instrument. The question was as old as Quintilian’s Insti tutia, but the answer supplied by science had been revolutionized by the development of the concept of organism. Talma specified the kind of nervous system required for acting, but the increasing interest in individual bodily and psychic fabrics rendered the trend toward specificity entirely more personal. The individual organism came to be scrutinized as a network of endowments and limitations, themselves the complex product of heredity and environment. If the actor’s art requires him to lend his peculiarities to his imaginative creation, then an inventory of those quirks would seem to be necessary as a preliminary step. This inventory of the actor’s means could take many forms, but none perhaps more remarkable than that sketched by Sir Charles Bell in The Anatomy and Philosophy of Expression as Connected with the Fine Arts, first published in 1806 and again in many subsequent editions to 1880. Bell shares priority in establishing the Bell-Magendie law of nerve physiology, which differentiates between motor and sensory channels entering and exiting the spinal cord, an important contribution to the understanding of reflex action. His principal interest was anatomy, but like his brother, G. J. Bell, who left richly detailed notes on Mrs. Siddons’s Lady Macbeth (PA, 79–109), Sir Charles became a close student of actors and the art of acting.

Bell’s Anatomy and Philosophy of Expression anticipated Darwin’s Expression of Emotion in Man and Animals (1872) by proposing a comparative method for demonstrating the continuities of emotional expression among the higher animals including man. At the outset he claims “special provision” for human expression, but his most stimulating observations concern the expressive machinery that man has in common with savage and domesticated creatures. He divided the muscles of the face into three classes: those that raise the lip from the teeth, those that surround the eyelids, and those that move the nostrils. The first category he divided into two divergent subtypes: ringentes, the “snarling muscles” of carnivorous animals; and depascentes, the feeding muscles of “graminivorous” animals. Bell inventories both types, carnivores and graminivores, in currently popular actors and actresses. Though he re-
garded the horse as the possessor of the noblest of animal physiognomies, one wonders if Mrs. Siddons could actually bring herself to accept the compliment in the spirit Bell intended:

In the countenance of Mrs. Siddons, or Mr. John Kemble, there was presented the highest character of beauty which belongs to the true English face. In that family the upper lip and nostrils were very expressive: the class of muscles which operate on the nostrils was especially powerful, and both these great tragedians had a remarkable capacity for the expression of the nobler passions. In their cast of features there was never seen that blood-thirsty look which Cooke could throw into his face. In him the **ringentes** prevailed: and what determined hate could he express, when, combined with the oblique cast of his eyes, he drew up the outer part of the upper lip, and disclosed a sharp angular tooth?

Bell’s assessment of the anatomical and physiological limits imposed on expressiveness ushers in a new concept of the particularity of emotion. His view derives from the emerging doctrine that expressive behavior is inherited, that the motors driving emotion are held in common by certain evolutionarily related species, but that singular characteristics may emerge under the determining influence of unique inheritance and individual experience. To view the actor’s expression of emotion as part of the continuity of nature, as Sir Charles Bell did, opens up new avenues leading from physiognomy inward to psychology and to the anatomy of emotions at their source. To view the player’s passion as a manifestation of his animal nature, comical as Bell’s example may appear, invites theatrical theorists to examine emotion in light of the findings of the most important revolution in nineteenth-century science, the developmental hypothesis or Darwinism.

Underlying the **Paradoxe sur le comédien** there resides Diderot’s presupposition that the authentic emotions, by their very nature, resist voluntary control. Behind this assumption, in turn, exists his concept of negative will as he explored it in the *Éléments de physiologie*, namely, that will has no real existence apart from a congregation of biological drives dictated by the animal origins of the human machine. By will Diderot means instinct. Throughout the *Rêve de d’Alembert*, he upholds the continuity of the forms of nature and their evolutionary mutability: "Who knows whether our species is not simply a hatchery for another generation of beings who will supplant our species after the lapse of countless centuries, during which successive modifications will occur?" (*Rêve*, 116). Sensibility exists from the lowest to the highest levels. Give way to your sensibility, Diderot says in effect, and you experience the spasms of a nonrational force you have in common with the rest of **FIGURE 20. Mrs. Siddons. (Courtesy of Washington University Libraries.)**

**FIGURE 21. *Dopascentes.* "In the graminivorous they are directed so as to raise the lips from the incisor teeth." From Charles Bell, *Anatomy and Philosophy of Expression* (1806). (Courtesy of Washington University Libraries.)**
evolving nature. It operates from below, trembling the filaments of your web, beyond your conscious control. Charles Darwin's own account of emotion and expression, illuminated by his explanation of the mechanism of natural selection, makes Diderot's point specifically: "That the chief expressive actions, exhibited by man and by lower animals, are now innate or inherited—that is, have not been learnt by the individual—is admitted by everyone. So little has learning or imitation to do with several of them that they are from the earliest days and throughout life quite beyond our control." Ethology, the modern science Darwin founded with The Expression of the Emotions in Man and Animals, explores the continuities of emotional behavior in nature, and it has influenced contemporary theatrical theory on questions of communication and social interactions. In the nineteenth century, however, Darwin's authority was brought to bear directly on the question of the actor's feeling. In Masks or Faces? William Archer quotes The Expression of the Emotions to prove, among other things, that perspiration during performance indicates the presence of powerful emotions in the actor and that, once excited by the imagination, these emotions continue to produce manifestations involuntarily (MF, 166–67). To illustrate his point Archer turns to the involuntary phenomenon of the pallor of terror and the flushed complexion of rage in a chapter called "Nature's Cosmetics.

Darwinism portrays the body as organized principally to meet the exigencies of the exterior milieu. The senses turn outward on the objective world to meet any threats to the well-being of the organism, not inward to monitor the vague impulses that will burst forth as emotion. Expressive movements more naturally spring from the reflexes of the species than the conscious will of the individual. Intriguingly, Darwin suggests in passing that a certain family of great actors—the Kembles, no doubt, though he does not name them—may have possessed voluntary control over specific groups of facial muscles to an abnormal degree (Emotions, 183–84). Diderot raised the same issue when he described Garrick's astonishing physiognomical virtuosity, but pinpoint control over the inward physiology of emotion was another, more complex question. Though not impossible in the broad spectrum of mutations, the natural emergence of this quality would be a rarity indeed. As Archer observed: "Physiological records may furnish cases of a power to blush and blanch at will; but even if these exist (they have not come to my knowledge) we can only regard such a faculty as a freak of nature, much more abnormal than (for example) the power of moving their ears which some people possess" (MF, 159). Diderot suggests that this sort of control, if not conspicuously present in the organization to begin with, may be developed by the exceptional organism—machine through practice or
habit by the artful cultivation of a second nature (Rêve, 149–56). Diderot
would have agreed with Darwin and Archer on the scarcity of this attrib-
ute in the wild. By 1769 he already held the modern view that in nature’s
plan the conscious mind looks outward on the light of the world; behind
it there prevails an inner darkness, harboring not only the unspeakable,
but the unthinkable: “If your little savage were left to himself and to his
native blindness,” observes MOI in Le neveu de Rameau of LUI’s son,
“he would in time join the infant’s reasoning to the grown man’s pas-
sion—he would strangle his father and sleep with his mother” (76).

Nineteenth-century theories of mind-body relationships increasingly
adopted the view that nonrational and instinctive forces in man reside in a
mysterious and capacious place called the unconscious. By the 1870s the
word unconscious and its physiological counterpart subconscious achieved
a popularity pervasive enough to constitute a fashion. This trend pro-
vided a meeting ground for Darwin and Freud.10 Physiological biology
sought to locate the “higher” mental processes in the cerebrum and the
emotions in the brain stem, which had evolved at a more primitive stage
in the descent of man. Speculative psychology, on the other hand, divided
the mind into two interdependent but unlocalized spheres of influence—
consciousness and everything else. The rise to prominence of these con-
cepts may be gauged by the phenomenal success of Eduard von
Hartmann’s Philosophy of the Unconscious (1868), which straddled both
the biological and speculative views. This deeply thoughtful, well-
formed, and extremely boring book went through nine German edi-
tions by 1882. Translations appeared in French (1877) and English (1884).

 Chroniclers of intellectual taste reported that during the decade of the
1870s two topics dominated the discussions of the Berlin intelligentsia:
“Wagner and von Hartmann, the music and the philosophy of the uncon-
sious, Tristan and instinct.”

William Archer approached von Hartmann with deference as “the
Philosopher of the Unconscious” (MF, 172). To describe the actor’s re-
course to his unconsciousness, he adopted von Hartmann’s term autosug-
gestion. Masks or Faces? cites several examples of actors whose powers of
concentration allowed them to maintain an intense absorption in their
roles, beginning with Burbage putting on his part in the Globe tiring
house. A number of actors who responded to Archer’s questionnaire
reported spending introspective moments in their dressing rooms or
backstage before their entrances. Their purpose seems to have been to
prepare the kind of mental perimeter that Stanislavski would later call
“the magic circle.” Like Stanislavski, Archer emphasized the fugitive
nature of the actor’s subconscious mind, all too easily driven to hide itself
in inaccessible places. It would not be forced. Through autosuggestion,
Archer maintains, such an actor works on his feelings indirectly; he does not will them into existence consciously, but creates a psychological environment into which they can penetrate more easily. Ibsen’s translator seems to have been aware of current developments in medicine. Hypnosis as a therapeutic device, after suffering a serious reverse with the discredit of Mesmer and animal magnetism, had made a strong comeback by the 1880s in the psychiatric practices of Jean-Martin Charcot, Hippolyte Bernheim, and the young Sigmund Freud. Its status at this juncture was complex and controversial, but enthusiasts viewed it as a hidden pathway to the unconscious mind. The use of hypnosis by actors to attain trance-like concentration on the role was shortly thereafter proposed by Max Martersteig in Der Schauspieler: ein künstlerisches Problem (1900). Martersteig’s transfiguration theory made specific use of the premise that hypnotic suggestion can release creative energies “without voluntary participation.” The hypnotic instrument is the play itself, which begins to work its magic on the actor’s “cerebral system” from the very first reading.16

Drawing on The Expression of the Emotions in Man and Animals yet again, Archer introduced the term innervation as a physiological counterpart to von Hartmann’s psychological autosuggestion. By innervation Darwin meant the physical preparation of the animal’s muscular system for violent exertion, combat, or display. Archer begins his discussion on this question with the following anecdotes: “G. H. Lewes relates how Macready, as Shylock, used to shake a ladder violently before going on for the scene with Tubal, in order to get up ‘the proper state of white heat’” (MF, 171). He goes on to cite the passage in the Hamburg Dramaturgy where Lessing argues that an actor can work up an emotion by performing the physical actions associated with the emotion. As Darwin put it in another passage that Archer quotes: “He who gives way to violent gestures will increase his rage; he who does not control the signs of fear will experience fear in a greater degree;... These results follow partly from the intimate relation which exists between almost all the emotions and their outward manifestations; and partly from the direct influence of exertion on the heart, and consequently on the brain” (Emotions, 366). Archer’s vague duality alternates between working from the inside out through mental concentration and from the inside in through physical actions (he himself seems to confuse the processes). In such an idea Aaron Hill might have recognized his “plastic imagination” and Lessing his contrasting “involuntary mechanism.” The immediate source of Archer’s bipolar division of theatrical emotion was, as his reference to the anecdote about Macready suggests, much closer at hand. He was George Henry Lewes, Victorian scientist and drama critic, whose expert inquiry into the psychophysiology of acting confronted the complex issues raised by the concept of organism.

