

Maximum Influence from Minimum Abilities: La Mettrie and Radical Materialism

William J. Fossati

Julien Offray de La Mettrie (1709-1751) represents the lower tier of Enlightenment thinkers. He was described by the German historian, Friedrich Heer, as part of the “Low Enlightenment.”¹ La Mettrie has not been accorded the renown by historians of the period which has been lavished on his more illustrious contemporaries. One does not hear La Mettrie’s name in the same context as those of Montesquieu, Voltaire, or Diderot. La Mettrie’s contribution to Enlightenment thought consisted of a jackhammer-subtle interpretation of the discoveries in natural history and physics which took place in the seventeenth century.²

The path to his philosophical and scientific opinions begins with René Descartes. It was Descartes—heavily influenced by discoveries in mechanical physics and technology—who articulated a mechanical description of biological creatures. Descartes was the scion of a medical family and, as such, he maintained a strong interest in animal skeletal and muscular formation.³ His interest in the physical construction and activity of animal life was a major component of his professional life. His inquiries into the nature of animal body structure included dissection, vivisection, and the construction of rudimentary mechanical models of skeletal and muscular function.⁴ It is on this basis that Descartes’s claim to the title of “founder of physiology” rests.⁵

¹ Friedrich Heer, *Europäische Geistesgeschichte* (Stuttgart: W. Kohlhammer Verlag, 1957), p. 513.

² See Julien Offray de La Mettrie, *Machine Man and Other Writings*, trans. & ed. by Ann Thomson (Cambridge: Cambridge University Press, 1996), p. ix.

³ See Justin Leiber, *An Invitation to Cognitive Science* (Cambridge, Massachusetts: Blackwell, 1991), p. 22.

⁴ *Ibid.*

⁵ *Ibid.*

Elaborating on data from these studies, he theorized that the activity of biological creatures is explainable in exclusively mechanistic terms. Descartes expressed his theory of mechanism in his “beast-machine” hypothesis which stood in direct contradiction to Aristotle’s “animal soul” description of cognition in animals as well as humans.⁶ As a result of the “beast-machine” theory, Descartes was forced to defend himself against charges of atheism. Certainly, he had hurled a serious challenge at the feet of the Aristotelian/rationalist tradition.

That he should have aroused the disapprobation of prestigious philosophical and academic forces as well as the suspicion of Church authority is partly understandable in relation to his better-known inquiry into the nature of the human mind. Descartes wished to juxtapose the physical and mechanical nature of the corporeal world with the intangible and non-demonstrable world of the intellect.⁷ He set out to solve the problem which Plato had posed; namely, how do humans arrive at infinite systematic and abstract knowledge in light of their limited sensory faculties?⁸ Plato attempted to answer this question in his dialogue, *Meno*, but his answer was not to Descartes’s satisfaction. Descartes took up the problem in *Meditations on First Philosophy*. An indication of his conclusion is to be found in his examples of the thousand-sided polygons.⁹ He used them in *Meditations* to demonstrate that the mind is a combination of active, innate, and formative ideas and environmental stimuli received through the senses. Descartes illustrated the coordinated workings of this combination in *Meditations* with his example of the bee’s wax.¹⁰ By considering not only the physical attributes of the wax, but his perceptions of it as well, he described a complex process of human thought. In so doing, Descartes prepared the ground for future speculation regarding the nature of “mind” in spiritual or materialist terms.

La Mettrie’s reading of Cartesian philosophy fastened on the mechanistic aspect. In his first controversial work, *The Natural History of the Soul* (1745), he rejected Descartes’s attempt to reconcile the existence of a soul with his own mechanistic theory. In place of Descartes’s dualist description of animal and human activity, La Mettrie discounted any notion of “spiritual” presence in the motor functions of men or animals.

Far from being a clear, concise scientific treatise, *The Natural History of the*

⁶ *Ibid.*

⁷ *Ibid.*

⁸ *Ibid.*, p. 11.

⁹ See René Descartes, *Meditations on First Philosophy* (Indianapolis, Indiana: Bobbs Merrill, 1979), p. 69.

¹⁰ See *ibid.*, pp. 29-30.

Soul presents a smoke screen which all but obscures the author's mechanistic theories. His radical mechanism was sure to draw the fire of Church and political authorities in Paris. Therefore, he attempted to conceal the true thesis of his essay beneath an odd combination of scholastic jargon and Lockean empiricism. In chapter 5, dealing with the dynamics of matter, he began with a pseudo-scholastic explication and ended with an appeal to the authority of Cicero:

In the past, the term "matter" has been given to the substance of bodies, it being susceptible to movement: this same matter becomes able to move itself, it was understood by the term "active principle," given then the same substance. But these two characteristics appear so essentially dependent on each other, that Cicero, in order better to express this essential and basic union of matter and its principle motive power, said that each exists in the other . . .¹¹

Later, in chapter 6, he pursued an empirical line of thought:

Experience does not in the least demonstrate to us the faculty of feeling in animals, but only in men. For I, myself, am quite sure that I feel. I have no other proof of feeling in other human beings except by indications which they give me. Common language, by which I mean speech, is not the indicator which expresses it best. There is another, common to men and animals, which manifests itself with more certainty. I am speaking of emotions, such as moans, cries, caresses, flight, signs, singing; in a word any expression of pain, sadness, repugnance, fear, aggressiveness, submissiveness, anger, pleasure, joy, tenderness, etc. A language such as this, full of energy, is much more convincing than all the sophistic arguments of the Cartesians.¹²

In addition to his literary obfuscations, La Mettrie attempted to conceal his authorship further by asserting that the work was a translation of a treatise in English by a Mr. Sharp.¹³

Nonetheless, *The Natural History of the Soul* was condemned by the Parlement of Paris and publicly burned—as was the custom—by the public executioner. At the same time La Mettrie found it convenient to remove himself to the more tolerant climes of Holland.¹⁴ Once in the Dutch city of Leiden, he

¹¹ Julian Offray de La Mettrie, *Œuvres philosophiques* (2 Vols.), (New York: Georg Olms Verlag, 1970), Vol. I, p. 62.

¹² *Ibid.*, Vol. I, p. 67.

¹³ See Justin Leiber, *An Invitation to Cognitive Science*, p. 26.

¹⁴ *Ibid.*

continued his pursuit of radical mechanistic theories. In 1747, his theorizing coalesced in the treatise *Man a Machine*.

In this work, he abandoned all pretense of anonymity. *Man a Machine* is a frank exposition of his radical materialist philosophy which he freely acknowledged as his own. Expanding upon Descartes's hypothesis that animals are simple machines without souls, La Mettrie asserted that humans, likewise, are biological mechanisms. The search for a soul, he maintained, was bound to be fruitless. All explanations of human activity are to be