Archer credited Lewes with the introduction of the word psychology into the vocabulary of dramatic criticism and proposed him as “the most highly trained thinker who ever applied himself to the study of theatrical art in England.” Other testimony supports Archer’s view. In La psychologie anglaise contemporaine of 1870, Théodule-Armand Ribot described Lewes as “a physiologist” and Comtean “philosopher of science” whose efforts were part of a movement to establish psychology as an independent branch of scientific inquiry. Histories of psychology link him with Herbert Spencer as a thinker who grasped the implications of evolutionary biology for the study of behavior. After exploring incidental topics in the history of science in his Biographical History of Philosophy (1845) and The Life of Goethe (1855), Lewes turned to research in marine biology and animal physiology. His studies led to an extremely popular publication, The Physiology of Common Life (1859). His culminating work was a five-volume study of psychology, Problems of Life and Mind (1874–79). As drama critic and essayist on theatrical subjects for such journals as the Leader, Blackwood’s, and the Pall Mall Gazette,
Lewes thus brought expert knowledge to bear on his interest in what he called the "psychological conditions on which [theatrical] effects depend." Late in life he temporarily set aside the middle volume of his Problems, The Physical Basis of Mind, in order to assemble his scattered dramatic reviews and essays into a single collection, On Actors and the Art of Acting. Reflecting on Lewes's attainments, Archer wished that Diderot's paradox could be reargued, not by a "dogmatic 'First' and docile 'Second,'" but by an actor and a "trained psychologist" (MF, 76). Lewes was able to speak in both of these capacities. He had acted in amateur and professional productions, and he employed his extensive knowledge of physiology to pursue the anomaly of spontaneity, the paradox of organic and mechanical modes of behavior.

As a psychologist, G. H. Lewes was an associationist in the direct line of descent leading from David Hartley's Observations on Man, a book he admired as an early attempt to adduce a physiology of mental processes. He retained Hartley's term vibrations even though he confessed it lacked literal meaning when applied to nervous tissue. Abandoning Hartley's parallelism for monism, however, Lewes believed that mind and body constitute one entity, not two. Every experience presents a double aspect—objective and subjective. The body is merely the objective aspect of a subjective process called mind. Every mental change has a corresponding physical change, and every mental act is carried on by the entire organism. In the mind-body continuum the nervous system represents a single entity. The primary mechanism of experience is the neural tremor or sense datum. The secondary mechanism is sensation or grouping of neural tremors; the tertiary mechanism, the reproduction of sensation to form an image. When an image loses its immediacy in sensation, it becomes an idea or symbol. The most intimate reciprocity exists between higher and lower forms of nervous activity. The idea or mental symbol may recall the primary tremor; an external stimulus may recall the image, the idea, and the feeling. Mind equals Organisation, which Lewes defined in The Physiology of Common Life as "the whole sum of necessary conditions" to sustain life, the connection and coordination of parts for vital functions or processes.

The emerging concept of reflex also played an important part in Lewes's thinking about the body, and it led him to some of his most productive experimentation. Vivisectionists had previously discovered that the spine could respond with surprising versatility even in the absence of a brain. In 1853 Eduard Pflüger, in an experiment later repeated by Lewes, reported on the "wash reflex" of the spinal frog. After removing its brain, Pflüger poured acid on the animal's right side. It responded by washing its back with its right hind leg. Then Pflüger amputated the right leg and restimulated the right side with acid. Thereupon the decapitated frog washed its right side with its left leg—a reflex adapted to special circumstances with the expedience of thought. Stirrled by this apparently purposive act carried out by the spinal frog, Pflüger was moved to locate a part of the soul in the spinal cord. Less abstractly put, he concluded that the spine thinks. Once the reflexive nature of higher nervous activity was established, physiologists could attribute sentience to the organism as a whole. Lewes did not hesitate to include man in the generalizations derived from animal experimentation: "It is the man and not the brain that thinks; it is the organism as a whole, and not one organ that feels and acts" (PLM, Physical Basis of Mind, 441). On the basis of his replication of Pflüger's work and of further experiments along similar lines, Lewes concluded that: 1) all action is based on a "reflex arc" and that "the cerebrum and spinal cord constitute an axis of reflection"; 2) reflex actions—all action—are due to a complex of physiological mechanisms, but are not merely mechanical in Descartes's sense of automatism because they are sentient ("felt") even in the absence of a brain. The cerebrum is an indispensable center for the coordination of the higher reflexes, but it is not the exclusive seat of sensation. When the brain is removed, reflex coordination is reduced sufficiently to give the appearance of mere mechanism, but the organism is still sensible. "All actions are the actions of a reflex mechanism," he wrote in a sentence that distills the vitalist-mechanist controversy à la Diderot; "and all are sentient; even when unconscious they are therefore never purely mechanical, but always organical" (PLM, Physical Basis of Mind, 390).

In drawing a distinction between organisms and machines (in the gross sense of man-made objects like steam engines), Lewes imputed unique properties to the "vital mechanism" in order to differentiate between it and a mere "system of forces." Although an organism is "also a system of forces," it responds less directly than a machine to external impulses; rather, it responds to its own internal impulses: "Secondly, . . . its mechanism or structural adaptation, becomes modified, and consequently its motors rearranged, under varying stimulations, so that its reactions are not uniformly the same. The organism has a history, and is the expression of experiences. On these two points of difference rests the marked contrast between the spontaneity of organisms and the fatality of machines. No machine is educable. All its actions can be predicted. What it does today it will do to-morrow, and without variation in the way of doing it." (PLM, 3rd series, 2:85). He further distinguished between vital entities and pure mechanisms on the basis of evolution: not only individual organisms but entire species have histories and are the expression of connected experiences—adaptable, mutable, and various. The phrase that
keeps reappearing in Lewes's work is "fluctuating spontaneity" or its alternative, "fluctuating variety." In his view it describes the fundamental properties of life.

When Lewes writes about the theater, he relies on example rather than extended exposition, but if his theatrical specimens are checked against his scientific principles, clear patterns begin to emerge. He boldly sets out to discriminate "the sources of theatrical emotion" (On Actors, 9), for he views expressiveness as the crux of the actor's art. The great performers must first possess "plasticity of organisation" (175). This means a fluid interdependence of body and mind, muscle and imagination, including a physique free from muscular tension, rigidity, and superfluity of motion, and a technical mastery of voice in tone, cadence, and tempo. The physical organizations of great actors all share one characteristic: an "animal" physiology manifested in its energy, responsiveness, flexibility, and grace. Lewes's favorite performers spring from the pages of his criticism as if from the center ring at the circus. "Rachel was the panther of the stage, with a panther's terrible beauty and undulating grace she moved and stood, glared and sprang" (35). Edmund Kean was a lion (159). Leman is burned with the "great energy of animal passion" (89). Shakespeare probably failed as an actor, Lewes speculates, because he lacked "weighty animalism" (101).

Animal physique or no, Lewes refused to credit "impulsive" or "inspired" acting as a way of communicating emotion: "It is not enough for an actor to feel, he must represent" (On Actors, 30). The craft of acting must be mastered by conscientious training and study. Unmediated emotion is not the source of great performances. The poet, as Lewes repeatedly says, may feel the emotions he describes, but he cannot read his poem in a way that would convey those emotions to others. Stage emotions must be enlarged or, for practical purposes, they will not exist.

Only the actor has the appropriate instrument to magnify a mental tremor or vibration—clinical terms routinely used by Lewes in his drama criticism—into a theatrical image or symbol. "Voice, looks, and gestures are the actor's symbols" (30), and the finest actors are those who can choose the symbols that will most effectively represent the characters they are trying to portray. A symbol drained of its inner content of feeling, however, will not suffice for Lewes. He continually distinguishes the great actor who convincingly embodies the emotion he conveys from the conventional actor whose symbols lack vividness. "Either because in truth there is no strong feeling moving him, or because he is not artist enough to give it genuine expression," the conventional actor repeats merely pantomimic formulas—ready-made "signs," clichés, as "unlike nature as the gestures of a ballet-dancer" (176, 185). Though such hieroglyphic demonstrations may on occasion awe the uncultivated, for the most part Lewes stigmatizes them as "mechanical," barren of the textures and subtle gradations of real life.

As a working critic Lewes reserved his most brutal analyses for those performers who failed to command what he called "the fluctuating physiognomy of passion" (On Actors, 180). In his view the actor had two gifts with which to work—the character's emotions as conceived by the dramatist and the potentiality of his own bodily instrument. The actor's goal was to bring these elements into expressive juxtaposition, attaining the variegated responsiveness of a living organism. After surveying the several promising possibilities for vital characterization in Shakespeare's Macbeth, Lewes's surgical eye fell upon Charles Kean's inadequacies in this department: "When the witches accost him, his only expression of metaphysical influence is to stand still with his eyes fixed and his mouth open, in the way you know. The fluctuating emotions which Macbeth must be undergoing all that time are expressed by a fixed stare." Lewes, in his criticism of Charles Dickens's novels, develops a parallel idea. As truthful characterization in a realistic novel requires wholeness and roundness to capture the organic conditions of life, so characterization in the theater requires a completeness of response from the actor—body and mind together. In his remarks on mechanical characterization in Dickens, Lewes introduces an illuminating analogy between flat characters and trained laboratory animals, whose centers of reflex coordination have been excised. When he thinks of mere catchwords personified as characters, Lewes is reminded of the frogs whose brains have been taken out for physiological purposes, and whose actions henceforth want the distinctive peculiarity of organic action, that of fluctuating spontaneity. Place one of these brainless frogs on his back and he will at once recover the sitting posture; draw a leg from under him, and he will draw it back again; tickle or prick him and he will push away the object, or take one hop out of the way; stroke his back, and he will utter one croak. All these things resemble the actions of the unmutated frog, but they differ in being isolated actions, and always the same: they are as uniform and calculable as the movements of a machine. The uninjured frog may or may not croak, may or may not hop away; the result is never calculable, and is rarely a single croak or a single hop.

Unimpaired frogs respond with the flexibility and variety of life itself, which are organic. Altered frogs react with uniformity and predictability, which are mechanical. In the eighteenth century similar alterations had emphasized the mechanical nature of artists like the castrati and had been
praised as such; in the new context of the nineteenth century, anything less than organic completeness was considered less than human. Like Charles Kean's Shakespearean performances generally—for Lewes did not single out Macbeth for special condemnation—such decoratuated characters are “utterly without physiognomical play; one stolid expression, immovable as an ancient mask, is worn throughout a scene which demands fluctuating variety” (On Actors, 28). In short, according to Lewes, “Charles Kean has an organisation which excludes him from the artistic expression of complex or subtle emotions” (30–31).

At the opposite niche in Lewes's pantheon was Edmund Kean, Charles's father and the leonine hero of On Actors and the Art of Acting. Like Rachel and Lemaître, Edmund Kean was endowed with “mimetic flexibility of organisation” (100–01). In acting of this physical calibre, inner impulse and outer expression coincided with astonishing ease. They "found no difficulty in the most rapid transition; they could one moment chat calmly and the next explode. The imaginative sympathy instantaneously called up the accessories of expression; one tone would send vibrations through them powerful enough to excite the nervous discharge" (115). Lewes as a drama critic did not necessarily approve of these explosions because they dangerously resembled the mechanical “points” of old. As a scientist, however, he was fascinated by the reciprocity of mind and body demonstrated by such displays.

Discharge and vibrations—the terms Lewes used to describe the performances of Rachel, Edmund Kean, and Lemaître—are clinically defined in The Physical Basis of Mind: the former means a dynamic liberation of energy in nervous tissue, a sudden release of accumulated tension; the latter means the communication of a nervous impulse to adjacent tissue. “Laws of Discharge” and closely related “Laws of Arrest,” Lewes theorizes, govern the function of the entire nervous mechanism. A state of nervous tension, for instance, is increased by every stimulation that falls short of discharge. Liberated tension in the form of energy discharges itself along “the lines of least resistance” in the pathways of the nervous system. Frequency of use helps to determine ease of traverse, but overstimulation may lead to arrest caused by fatigue of the organ at the end of the pathway.

Lewes applied his “Laws of Discharge and Arrest” directly to a theatrical phenomenon he called subsiding emotion. Like the observations Newton made on optical traces, Lewes's research proved that each nervous impulse “leaves behind it a tremor which does not immediately subside.” Even after the stimulus has been withdrawn, the nervous activity or “agitation” that it caused continues. Lewes restates in abstract terms the basic idea that had led one hundred years before to the doctrine of sensibility: “We know by accurate measurements that the excitation of a nerve lasts much longer than the stimulus, a momentary impact producing an enduring agitation. We know that the excitation of a centre lasts longer than the muscular contraction it has initiated” (PLM, Physical Basis of Mind, 303, 176). Such experiences are familiar to everyone: the eyes, staring at a single lamp in an otherwise darkened room, continue to “see” the image after the light goes out; the bitter taste remains after the bitter substance has been removed; the arm muscles still tremble after the weight has been set down. These residual nervous tremors, increased in complexity and greatly amplified, form the physical basis of a complex psychic event—the gradual subsiding of emotion after a massive discharge. Again Lewes singles out Kean and Rachel, who also possessed the powers of nearly instantaneous transformation, as masters of the gradual physiology of subsiding emotion. He identified it as Kean's most conspicuous virtue and the clinching proof of his greatness:

Kean was not only remarkable for the intensity of passionate expression, but for a peculiarity I have never seen so thoroughly realized by another, although it is one which belongs to the truth of passion, namely the expression of subsiding emotion. Although fond, far too fond of abrupt transitions—passing from vehemence to familiarity, and mingling strong lights and shadows with Caravaggio force of unreality—nevertheless his instinct taught him what few actors are taught—that a strong emotion, after discharging itself in one massive current, continues for a time expressing itself in feeble currents. The waves are not still when the storm has passed away. There remains a ground-swell troubling the dea's. In watching Kean's quivering muscles and altered tones you felt the subsidence of passion. The voice might be calm, but there was a tremor in it; the face might be quiet, but there were vanishing traces of recent agitation. (On Actors, 20)

Emotion thus anatomized and finely delineated reproduces the behavior of a living being. Abrupt transitions, while “theatrically” effective in startling the philistines from their naps, mirror only the machine. According to Lewes, Rachel eventually began to neglect her talents, showing her most damaging carelessness by rushing to make old-fashioned “points.” In isolated moments her former power burst forth, but without meaning, because her interim emotion had degenerated into empty noise and gesticulation. “The secondary emotions of subsiding passion,” Lewes notes sadly, “she no longer represents, and that is what I indicate in saying she has become mechanical.”

Lewes's criterion of subsiding emotion offers yet another instance of a now familiar phenomenon. A transformed concept of the body had again
revolutionized standards of theatrical truth. The mechanical passions like
Garrick's astonishment, once accepted as the scientific representation of
nature, had given way to organic transitions of evolving emotions. This
marked the success of a new "semiotics of affects" founded on a new
physiological paradigm. Naturally enough, Lewes the drama critic cham-
piioned the interpretation of nature advanced by Lewes the biologist. The
life of the role must, like the life of the organism, be marked by subtle
gradations and complex adjustments. Both have identities shaped by their
spontaneous capacity to adapt to changing circumstances. Both have his-
tories formed by their memories of those adaptations. "Kean's quivering
muscles and altered tones" attested to his sense of the character's integrity
and the continuity of his experiences.

Kean could not have reproached Lewes, of course, as one of those
amateurs who praised his impulsive genius and depreciated his craftsmanship. This drama critic at least wrote of Kean's technique from the position
of an acting theorist who had often lowered his bucket into the wells of
Diderot's Paradoxe and Talma's Lekain. As a physiologist at work on
the phenomenon of conditioned reflexes, he understood the importance
of second nature. His use of "mechanical" as a pejorative adjective obvi-
ously referred to the disappointing effect produced when body and mind
case to function in coordination onstage, when the actor's expressions
lose the power to amplify the exquisite play of feeling in a sensitive
organism. It did not refer in a negative sense to the creation of a charac-
ter-model and the attendant rehearsal process:

[Edmund Kean] was an artist, and in Art all effects are regulated. The
original suggestion may be, and generally is, sudden and unprepared—
"inspired," as we say; but the alert intellect recognizes its truth, seizes
on it, regulates it. Without nice calculation no proportion could be
preserved; we should have a work of fitful impulse, not a work of
enduring Art. Kean vigilantly and patiently rehearsed every detail,
trying out tones until his ear was satisfied; and having once regulated
these he never changed them. The consequence was that, when he was
sufficiently sober to stand and speak, he could act his part with the
precision of a singer who has thoroughly learned his air.

Counting the steps for each cross was but one of the "mechanisms" of his
art whereby Kean "was always the same" (On Actors, 18–19). There is a
qualitative difference between "fitful impulse," which is without reflex
coordination, and "fluctuating spontaneity," the illusion of which is
achieved by artful calculation and sufficient rehearsal to develop a score
of the role.

On Actors and the Art of Acting, therefore, like Talma's Lekain and
Arché's Masks or Faces, increases in specificity and coherence as it
approaches the paradigmatic text, Diderot's Paradoxe. "The rarity of fine
acting," Lewes writes, "depends on the difficulty there is in being at one
and the same moment so deeply moved that emotion shall spontaneously
express itself in symbols universally intelligible, and yet so calm as to be
perfect master of effects . . . with a mind in vigilant supremacy control-
ling expression, directing every intention, look, and gesture" (105–06).
The psychophysiological solutions Lewes proposes to this dilemma de-
rive from Diderot's central techniques for the creation and execution of
the inner model: memory of emotion, observation of emotion in others,
subconscious stimuli, imagination, and, above all, double consciousness.
Like Diderot, Lewes supplies each of these techniques with a physical
basis drawn from the best available knowledge of the body and its inner
workings.

In "Subjective Analysis and the Introspective Method," a chapter from
the penultimate volume of Problems of Life and Mind, Lewes defends
introspection as a valid form of scientific inquiry. Although he regrets the
vagueness of such terms as the inner eye, he believes that self-
contemplation may hold insights that are impossible to achieve through
the application of purely objective methods. The mind may stand outside
itself, observe itself in operation, and retrieve those operations through
memory: "states of consciousness, whatever their origin, are feelings
capable of being re-lived in the forms of images and memories" (PLM, 3rd
series, vol. 1, Study of Psychology, 88). Therefore, he strongly urged ac-
tors to practice "introspection of their own means" (On Actors, 107).
The boldness of such inner vision characterizes great artists. It defines their
powers. "We are all spectators of ourselves," he wrote, "but it is the
peculiarity of the artistic nature to indulge in such introspection even in
moments of all but the most disturbing passion, and to draw thence the
materials of art" (113). Lewes quotes Talma to the effect that however
cruel the actor's loss or sorrow in real life, his mental gaze turns inward to
allow the artist to eavesdrop on the man. Only by becoming intimately
familiar with the nature of his own emotions can the actor interpret
analogous passion in creating a character, but, as Diderot and
Wordsworth had also noted, time must intervene between the feeling and
the artistic expression of feeling. Memory provides the storehouse to
which introspection holds the key. Emotion must be processed. Lewes
applies the neurophysiological term tremor and the psychological term
image to the process whereby the artist can "select" those emotional
memories that fit his design: "It is from the memory of past feelings that
he draws the beautiful image with which he delights us. He is tremulous again under the remembered agitation, but it is a pleasant tremor, and in no way disturbs the clearness of his intellect" (113).

In a chapter from the final volume of Problems of Life and Mind called "Double Consciousness," Lewes offers an innovative explanation of this important phenomenon. His absolute mind-body monism will not permit him to follow Diderot in depicting the division of consciousness into several channels, parallel streams running along simultaneously. Rather, Lewes sees a rapid alternation of attention from one level of consciousness to another, not unlike alternating current in standard electrical devices. In searching out a metaphor for this version of double or multiple consciousness, Lewes shows that at least one sort of theatrical performance was foremost in his mind: "When Ducrow rode six horses at once he pressed the reins of each alternately, now checking, now redirecting. Attention in like manner shifts from one series to another." Earlier he had advanced a definition of attention that anticipates currently popular conceptions of breathing and body states as the basis for concentration: "The acquisition of the power of attention is the learning how to alternate mental adjustments with the rhythmic movements of respiration" (PLM, 3rd series, 2:220, 189n). The complex interplay of voluntary and automatic control over breathing illustrates his idea that levels of consciousness advance and recede alternately.

Ducrow's six-horse gallop improves on Diderot's model because it describes the phantasmagoric multiplicity of theatrical performance. It also does justice to the adaptive complexity of organisms. At any given moment the actor's mind must retain his cues, his lines, his blocking, his gestures, some idea of the similar assignments of his cohorts (lest they forget), audience reaction, the location of properties and their heft, the precise timing of complex business, and, if he works that way, his motivation. As in the case of Ducrow, it is easier to believe that the actor does one thing at a time in rapid succession than it is to believe that he does everything at once. It would seem that the more elements he can render automatic through repetition, the more control he can exert over the variables that do arise. Archer records several instances of multiple levels of consciousness, which he quaintly calls "The Brownies of the Brain," thereby allowing for the automation of at least some of them. He catalogues the ornate mosaic of Fanny Kemble's mind as she colors with a virgin blush, minds not to fall over her train, prevents the tears from dropping on her silk bodice, avoids setting herself on fire with the funeral torches, checks herself from leaning her full weight on the canvas balcony, and speaks iambic pentameter interpretively. "There is sometimes a difficulty, of course," says Archer, putting it mildly, "in distinguishing between automatic action and ... conscious or subconscious mental activity" (ME, 185-87). Lewes's metaphor allows room for just this sort of psychophysical complexity, a consciousness not only doubled but polygonally multiplied like the inside of an insect's eye.

Dilating on Fechner's law of Schwelle or the "threshold" of consciousness, Lewes writes that "our mental activity is for ever alternating between the upper and under levels of excitation; and for every change in consciousness there is needed a rise in intensity on one side which involves a fall on the other. There is thus a stream of Consciousness formed out of the rivulets of excitation" (PLM, 3rd series, 2:366). The subterranean tributaries to the "stream of Consciousness" (Lewes used the phrase a decade before William James) have an important place in his concept of theatrical creativity. Actors such as Rachel and Edmund Kean possessed a volatile and prolific "imaginative sympathy," buried deep in their physical constitutions, which "instantaneously called up all the accessories of expression" (On Actors, 115). That an inner impulse can ignite an outward manifestation as "spontaneously" powerful as "the lurid flame of vengeance flashing from [Kean's] eye" (160) obviously intrigued Lewes. To his way of thinking, imagination has a recombinant power of linking heretofore discrete entities, but it also has a vivifying power of "reinstatement," in which images become irradiated with the energy of sensations. In The Physical Basis of Mind, he noted that inner mental activity in everyday life can influence involuntary physical responses: the mention of a lover's name will cause a blush; the thought of an absent infant will cause a flow of milk in the mother's breast (PLM, 288). He divides consciousness into regions of "special sensation" (the five senses) and "systemic sensation," the subconscious, the submerged world of the involuntary sensations. The operation of the subconscious region continually replenishes the sources of outward behavior: beneath the realm of sense experience, a "groundswell of systemic sensation, emotion, or ideal preoccupation" is ready to emerge into consciousness. Even when submerged "below the waves," this systemic sensation is "silently operating, determining the direction of the general current, and obscurely preparing the impulses which burst forth into action" (PLM, 3rd series,2:366-67).

Lewes's excursion into the subconscious represents the "subjective aspect" of his theory of mind-body unity. In this aspect an impulse moves from exterior to interior, from subjective to objective; a psychic tremor stirs a physical act. In the "objective aspect" the direction of the process is reversed; the physical act excites the psychic tremor. The objective aspect of acting begins with the detached observation of nature: "[Passion] must be watched in others, the interpreting key being given in our own consciousness. Having something like an intellectual appreciation of the se-
quences of feeling and their modes of manifestation, the actor has next to select out of those such as his own physical qualifications enable him to reproduce effectively" *On Actors*, 114). The physical enactment of these outward manifestations of emotion, Lewes believed, inexorably reacts on the inner fibres of the sensorium, producing the emotion itself. His examples, as Archer noted, included Macready, who shook a ladder to work up Shylock's rage, and Liston, who sputtered to himself backstage to attain the right tone of befuddledness for a comic entrance (50–51).

By his insistence on the essential unity of psychological and physiological processes, Lewes helped to prepare the way for the James-Lange theory of emotion. James first published his views in *Mind* (1884) and then recapitulated them in his *Principles of Psychology* (1890). Carl Lange announced similar findings in his *On the Emotions* (1885). Théodule Ribot digested the views of both psychologists in *La psychologie des sentiments* (1896), which Stanislavski cites in connection with memory of emotion, but whose service as a disseminator of the James-Lange theory has been overlooked. "The doctrine which I have called physiological," notes Ribot in acknowledging his own indebtedness to nineteenth-century English psychophysiology, "connects all states of feeling with biological conditions."28 This fairly summarizes Lewes' position from *The Physiology of Common Life* in 1859 and throughout his career. In biologizing the passions, James goes on to observe that the physiological manifestation of the emotion is the emotion. He reorders the commonplace assumption that "I see the bear, I feel terrified, I run" to the innovative assertion that "I see the bear, I run, I feel terrified." Similarly, he argues that it is because we weep that we feel sad, that it is because we laugh that we feel angry, and that it is because we tremble that we feel afraid. In every case perception follows expression. A "necessary corollary" to James's theory would be that the voluntary enactment of the symptoms of emotion will bring forth the emotion itself—a point that has influenced theatrical theory profoundly. By the time he published *The Principles of Psychology*, James was aware that the testimony of actors on this point was mixed, and he cites from Archer's *Masks or Faces* the material that most helps his case.29 Lewes seems to have had his share in the formulation of the James-Lange theory, though his contribution is forgotten today. When James reviewed the second volume of *Problems of Life and Mind* (1874), a book he predicted would provide "a most important ferment in the philosophical thought of the immediate future," he employed a phrase that later echoes in his physiological definition of emotion: "Mr Lewes affirms the psychic event which accompanies a tremor in the brain to be that tremor in a different aspect."30

When Diderot wrote the *Paradoxe*, important advances in contemporary science remained within the grasp of the literate layman, in their breadth if not their depth. In his article "Encyclopédie" Diderot acknowledged that he undertook his editorial task at a most propitious time, at the dawn of the age of science or, at least, of publication, "before a superabundance of books should have accumulated to make its execution extremely laborious." By the close of the nineteenth century, however, as actors and theatrical theorists confronted the proliferating complexities of science, a combination of specialties such as that possessed by G. H. Lewes had become a valued rarity. In recognition of the range of his mind, he enjoyed a wider readership among actors than is generally appreciated today. Joseph Jefferson, Edwin Booth, and E. H. Sothern cited his authority (AA, 556, 560, 572), and Mrs. Fiske told her biographer that *On Actors and the Art of Acting* should be renamed "The Science of Acting" and required as a standard textbook.27 The most significant evidence of his prestige as a scientific writer and his consequent contributions to acting theory, however, concerns his readership among his scientific contemporaries in Russia.

Historians of science have stressed the importance of the 1861 publication of Lewes's *Physiology of Common Life* in Russian translation. Appearing shortly after Darwin's *Origin of the Species* and sharing the same translator, Lewes's book precipitated a violent clash between reactionary idealists, who wanted it suppressed, and progressives, who took it as a rallying point for the general revolution in the biological sciences. Dostoevsky names it in the second chapter of *Crime and Punishment*, and it inspired young Ivan Pavlov to give up theology and take up the study of digestion. Pavlov memorized passages from Lewes and could repeat them verbatim.28 The uncompromising monism of *The Physiology of Common Life*, its arguments for the wholeness of living creatures and for the continuity of nature, inevitably attracted scientists whose research probed the physical basis of mind and illuminated the increasingly dominant concept in the physiology of mental life—the reflex.

In 1863, the year that Stanislavski was born, Ivan Mikhailovich Sechenov completed his decisive essay, "An Attempt to Establish the Psychological Basis of Psychical Processes." The Tsarist censors thwarted its publication in a popular magazine. They permitted it to appear only in a medical journal under a revised title, "The Reflexes of the Brain," which actually describes its contents more specifically. Sechenov, who is known as the "father of Russian physiology," shared Lewes's view of the brain as the coordinating center of an integrated system. Sechenov also located the foundation of all higher processes in reflex action. He concluded that the living organism is a kind of self-acting "machine," responding to stimuli according to natural laws. As his intellectual predecessors, Sechenov cited
the "French sensualists"—Holbach, Condillac, and Diderot. The development of a physiologically based psychology by Sechenov and his successors, Pavlov and Vladimir Bekhterev, prepared the ground for the extraordinary flowering of acting theories in the Russian theater of the 1920s and 30s. The same development insured the ultimate triumph of Diderot’s Paradoxe as a paradigmatic text. The very conflation of the word Biomechanics bespeaks Meyerhold’s indebtedness to the central dialectic of modern life science; and, as we shall see in detail, Stanislavski based important elements of his System on the theory of spontaneity supplied to him by psychophysiology.

The full significance of the übermarionette may now perhaps be revealed in a clearer historical light. Craig’s distrust of life is real but qualified. Pressed from all sides on the extent to which he meant to be taken seriously, he allowed that the precision of living Oriental actors might fulfill his dream of automation because their gestures had been amplified and their egos diminished by rigorous physical training. Moreover, the nearest thing to the superpuppet that Craig ever saw was not a puppet at all but Henry Irving, Diderot’s self-professed antagonist in the summa contra Coquelin, whose “designed” motions transcended organism and achieved dance. Although he hardly resembled a puppet in any other way, Irving did fulfill Craig’s mechanical criterion for Diderot’s grand acteur: Diderot’s posthumous answer to Craig’s challenge was supplied on behalf of psychophysiology by G. H. Lewes. He pointed out that an organism “becomes modified, and consequently its motors rearranged under varying stimulations. . . . No machine is educable.” The actor-organism is not doomed to exist always within the same “structural adaptation.” His body is educable, capable of acquiring a second nature more governable than the first. The übermarionette, therefore, symbolizes what the actor might achieve when his motors have been appropriately rearranged.

The search for a physical system of actor training, a process, a technique, a discipline whereby the body may be reliably mastered, characterizes the best thinking about the art of acting in the twentieth century. Craig’s early enthusiasm for the flesh-and-blood actors of the Moscow Art Theatre suggests the direction his revolutionary idealism might have taken if only he could have gotten along with anyone long enough: “They give hundreds of rehearsals to a play,” he wrote admiringly, “they rehearse, and rehearse, and rehearse.” Through disciplined application of a conscious process based on scientific principles, the Russians set out to resolve the mystery of the player’s passion in light of modern biology. They knew that life was mutable, and they believed that it might be improved.

Art should be based on scientific principles; the entire creative act should be a conscious process. . . . Since the art of the actor is the art of plastic forms in space, he must study the mechanics of his body. This is essential because any manifestation of a force (including the living organism) is subject to the constant laws of mechanics.

—Meyerhold, “The Actor of the Future and Biomechanics” (1922)

We are far from Pavlov’s level, but his teaching is applicable to our science of acting.

—Stanislavski, quoted in P. V. Simonov, The Stanislavski Method and the Physiology of Emotion (1962)

In the summer of 1914, Stanislavski spent his holiday at Marienbad in the company of a collection of excerpts from classical acting texts. They had been assembled and translated for him by the dramaturg Lyubov Gurevich, drawing upon the libraries of St. Petersburg. Stanislavski’s purpose was to define and clarify the emerging System of acting with which he had been experimenting at the Moscow Art Theatre and its recent offshoot, the First Studio. To this end he intended to measure the best of previous theory against his tentative solutions to the problems that he and his colleagues had encountered, chief among them organic spontaneity and the physical control of emotion and action. In surveying the excellence of the great actors whose work he had especially revered—Duse, Salvini, Chaliapin, Rossi—he asked: “What was this quality, com-
mon to all great talents?" He answered: "Their bodies were at the call and beck of the inner demands of their wills." In essence he wanted to know by what methods and techniques, if any, this essential quality could be systematized, for that which defies method must be relegated to Apollo. In searching for the language that would allow him to formulate an intelligible system, Stanislavski markedly favored the French critics. His reading included Luigi Riccoboni's essay on declamation ("I could kiss him"), François Riccoboni's dissenting L'art du théâtre, the memoirs of Clairon and Dumesnil, and François-Joseph Talma's Réflexions sur Lekain, et sur l'art théâtral. Above all, it included Diderot.1

In his study of the philosophe, Stanislavski anticipated a trend, though one that would develop in the next few years more swiftly and more radically than he or anyone else could have foreseen. Diderot's special relationship to Russia dated from the reign of Catherine the Great, who acquired his personal library by lavish purchase and who in return accepted his manuscripts, including some of his more progressive writings, as his gift to the Imperial collection at St. Petersburg. Here they slumbered through the nineteenth century in sealed archives, like a time capsule in the cornerstone of a building overdue for demolition.

Following the Russian revolution, several editions of the Paradoxe sur le comédien and a substantial body of criticism on Diderot's theory appeared in the Soviet Union. Anatoly Lunacharskii, Commissar of Education and Enlightenment, provided the first of these editions (1922) with an admiring and ideologically significant foreword. Two methods of acting historically contend, Lunacharskii observed: one, turning inward, draws on the actor's own inner psychological "resources of self" and leads to "subjective impressionism"; the other, drawing on the actor's powers of detached observation, opens outward on the objective world, on nature and society. That both Marx and Engels had professed admiration for Diderot no doubt disposed Lenin's culture minister to encourage general interest in the philosophe as a scientific writer and theatrical thinker. But the affinities ran more deeply here. As a university student in Zurich in the late 1890s, Lunacharskii made a special study of the classics of eighteenth-century French materialism. Later his ministerial charge was to review many of the same revolutionary ideas set forth in Diderot's Plan of a University for the Government of Russia, written in 1775 at the request of Catherine and long suppressed. The theme of the philosophe in his role as universal scientific educator, inscribed in the Soviet cultural pantheon under "the service of progressive mankind," still resounds in the entry "Diderot" of the Bol'shaya Sovetskaia Entsiklopedii, itself a lineal descendant of the Encyclopédie.2

Diderot's materialism, atheism, and revolutionary science seemed smartly in step with the new order. To commemorate this foresightedness with a suitable memorial, Lunacharskii's acquaintance, Bertolt Brecht, made a proposal. In 1937 he drew up a prospectus for an organization dedicated to scientific research in theatrical art that he would have called "The Diderot Society." Though eventually nothing came of this effort, Brecht used the occasion of the prospectus to sum up his debt and that of twentieth-century acting theory to Diderot's scientific muse: "In recent decades, however, a new kind of theatre has developed—one which sets itself the goal of an exact picture of the world and which admits of objective, non-individualistic criteria." The theatrical artist no longer presents "his own world" or "portraits of the portrayers." Rather, this mimetic automation creates "images of the world" beyond him.3 Brecht's proposal reflects his desire to gather together a group of thinkers engaged in a common pursuit. Presaging his call for a "theatre for a scientific age" in Kleines Organon für das Theatre of 1948, Brecht's "Diderot Society" self-consciously aspired to the model of a scientific community. An informal version of such a community emerged in the Soviet theater of the 1920s and 30s. Supported by current psychophysiological research, it was led by Stanislavski and Meyerhold, each of whom advanced a system of actor training guided ultimately by the principles originally propounded in Diderot's revolutionary text of 1773.

Brecht discerned with enviable clarity and fair-mindedness that the broad foundations of scientific materialism supported Stanislavski's position, especially as it evolved toward the end of his life, as well as it did his own. Throughout his experimentation with actors and his writings, Stanislavski sought to objectify the phenomenon of spontaneity. From the formative years of the System to the years of its maturity, Stanislavski and his rebellious son Meyerhold would grapple with the issue of second nature. In the 1920s Meyerhold dismissed the acting methods of the Moscow Art Theatre, aimed at recreating lived experience onstage, as entirely too subjective, a form of self-hypnotic narcissism. Stanislavski's teachings during this period were exported by various emigres and eventually this early stage in his thinking formed the basis of the American Method. His name became associated with the doctrine of "affective memory" whereby the actor, following in a tradition founded by Diderot and developed by Talma and Lewes, subjectively revived his own past emotions in the circumstances demanded by the role. The Stanislavski System, however, did not fully mature until the 1930s, and it was by no means a closed book at the time of the master's death in 1938. It culminated in the development of the "method of physical actions," based on what G. H. Lewes had termed the "objective aspect" of the mind-body continuum. Stanislavski's revisions stemmed not only from his
daily work with live actors and singers in his Studio, but also from his changing appreciation of current science. Brecht himself sympathetically analyzed the Stanislavski System as a synthesis of the struggle between the ancient "cult" of subjectivism and spontaneous self-transformation, of which Brecht was thoroughly skeptical, and the "progressiveness" of the method of physical actions, which he approvingly attributed to the "influence of Soviet life and its materialistic tendencies."

The materialistic tendencies to which Brecht referred centered on the revolutionary transformation of psychology into an objective science of behavior. Underlying this new science rested the ideological assumptions that external conditions determine human nature and that objectively controlled manipulation of the physical environment will alter the inward man. This science denies, in short, that a meaningful distinction can be drawn between the psychological and the physical or, for that matter, between the vital and the mechanical. Thus it happened that materialistic doctrines of second nature prophesied by Diderot and reiterated by nineteenth-century science swiftly found a highly receptive audience in twentieth-century Russia.

Ivan Sechenov's collected Works, celebrating the primacy of the reflex as the essential mechanism of organic response, appeared posthumously in 1908. By that date Vladimir Bekhterev, director of the St. Petersburg Military-Medical Academy, had published Foundations of Knowledge about the Functions of the Brain (1905-07) and had begun his exploration of the science he later called "objective psychology" or "Reflexology." By that date Pavlov had won a Nobel Prize for his study of the digestive process in dogs, and he had newly devoted his laboratory, adjoining Bekhterev's at the Academy, to the central issue framed by Sechenov: reflex excitation and inhibition as the physiological basis of all behavior.

This research explained all psychological phenomena by reducing them to physiological laws. Sechenov, for instance, demonstrated the operation of central inhibition, the repressive effects of the thalamic nerve centers on spinal reflexes. His concept of reflex inhibition resembles G. H. Lewes's vague "Laws of Arrest," but there is nothing vague in Sechenov. All manifestations of brain function can be reduced to muscular movement propelled or repressed by reflex. Emotions are merely intensified reflexes. Thoughts are merely reflexes, from those of a girl trembling in the first awakening of love to those of Newton enunciating the universal laws of motion. Sechenov predicted that reflexes will someday present themselves to be studied with the exactitude that a physicist brings to the analysis of falling bodies. Long before Pavlov and Watson, Sechenov argued that "frequent repetition is the means by which capacity is acquired." Complex behaviors, moreover, consist of a "whole series of successive reflexes." The inevitable result of Sechenov's argument is to limit the role of what he terms "so-called voluntary actions." Reflexes run the bodily machine deterministically as "psychomotors." In an essay written in 1900 entitled "The Part Played by the Nervous System in Man's Working Movements," Sechenov sets down the basic psychophysiological principles that inform such familiar theatrical concepts as motivation and action. The essential view of will has not advanced significantly beyond Diderot's *Éléments de physiologie:*

Things will be different if, remaining on the ground of psychology, we replace the meaningless concept of will by the real concept of desire in the form of a sensation with a definite content. Vital requirements engender desires, and the desires give rise to action; in this case, the desire is the motive or the aim, while the movements are the action or the means of attaining the aim. When a man performs a so-called voluntary movement the latter appears in his consciousness after the desire. Without the desire, which plays the role of a motive or impulse, the movement would be senseless. In accordance with this point of view, the motor centers located on the surface of the brain are known as the psychomotor centers. Reflex action thus constitutes the basis of all behavior, spontaneous and acquired, muscular and mental. In fact, the convenient terms mental and physical simply describe two aspects of an indivisible phenomenon—life. Appropriately, therefore, when Stanislavski asked rhetorically in 1924 if there could be a system for acting founded on "organic laws," his answer construed organism materialistically in light of the prevailing scientific optimism about what could be discovered in the tangible, physical reality of the body: "In certain parts of the system, like the physiological and the psychological, such laws exist for all, forever, and in all creative processes. They are indubitable, completely conscious, tried by science and found true, and binding on all" (My Life in Art, 483).

It was against this scientific backdrop, as well as in the midst of a political revolution whose leadership starkly dictated materialism, that Vsevolod Meyerhold called for a Biomechanical method of actor training in 1922. Biomechanics offered the actor preparatory exercise routines. The obvious goal of such exercises was to condition his neuromuscular responses to peak efficiency. Their ultimate purpose was to induce in his body the appearance of second nature. The profundity of Meyerhold's understanding of science was sharply questioned at the time, but in light of what has been said here about the psychophysiological doctrines common to Diderot, Lewes, James, Sechenov, Bekhterev, and Pavlov, his grasp of the salient issue cannot be disputed: "All psychological states," he wrote in his biomechanical manifesto, "are determined by specific
physiological processes.” Above all, his new theatrical technique was to be predicated on the actor’s “innate capacity for reflex excitability.”

The biomechanical exercises developed by Meyerhold followed a three-fold pattern, consistent, he claimed, with “the natural laws of movements” (AA, 502). First there was to be a moment of preparation (intention) for the action, then the physical performance of the action itself (realization), and finally the moment of reaction in which the sensations caused by the action in turn caused a new moment of preparation (intention). Igor Ilnitsky, an actor under Meyerhold’s direction when the biomechanical exercises were developed, explained them by way of this familiar example: “an actor representing fear must not experience fear first and then run, but must first run (reflex) and then take fright from that action” (AA, 504). Meyerhold’s indebtedness to psychophysical science for such a formulation may be attributed to various influences. Sechenov had observed in 1863 that the “sensation of fright” constitutes an “integral reflex” following, not preceding, the exterior muscular movement or startle response. Bekhterev’s theory of “associated motor reflexes” reduced all living behavior to reflexive responses to environmental stimuli. Ribot’s digest of the James-Lange theory in *The Psychology of the Emotions* was also readily available to Meyerhold in Pavlenkov’s Russian translation of 1898, which Stanislavski had already utilized for his own purposes as early as 1914. These sources reflect the modern awakening of a long-simmering radicalism in the theory of feeling, volition, consciousness, and behavior. “Life,” said Diderot, biologicalizing mechanics in 1769, “is a series of actions and reactions” (Rêve de d’Alembert, 125).

In 1927 Ivan Pavlov summed up the trends in nerve physiology bearing on what Meyerhold had crudely termed “the natural laws of movements.” In *Conditioned Reflexes: An Investigation of the Physiological Activity of the Cerebral Cortex*, Pavlov defines behavior as sequences of reflex responses to stimuli, the smaller reflex units adhering together to form links in the psychophysical chain. “Instincts” such as nest-building, for instance, are actually complex reflex re-actions connected in chains: “To look upon this as reflex we must assume that one reflex initiates the next following—or, in other words, we must regard it as a chain reflex.” Pavlov goes even further: “But this linking up of activities is not peculiar to instincts alone. We are familiar with numerous reflexes which most certainly fuse into chains.” Slow-motion cinematography had revealed to Pavlov the elaborate reflex sequence that takes place when a cat lands on its feet after being dropped from a high place. First the cat’s head, responding to stimuli created by its disturbed equilibrium, begins to right itself; then, following in a ripple effect along the entire length of its body,
the muscle groups of the shoulders, trunk, and hunches respond in turn, each nerve in the “chain” contracting or inhibiting the appropriate muscles in reply to the stimulus provided by the actions of its predecessors. In this manner complex behaviors can be analyzed as mechanical sequences of simple reflexes. An animal’s stirring restlessly in a cage Pavlov called the “freedom reflex.” Likewise, he labeled curiosity the “What-is-it? reflex” (11-12).

Pavlov’s mechanization of biological responsiveness, his organization of complex behaviors into chains with single reflex links, recalls the theory of *enchainement* as described in the *Éléments de physiologie* of Diderot derived from associationist psychology the idea of trains of sensations that naturally become linked in complex sequences. These are spontaneous in the sense that one leads automatically to the next. As secondary automatic sensations they can also be acquired by habit. Similarly, in Meyerhold’s biomechanical scheme, discrete units of *preparation-action-reaction* may be linked together and organized into “chains of movements” propelled along by reflexes, rendered supple and apparently spontaneous by repetition, like those of a gymnastic routine.

A principal difference between the acting theories of Meyerhold in his biomechanical period and Stanislavski resides in their relative attitudes towards organic spontaneity, the degree to which they permitted “bio-s,” vitalistically interpreted, to figure in their “mechanics.” Meyerhold had less interest than Stanislavski in the psychological content of motion. During the 1920s, in the climate that brought forth the experimental choreographer Nikolai Mikhailovich Forgerger’s *Dance of the Machines* and the Constructivist glorification of technology, Meyerhold was not being merely eccentric when he conceived of human movement by mechanical design. Elsewhere at the same time, Ernst Junger in *The Glass Bees* (1923) dreamed of Vaucanson’s old dream of a stage peopled by performing automata. Enrico Prampolini in *Futurest Scenography* (1915) called for the replacement of living actors with colored “actor-gases.” At the Bauhaus, Oskar Schlemmer designed his mechanical ballets and L. Moholy-Nagy joined Craig and the radical mechanists in proclaiming the inadequacy of “organism” as a theatrical medium. In such company Meyerhold may actually seem moderate by comparison. After all, he retained the human body center stage, even if only as a reflex-machine.

Outlining a “Program of Biomechanics” for acting workshops in 1922, Meyerhold listed the essential topics to be covered with his actors. Chief among them are:

The human organism as an automative mechanism
Mimeticism and its biological significance (Bekhterev)

Complex of movements of the whole organism or chain of movements
Acts of inhibition (not doing)
Study of mechanism of reaction in the nervous system
Psychic reactions as the object of scientific study
Psychic phenomena, simple physico-chemical reactions . . . purely physiological reflexes
Reflex instinct
Reflexes, their connection, sequence, mutual dependence
Mechanization, subconsciously habitual acts

Along with his citation of Bekhterev by name, Meyerhold recapitulates the essential content of reflexology as it had evolved since the publication of Sechenov’s *Reflexes of the Brain* in 1863. In the name of Biomechanics he repudiates the mind as a vital machine. He is also aware of the idea of reflex inhibition, which is essential to muscular coordination and locomotion. He conceives of the reflexes functioning in sequential “chains,” the neurophysiological basis of complex behaviors. Finally, he underscores the importance of subconscious automatization, thus updating Diderot’s *habitude* and the paradoxical spontaneity of second nature.

Under attack for exaggerating the scientific legitimacy of Biomechanics, Meyerhold brought to his defense a “brochure by Coquelin.” His *riposte* was more to the point than may appear at first glance. Coquelin built his case solidly on Diderot’s science, notably on the indispensable premise of double consciousness. Meyerhold rather pretentiously reduced Coquelin’s “dual personality” to a mathematical formula: “N = A₁ + A₂ (where N = the actor; A₁ = the artist who conceives the idea and issues the instructions necessary for its execution; A₂ = the executant who executes the conception of A₁).” Diderot disdained abstract descriptions of natural phenomena and thought mathematics overrated as a tool of modern science, but in Meyerhold’s pseudo-algebra he doubtless would have recognized a version of his metaphor of harpsichordist and harpischord, of a dispassionate intelligence making a responsive instrument vibrate.

Reflexology, of course, had broad implications for the Soviet program of rapid industrialization during the 1920s. Advocating a strong director-centered theater, Meyerhold also familiarized himself with the motion economy studies set forth in *Principles of Scientific Management* by Frederick Winslow Taylor, whose efficiency theories attracted an odd mix of enthusiasts from the Bolsheviks to the engineering department of the Ford Motor Company. In his biomechanical period Meyerhold regarded his actors as workers whose motions in time and space could be objectively analyzed and mechanically improved. He had them dress in overalls and put them to work on Constructivist settings, machines for acting,
featuring ramps, slides, and moving parts, which he treated as theatrical assembly lines. The best method of acting was the one that most effectively simplified the actor’s industrial task. The movements of the well-drilled worker were the dance of the twentieth century. “Biomechanics,” Ilsinsky concluded, “shows the actor how to control his acting” (AA, 506), just as Diderot, in his article “Encyclopédie,” recognized that the expert who has mastered a “mechanical craft” will “grasp the whole nature of a process, no motion of the hand will escape him, for he will easily distinguish a meaningless flourish from an essential precaution.”

Whereas Meyerhold makes the objective physiological claims of biomechanics explicit in his workshop program of 1922, Stanislavski’s relationship to science evolved over several decades with substantially more depth and complexity. His thirst for a system, a method, a science of his profession reached an early point of crisis in 1906. He had been playing his roles at the Moscow Art Theatre long enough and, in the case of Dr. Stockman in An Enemy of the People, successfully enough to have been bored by them. As Craig had admiringly observed, the Moscow Art Theatre rehearsed its productions at prodigious length and kept them in the repertoire indefinitely: indeed, some of them are still there. Without a reliable method of keeping a role fresh, fossilization had begun to set in. Unlike that unnameable paralysis afflicting the characters who people the Chekhovian mise en scène that Stanislavski had created, his own ennui permitted him to make a trenchant self-diagnosis: “From performance to performance I had merely made a mechanical habit of going through all this [sic] technical gymnastics, and muscular memory, which is so strong among actors, had powerfully fixed my bad theatrical habit” (My Life in Art, 460). In contradiction to the assurances of the mechanistic side of the Paradoxe, Stanislavski’s mental machine was running down while his body kept right on ticking away. As his spontaneity drained away, his sense of crisis deepened. He despised in himself the automatization implied by his ability to perform gymnastics. He seems to have resented the surrender of consciousness implied by his mechanical habit. It represented a kind of spiritual death. This intense, even obsessive interest in the inner psychological content of an action, marked by the tendency to immerse himself in the nature of consciousness itself, may set Stanislavski apart from Meyerhold. But it does not set him apart from Diderot.

Stanislavski and Diderot evolved their theories about actors and acting in strikingly similar ways. Both began as uncritical believers in ad hoc inspiration. Having experienced disillusionment with unmediated emotion, both formulated psychophysical techniques whereby emotions may be processed into art through memory, imagination, and physical action. Both came to the conclusion that true emotion lay beyond the direct reach of the will. Both attributed major powers of artistic creativity to the unconscious mind, which they similarly interpreted as a subconscious repository in a pre-Freudian physiological sense. Both regarded the actor’s creativity highly, but conceived of an inner model of character brought forth collaboratively with the playwright. Both believed in lengthy rehearsal periods to prepare a role meticulously. Both emphasized the need for absorption in the stage task. Both regarded the role as a score or inner model of physical actions overseen by the dispassionate half of a divided consciousness. In short, both Diderot and Stanislavski had final recourse to science and, within science, to essentially the same set of modern assumptions about the human body. With these premises in common, they attempted to solve the ancient riddle of theatrical aesthetics: To what extent is the actor’s bodily passion spontaneous?

Like the body itself, Stanislavski’s theory of acting forms an indivisible whole, which may be analyzed in two aspects, physical and psychological. He views the actor’s art as a rigorous process of “working on himself.” It has been assumed that the process begins with work on the psychological aspect of the instrument, then emphasizes the preparation of its physical aspect, and finally brings both together in the creation of a role. At least this is the pattern that suggested itself to the unvaried by the vexed publication history of his English-language trilogy. An Actor Prepares (1936) treats what Lewes would have recognized as the “subjective aspect” of the actor’s process, including the celebrated doctrine of emotion memory and the all-important subconscious. Building a Character (1949), as the architectural metaphor of its title suggests, defines more objective techniques, including physical characterization, plasticity of motion, diction and singing, and tempo-rhythm in movement. Creating a Role (1961) offers practical analyses of three major roles and reworking of earlier materials. In Stanislavski’s practice, both aspects—objective and subjective, physical and psychological—come into play from the outset, since in fact they exist simply as a convenient way to describe with different emphases the same set of phenomena. Stanislavski explains in An Actor Prepares: “The bond between body and soul is indivisible. . . . In every physical act there is a psychological element and a physical one in every psychological act” (132, 136). The law of the unity of the physical and psychological, derived from the paradigm framed by contemporary science, provides the basis for the method of physical actions on which Stanislavski was at work when he died and which he regarded as the final synthesis of all his theories. At every stage of the development of his System, however, he accepted the premise of dual-aspect monism: “Conscious or unconscious objectives are carried out both inwardly and outwardly, by both body and soul. Therefore they can be both physical and psychological.”
Significantly, the implied division is not between body and mind, but between conscious and unconscious states.

The Stanislavski System is a means of manipulating levels of consciousness to achieve certain specific effects on the body, especially the illusion of spontaneity. It promises to give the actor expressive control over his own body, in all its mercurial diversity and surprising obstacles. Among the techniques that Stanislavski proposes toward this end are the relaxation of the muscles, concentration of attention, public solitude, adaptation, units and objectives, emotion memory, tempi, rhythm, the score of the role, and, definitively, the method of physical actions. Stanislavski's theories defy tidy summary because they take into account the complexity of higher organisms, including the phenomenon of double or multiple consciousness. As he clarified the implications of contemporary psychophysiological theory in his own mind, Stanislavski adjusted his emphases to suit the emerging facts of life. His System, therefore, cannot be comprehended without his science.

"So infinitely complex, so continuously in flux, are the conditions in the world around," wrote Ivan Pavlov, "that complex animal system which is itself in living flux, and that system only, has a chance to establish dynamic equilibrium with the environment." Part of this living flux consists of the alternation between conscious and unconscious adaptations to circumstances. Another related part consists of an alternation of attention between external and internal stimuli. This is life as Stanislavski also construed it. "Mechanical or motor adjustments," he wrote in An Actor Prepares, "are subconscious, semiconscious, and conscious in origin. They are normal, natural, human adaptations that are carried to a point of becoming purely mechanical...without sacrificing their quality of naturalness. Because they remain organic and human, they are the antithesis of the rubber stamp" (224). It is significant that Stanislavski allowed for actions that are at once mechanical and organic, thereby reiterating the fundamental paradox within the Paradoxe. By "rubber stamp" he means a theatrical cliché, a gesture made for the sake of a gesture. It is not, as in life, an adaptive adjustment designed to mediate between the organism and its environment; it is drained of its purposive content. A "rubber stamp" can exist on stage and nowhere else in the world known to science, except perhaps in the purely mechanical spasms of a decorticated animal, and perhaps not even there. Lewes, after all, allowed the spinal frog a sentence that he could not locate in Charles Kean's Macbeth.

Pavlov views the reflex as the central phenomenon of psychic life. He became particularly interested in the learned or conditioned reflex, which he regarded as an improved adaptive mechanism. It consists of a tempo-

rory nervous connection linking the inner functions of the organism, such as digestion, to the senses and through them to the external world. Perhaps Pavlov's greatest achievement was to devise scientific methods of studying these mechanisms in higher animals without vivisection, the trauma of which radically disturbs the behavior of the organism. In a series of famous experiments, he juxtaposed four basic elements of reflex: unconditioned stimulus and unconditioned response, conditioned stimulus and conditioned response. Unremarkably, he discovered that an unconditioned stimulus (say a drop of dilute acid) placed on a dog's tongue automatically produced an unconditioned response (salivation) in measurable quantities. Each time this simple transaction occurred, however, Pavlov saw to it that a sound (bell) or visual effect (slide) immediately preceded the administration of the acid. After a certain number of repetitions, the sound or visual effect alone, now the conditioned stimulus, proved sufficient to produce the same amount of salivation, now the conditioned response. A learned mental reflex had been substituted for an innate physical one, suggesting that higher adaptive responses had important characteristics in common with the knee-jerk. Pavlov banned all subjective terminology and interpretations of data from his physiological laboratory and stoutly refused to recognize psychology as a science, but his methods, infinitely replicable and controllably variable, yielded results that could reasonably be supposed to have important implications for such psychological issues as motivation and the spontaneity of purposive actions.

"The reflexive linkage between inner motivations and outer world is a continuous process. It may be interrupted only by trauma, total unconsciousness, or death. Along closely parallel lines, Stanislavski believed that in life the process of adaptation is continuous. He believed that an "inner dialogue" runs within us without interruption—a stream of consciousness sustained and constantly redirected by subconscious impulses and sensory stimuli. To both Pavlov and Stanislavski, behavior consists of chains of physical adaptations, continuous transitions in the direction of the stream of consciousness caused by physical stimuli. This is the life that the actor attempts to emulate by "living the role."

The unnatural experience of stepping out onto the stage, however, is like vivisection, a trauma that impinges upon this free-flowing continuity of stimulus and spontaneous response. Stage fright—its adaptation to stress—threatens even the natural reciprocity of mind and body, which may be taken for granted under normal circumstances; it engenders a psychophysiological paralysis, which frustrates the natural completion of even the most commonplace tasks. It flattens out the variegated textures of life into the characteristic rigidities of mortification.
Several techniques proposed by Stanislavski seek to overcome the unnatural stimuli emanating from the "black hole," the audience, and to replace them with natural stimuli more directly under the actor's control. These techniques exist to alter the actor's consciousness so that he can induce the spontaneous reappearance of life. One such technique Stanislavski termed "concentration of attention," the ultimate goal of which is to create a state of heightened consciousness called "public solitude." Once, when he was given the simple task of counting the nails in the stage floor, Stanislavski discovered that his self-consciousness before the public decreased and his sense of reality on stage increased markedly. He was, in Diderot's terminology, absorbed within a perimeter from which the audience was excluded. Stanislavski concluded that the only way for the actor to create a sense of public solitude is to absorb himself in the stimuli generated by the physical reality of his immediate stage environment. He should narrow his attention to the physical objects around him and the physical tasks he is performing. Stanislavski proposed that the actor focus his concentration in "circles of attention." The smallest circle encloses the actor himself and his immediate surroundings, such as the chair in which he is seated. The largest circle encompasses the entire stage. The wider the aperture, the harder it is to maintain the intensity of concentration—the harder, that is, to displace the audience from the center of attention and to banish it beyond the perimeter of consciousness measured by Diderot's fourth wall.

Relaxation and concentration of attention are preliminary techniques leading toward the experience of living the part. This process involves approximating on stage the conditions of psychophysical normalcy that prevail off it, the state, as Pavlov called it, of "dynamic equilibrium with the environment." Under normal conditions organisms act purposively. The actor, however, requires extensive training and elaborate preparation before he can create the illusion of this phenomenon in the theater. Specifically, creating a role requires the actor to analyze the large actions of the character or "super-objective" into smaller "units and objectives." Like Pavlov's analysis of complex behaviors as chains of reflexes, Stanislavski's formulation defines individual units and objectives as "bits" in what will eventually, after sufficient rehearsal, become "the unbroken line of action" or "the score of the role." This line is a chain of mutually interdependent reflex desires and reflex actions. Engendered by powerful stimuli, such desires or strong motivations recall Sennet's maxim: "vital requirements engender desires, and the desires give rise to action." Stanislavski himself explained: "Life on stage, as well as off it, consists of an uninterrupted series of objectives and their attainment" (Creating a Role, 51). By laws of this "psychotechnique"—for that is how Stanislavski referred to his System—the actor can "reach the spiritual life of a role reflexively through its physical life" (Creating a Role, 206). Emotions, feelings, thoughts, and desires do not arise without a cause, and the cause is physical. It cannot be otherwise.

In the formulation of his psychotechnique, Stanislavski experimented with various means of creating stimuli that would reliably excite the appropriate reflexive responses. He was particularly interested in a method that promised to open up the deepest levels of the subconscious for the actor's use. It brought into play the actor's memory and imagination, which can be consciously manipulated, to trigger his emotions, which are not at the beck and call of his will. "Through conscious means," Stanislavski promised in An Actor Prepares, "we reach the subconscious" (166). This, the most notorious concept in the subjective aspect of the System, is affective memory or memory of emotion: "We cannot directly act on our emotion," Stanislavski wrote, "but we can prod our creative fancy in a necessary path, and fantasy, as scientific psychologists have discovered, stirs up our affective memory, calling up from its secret depths, beyond reach of consciousness, elements of already experienced emotions, and regroups them to correspond with the images which arise in us." Foremost among the scientific psychologists to whom Stanislavski alludes was Théodole Ribot, whose chapter "The Memory of Feelings" from The Psychology of the Emotions he drew upon for the "Emotion Memory" chapter in An Actor Prepares. Ribot discussed the intimate reciprocity of memory of sensation and memory of emotion, and he deliberately chose the word feelings for its ambivalence. Stanislavski seized upon this authority for the co-revivability of sensation and emotion in equal parts, but Ribot was somewhat less sanguine: "The emotional memory is nil in the majority of people" (171). Complete revivability is a special gift—or affliction—enjoyed by few. Stanislavski was acutely aware of the capricious nature of parallel memory of sensation and emotion, even in the most sensitive person: "They may seem to be beyond recall, when suddenly a suggestion, a thought, a familiar object will bring them back in full force." (An Actor Prepares, 158).

This passage offers an eerie echo of Diderot's Éléments de physiologie: "The sound of a voice, the presence of an object, a certain place, and behold, an object recalled—more than that, a whole stretch of my past—and I am plunged again into pleasure, regret, affliction" (Éléments, 248). But, more importantly, Stanislavski closely intertwines imagination with memory in the manner described in the Paradoxe. As the years pass, imagination refines memory of emotion into art. The resulting impressions are "more condensed, compact, substantial and sharper than the actual happenings"—not in pain but in clarity (An Actor Prepares, 163).
As Diderot put it, after the passage of time, impressions vibrate ever more distantly in the subconscious, "memory and imagination unite, one to retrace the other to accentuate" (PC, 36). In the creative process, according to Stanislavski, "Time is a splendid filter for our remembered feelings—besides it is a great artist. It not only purifies, it also transmutes even painfully realistic memories into poetry" (An Actor Prepares, 163). This is the meaning behind Stanislavski's observation that emotion memory re-groups impressions into sequences of images. Like Diderot, he was heir to associationist psychology, which viewed memory as Hobbesian *traperes* of thought, normally revised in the order that they were received, but capable of being reordered through imagination into new sequences. The line of descent traveled by this idea may have been roundabout—Hartley to Lewes to Ribot and/or the Russian reflexologists to Stanislavski. Or it may have been more direct—Diderot to Stanislavski. The creation of Diderot's inner model, after all, requires the regrouping of memories into revivable patterns of sensation and action.

Following the doctrine of reflex conditioning, Stanislavski said that the actor uses affective memory to revive the physiological manifestations of an emotional response in the absence of the original stimulus. It is, strictly speaking, a conditioned reflex substituting the stimuli provided by memory of certain sensations, locations, or physical objects for the first reaction to actual events. It is the bell without the acid. These conditioned responses may prove useful if they are analogous to those required by the role, but in this matter the human mind shows considerably more subtlety than the dog's in its response to the bell. Stanislavski's suggestible Kostya recalls that he once came upon an old Italian organ-grinder, who wept as he knelt over the body of a dead monkey lying in the gutter. As the man wept, he kept trying to shove a little piece of orange into the dead animal's mouth, coaxing it, pleading with it to eat. This deeply engrained memory struck Kostya as a more vivid image with which to unlock his subconsciousness than that of a horrible street accident he had seen much more recently. Moreover, he found that his reaction to the image of the old Italian intensified rather than diminished with time and with repetition. "I wonder why that is?" Kostya asked with unconvincing naïveté (An Actor Prepares, 162–63).

The use of affective memories live and on stage, as opposed to during leisurely rehearsals as favored by Diderot, places double stress on the actor's ability to concentrate narrowly on his task, to step within his magic circle and to achieve a sense of public solitude. The first problem Stanislavski ran into with this doctrine of the affective memory, a problem that also rebounded on the use of emotion memory at the Actor's Studio in America, was a basic one: speed. A play, even a supposedly actionless play like *A Month in the Country*, is a rapidly shifting kaleidoscope of action and emotion. The scientific psychologists offered no succor on this point. Ribot, who usually qualifies everything he says by counterexamples, was emphatic: "A characteristic peculiar to emotional affective revivibility is the slowness with which it develops and the time required." He explains that "emotional representation" depends on the completion of two stages, one intellectual and one emotional, and that the second stage "requires organic conditions, a difference in the organism, an excitement of the motor, vascular, respiratory, secretory, and other centres" (*Psychology of the Emotions*, 157n). The second problem that Stanislavski discovered with affective memory was one of mental hygiene. In nature, emotions do not appear without a reason. They are prompted by the appropriate physical stimuli. As Sechenov taught, there are no voluntary actions. Certainly the fugitive emotions are the least likely phenomena to be forced into public existence at will. Squeezing the emotions defies nature and threatens the actor's mental equilibrium. On this point the American Method and the Stanislavski System parted company. The chapter on "Memory of Emotion" in Richard Boleslavsky's influential *Acting: The First Six Lessons* (1933) cites Ribot but does not address this thorny point. The Group Theatre employed its own famous "minute of preparation" to work up affective memories. The reputation acquired by Method actors as self-indulgent and moody, whether deserved or not, derives at least in part from this introspective practice. Stanislavski, however, moved on to confront the issue in what Lewes would have called its "objective aspect" with his method of physical actions.

Stanislavski's search for appropriate stimuli led him outward from the subjective world of memory and emotion and into the concrete physical world of actions and events. These too, he believed, can influence the actor's creativity indirectly. "There is no direct approach to our subconscious," he reiterates; "therefore we make use of various stimuli that induce a process of living the part" (An Actor Prepares, 225). Such stimuli can be purely fortuitous, like the sound of nervous fingers scratching on a wooden bench that electrified him in rehearsal for *The Three Sisters*: "A spiritual spring was touched and I at last understood the nature of the something that was missing. I had known it before also, but I had known it with my mind and not my emotions" (My Life in Art, 373). But in the absence of happy accidents, appropriate physical actions can act on the subconscious to create the "inner truth of feeling" by "psychotechnical" means. Stanislavski calls the interdependence of physical action and mental experience "organic activity." The petulant Grisha, who is always giving Totskov a bad time in *An Actor Prepares*, asks: "How can you call
activity based on thin air physical or organic?” (128). In Tortsov’s view
mind is not based on thin air but on reflex action. He replies with the example of an actor called upon to “drink” water from an empty glass.
Swallow air, he advises, swallow your saliva—the physical processes will
create a sense of truth reflexively in the absence of the water. The all-
knowing Director concludes, “Mind you, only physical actions, physical
truths, and physical belief in them! Nothing more!” (134).

As Stanislavski’s emphasis on physical actions increased, questions of
reflex conditioning and automatization played an ever more decisive role
in his theories. In Chapter 4 of Building a Character, “Making the Body
Expressive,” Tortsov, accompanied by a famous circus clown, arrives at
acting school in time for the Swedish gymnastic class. He announces that
tumbling and acrobatics will henceforth provide a mainstay of the school
curriculum. There is one reason for this: “Decisiveness.” The acrobat’s
nerves and sinews, on which his life depends every day, must be structured
into patterns of unreflecting response. Flying high above the netless
void below, “there is no room for indecision; he must, without stopping
to reflect, give himself into the hands of chance and his skill. He must
jump, come what may. This is exactly what an actor must do when he
comes up to the culminating point of his part. In such moments as when
Hamlet says ‘Why, let the stricken deer go weep’ or Othello cries ‘Oh, blood,
blood, blood!’ the actor cannot stop to think, to doubt, to weigh
considerations, to make ready and test himself. He must act, he must
clear the jump at full gallop.” Opera fascinated Stanislavski, and the
material that later coalesced into An Actor Prepares and Building a
Character was first read as lectures to the students in his Opera Studio.
A singer-actor, of course, would be ill-advised to explain to the conductor
that his entrance will be so many measures late because he needs a private
moment to get into the creative mood. Stanislavski knew that in
the opera the score of the role is the score of the role, and like the acrobat, the
singer-actor “must jump, come what may.” Taking the great basso
Chaliapin as his model, Stanislavski perfected his System in accordance
with the needs of operatic production because he believed that the same
laws must inevitably apply on the regular stage.

In the chapter on “Tempo-rhythm in Movement” in Building a
Character, Rakhmanov, Tortsov’s assistant, introduces an “electrical con-
ductor for plays.” This device consists of two silently blinking lights that
could be placed in the prompter’s box and altered to blink like a silent
metronome at different tempi as noted in the prompt book. Tortsov and
Rakhmanov demonstrate this device by playing scenes in accordance with
tempi set randomly by the electrician, yet justifying each tempo with
proper motivations (212). A gifted actor with proper training, Stanis-
lavski believed, should be able to respond to external tempo-rhythm
without violating the law of inner justification. How can that be?

The tempo-rhythm itself allegedly stimulates the correct inner feelings.
Rhythmic patterns of muscular movement work themselves inward,
reacting on the psyche in the form of a “mechanical stimulus to emotion
memory and consequently to innermost experience.” Stanislavski invited
the actor to ask any singer what it is like to sing under the direction of a
conductor who understands the correct tempo-rhythm to bring out the
emotion of a score (Building a Character, 236). This technique recom-
mends itself because the actor’s memory pervades his entire body; it is
not the function of his brain alone. Physical action stirs memory and
muscle sense, as Lewes and Sekenen called it, with a speed and certainty
not obtainable from mental images induced by subjective means. Heart
rate fluctuates, respiration quickens and slows, body chemistry subtly
alters, driven by changing outer rhythms, which inexorably react on the
inner sensorium. Organism and mechanism coexist, two aspects of the
reflex machine.

Stanislavski regarded the method of physical actions as the culmination
of his life’s work. It rests on the now familiar principle that every thought
and feeling is connected to a physical action, that mind is merely the
subjective aspect of an objective process called body. The method of
physical actions begins with structured improvisations in which the actor
defines his role as a sequence of psychophysical objectives and events. As
he builds his character by accretion, he consciously constructs a chain of
stimulating actions. This is his inner model—a conscious artistic con-
struction automatized into his muscles and nerves. When he has fixed the
sequence or score through many repetitions, spontaneity returns. As
Kostya notes of Tortsov’s demonstration: “The more often he repeated
this sequence of so-called physical actions—or, to be more exact, the
inner stimuli to action—the more his involuntary motions increased”
(Creating a Role, 229). In summarizing his method of physical actions in
Creating a Role, Stanislavski explains exactly how the score will be com-
posed:

With time and frequent repetition, in rehearsal and performance, this
score becomes habitual. An actor becomes so accustomed to all his
objectives and their sequence that he cannot conceive of approaching
his role otherwise than along the line of the steps fixed in the score.
Habit plays a great part in creativeness: it establishes in a firm way the
accomplishments of creativeness. In the familiar words of Volkonski it
makes what is difficult habitual, what is habitual easy, and what is easy
beautiful. Habit creates second nature, which is a second reality. The
The Player's Passion

Stanislavski takes up Diderot's meaning of *spontaneity*—an activity so often that it becomes automatic and therefore free. Reflexivity firmly supported this position. Sechenov, in a book-length essay titled "The Elements of Thought" (1878), expanded on G. H. Lewes's notion of intuition as "organised reasoning," by noting that Lewes deduced point out its similarity with a very habitual movement which become automatic and in which the mechanism of its assimilation is perceptible owing to the rapidity and easiness of the action." This is true nature, looking for all the world like the first.

The advantage to the actor of such physical automatism is that it liberates his creative faculties to observe, assess, and correct his performance in accordance with the pre-established score. Stanislavski's wide-eyed Koslov sketched at the power and control that this dual consciousness gave to acting: "I divided myself, as it were, into two personalities. One acted as an actor, the other as an observer. Strangely enough this fact not only did not impede, it actually promoted my creative work." Encouraged and lent impetus to it." (Building a Character, 19).

The task of the inner critic might be compared to an editor whose goal is to trim away all that is superfluous and to maintain the clarity of the gel and the dynamic accents of the score. "Unrestrained movements," says Tortsov, "are natural though they may be to the actor himself, only when the design of his part, make his performance unclear, monotonous uncontrolled." Tortsov goes on to compare the unrestrained periphrase to the narrator who surrenders his narrative art to the personal emotions of the story he has to tell: "A person in the midst of experiencing a poignant emotional drama is incapable of speaking of it coherently," insists. Under the stress of unmediated emotion, his voice breaks, fades with tears; his grimaces and spasms distract his listeners and sent them from understanding the story he is telling. Only after the age of "time, the great healer," can the storyteller come to grips with sorrow, give it shape and solemnity, and speak of it in artful cadences they wrought "while those who listen weep." All the references to the part and getting into character and inner truth finally come into this, Tortsov's summing up of the goal of the Stanislavski System.

The Paradox as Paradigm

rehearsals, that he then calm himself, get rid of every sentiment alien or obstructive to his part. He then comes out on the stage to convey to the audience in clear, pregnant, deeply felt, intelligible and eloquent terms what he has been through. At this point the spectators will be more affected than the actor, and he will conserve all his forces in order to direct them where he needs them most of all: in reproducing the inner life of the character he is portraying. (Building a Character, 69-70)

Such "emotion recollected in tranquility" requires even more method and control than Wordsworth demanded of the poet, but the goal in both cases is the same: "clear, pregnant, deeply felt, intelligible and eloquent" artistic expression.

Stanislavski's search for truth brought him round again to the point at which he had begun in 1906, but with a new respect for habit. The strong muscular memory he had distrusted in actors survived in his thinking to become a crucial element in the System as it stood at the end of his life. That which remembers bad habits may also remember good ones. Impulse may create the score in rehearsal, but the score creates the impulse in performance—that was his final word.

Around the work of Stanislavski there developed a community of dedicated practitioners. Dividing into various studios and schools, they explored different phases of the System, probing its anomalies and testing the reach of its applications in a process analogous to what Thomas Kuhn describes as the workings of normal science. Stanislavski's foremost legatees, Eugene Vakhtangov, devoted his short life to the synthesis of Meyerholdian theatricality and Stanislavskian realism—an anomaly poised between the mechanics of external form and the organic content of inner feeling. B. E. Zakharov, among other practitioners, continued Stanislavski and Vakhtangov's inquiries into the "Unity of the Physical and Psychological, of the Objective and the Subjective in the Actor's Art." Similarly, Vasilii O. Toporkov recorded the foundation of the method of physical actions on "the Law of Unity of the Physical and the Psychological in man's nervous system" (AA, 524). The greatest actor to emerge from this circle, Michael Chekhov, went on to develop the psychological gesture, a physical delineation of complex expressive sequences. Those practitioners who, like Chekhov, left Russia to settle abroad carried various elements of the System with them. In 1924 Richard Boleslavsky and others founded the American Laboratory Theatre, which taught the principles of Stanislavski as they had evolved at the First Studio until 1919. Boleslavsky's own textbook on acting emphasized the actor's inner technique, "which works unconsciously by itself
The Player's Passion

paradox in all Stanislavski's writings. He sought to create a religion of art, in which the theater was a temple, the audience worshippers, and the actors celebrants at a mysterious rite. A mystic and idealist, he tolerated his own mechanization of the art he loved only within definite limits, and such sonorities as the "inner life of the human spirit" rolled off his tongue far more naturally than technical terms like cerebral reflexes. Although Stanislavski is a state hero, Soviet psychologists have expressed uneasiness with some of the more unscientific passages in his writings, and the censors felt compelled to prune a number of sentimental anisms out of the Russian edition of My Life in Art. For the inexplicable, the fugitive, and the enigmatic, Stanislavski invoked "inspiration" and "spiritual truth" from the realm of "Apollo," the last presence of the visions of the rhetors, now paved over by Soviet science, but stubbornly pushing up between the cracks in odd places, sustained by roots more ancient than history. Nevertheless, when his views are digested by less orphic voices than his own, Stanislavski's paradox flattens out into a materialism as far left as La Mettrie's, a bald equation of organism and machine. Of Stanislavskian actors Sonia Moore writes: "The System teaches them to function on the stage automatically as live human beings." Such an apparent contradiction makes sense only when it is read in the context of the psychophysical doctrines foreseen by Diderot and developed by Russian science during Stanislavski's lifetime, doctrines that define man as a machine who remembers and dies.

The Paradoxe as Paradigm

217
Perhaps it is this confrontation with mechanism that has repelled his religious nature and led Grotowski away from the disciplined score and toward organic para-atheatrical events such as The Tree of People. In this production a group of invited spectators/performers lived and worked in the Laboratory for days, reacting to one another and evolving a miniature society, the order and structure of which were, to use Lewes's term, emergent, spontaneous in a way that a conventional performance could never truly be. Perhaps in these surroundings acts of sincere self-discovery, self-revelation, and self-penetration are possible. It is hard to judge, however, what prior calculations the participants may have made on their own, what faces they have studiously fashioned to wear underneath their masks. The uncertainty principle undermines theories of emotional spontaneity more thoroughly than it does those of modern physics: just as an act of observation must alter the nature of the observed phenomenon, so an act of public expression must alter the nature of the feeling expressed. As Quintilian realized long ago, when you choose to reveal your innermost emotions in the public forum, the act of revelation itself elaborates the true feeling into a kind of fiction that is, for better or worse, a work of art. What physiology and psychology since the eighteenth century have done is to define this process of elaboration in terms of the body as a physical instrument, demystifying some of its most sacred totems at great cost to the actor's sense of his own spirituality. Even as Grotowski bases his theories of acting on current scientific conceptions of the body, he is tempted to make detours into the realm of ineffable mystery. Like the ancients, he yearns for the unquestionable authenticity of inspired revelation. At present the outcome of his journey is uncertain, but if the historic pattern continues to hold true, Grotowski will reach its end only to find Diderot waiting for him there, his patient face enlivened by the irritating smile of reason.

Notes

Note on Citations

The following works are cited in the text, using the abbreviations noted here:


Frequently quoted works are noted here on their first appearance and automatically cited in the text thereafter.

Chapter 1. Changeling Proteus

1. Institutio Oratoria, 6; Preface, 5–12; translator's gloss on animam recipere.
6. Hall, Ideas of Life and Matter 1:135; see also Galen on the Passions, 15.
7. T. Wright, Passions of the Mind, 301–06.
8. Doran, Endeavors of Art, 38.
11. Joseph, Elizabethan Acting, 100. Joseph's thanks for bringing to light a great deal of useful information on the relationship between oratory and stage performance was a series of hostile essays attacking his book on crypto-scientific grounds; i.e., what emotion in acting is really like. Rosenberg ("Elizabethan Actors: Men or Marionettes?" 913–27) would dismiss John Bulwer's rhetorical studies of "formal" gesture because "he had nothing to say to actors" and immortalize Richard Fiecklowe's description of Richard Burbage because it
Chapter 3. Crisis of Sensibility


2. Cheyne, English Malady, 51.


4. See Rothschild, History of Physiology, 125.

5. Gaub, “The Harmony of Mind and Body,” in De regimine mentis, in Rather, Mind and Body in Eighteenth Century Medicine, 34.

6. Bate, Treatise on Madness, 78–79.


9. J. Hill, The Actor, 1. This and subsequent references in the text are to the revised and enlarged version of 1795.


11. Carnall, Mid-eighteenth Century, 495, 505–06.

12. Manville, Hypochondriac and Hysterical Diseases, 135.


18. Lewes, Biographical History of Philosophy, 625. See also Warren, History of Association Psychology, 50–64, 168–75.


20. The relationship between Associationist psychology and The Actor has been explored by Taylor in “Just Delineation of the Passions,” Eighteenth-Century Stage, ed. Richards and Thompson, 51–72. I believe that Taylor’s discussion of Hartley’s work is an excellent essay, and he is far too Whiggishly in light of Stevens’ search for “an inner spiritual technique,” praising the eighteenth-century physician for “groping” toward psychotechnology but taking him for falling short of “a systematic examination of the subconscious creative activity of the actor, which [he] seems to recognize but cannot explain” (68–69). Hartley cannot explain biochemical photosynthesis either, but this is not a meaningful criterion by which to judge the significance of his Vegetable System.


25. Joseph, Tragic Actor, 113. See also his index entries for points and transitions. For an account of Garrick’s exhibition, see Hodgcock, Garrick and his French Friends, 232–34.


27. Kuhn, Structure of Scientific Revolutions, 67.
he conditions his tongue muscles to a point of absolute obedience—and so gains total freedom" (125).

28. See Diderot, Oeuvres esthétiques, ed. Vernière, xvii, 311 n.

29. Fried, Absorption and Theatricality, 93–105.


31. This is conspicuously true of double consciousness. "The actor should feel," says Aumont, as if in contrasting the work of Diderot, "but he must have a kind of 'radix'" (Paradoxe sur le comédiens avec recueils présentés par Marc Blanchet, 169).


33. Kuhn, Structure of Scientific Revolutions, 10.

Chapter 5. Second Nature


4. See Vasco, Diderot and Goethe, passion.

5. Lewes, Life of Goethe, 345, 359.


8. Freer, "Talma and Diderot's Paradox on Acting," 23–76. Freer makes a good case for Talma's concept of a m.s, of the Paradoxe before its publication in 1830. The actor also paraphrased and directly plagiarized passages from the "Observations sur Garrick" in his essay on Lekain.


10. Bell, Anatomy and Philosophy of Expression, 125.


13. See Sulloway, Freud, Biologist of the Mind, 238–76.


15. Kjeruli-Petersen, Psychology of Acting, 175.


17. Lewes, Short History of British Psychology, 46–53.

18. Lewes, On Actors and the Art of Acting, 103.

18. Lewes, Problems of Life and Mind, Third Series, 2:290. The publishing history of Problems of Life and Mind is complicated. In order to simplify matters, the following volumes will be cited in the text as P.L.M.—


2nd series: Physical Basis of Mind.

3rd series: Problems the First: The Study of Psychology; Problems the Second: Mind as a Function of the Organism.


20. Fearing, Reflex Action, 162–73.


23. Quoted in Kichel, George Lewes and George Eliot, 123.


27. Fiske, Mrs. Fiske, Her Views on the Stage, 104.


Engel, Johann Jakob. Æde zu einem Mimik. Berlin, 1812.


[Foote, Samuel.] A Treatise on the Passions so far as they regard the Stage. London: C. Corbett, 1747.


Galen on the Passions and Errors of the Soul. Translated by Paul W. Harkins. [Columbus]: Ohio State University Press, 1963.


[unsigned]. "What is an Emotion?" Mind 9 (1884): 188–205.


Mind, the Soul, Time and Fate. Cambridge: Cambridge University Press, 1954.


Prampolini, Enrico. "Futurist Sceography (Manifesto)." In Kirby, ed., Total Theatre, 95–98.


"The most important study in the English language on the history of western acting theory."—Theatre Research International

The Player's Passion reinterprets theories of acting in light of the history of science, examining acting styles from the seventeenth to the twentieth century and measuring them against prevailing conceptions of the human body. The author explores how dominant theories of emotion, from the Galenic humor to the Pavlovian reflex, have shaped the critic's changing standards of the natural order of life and the actor's physical embodiment of it.

The Player's Passion has become a classic among theater historians and students of acting, and received the prestigious Barnard Hewitt Award for outstanding research in theater history. A wider audience will appreciate the book for its consideration of how far an idea can spread from its original discipline into the broader currents of intellectual history and popular comprehension.

"A major contribution... The breadth of research is imposing; extensive endnotes and bibliography are excellent."—Choice

"I consider it a modern classic... a work of the finest erudition, without pretense but with a fine sense of learning and with an astonishing vocabulary that communicates complex and often controversial concepts with clarity and total competence."—Don B. Wilmeth, Brown University

Joseph R. Roach is Charles C. and Doreatha S. Dilley Professor of Theater and English, Yale University. He is also author of It and Cities of the Dead: Circum-Atlantic Performance, and co-editor, with Janelle Reinelt, of Critical Theory and Performance.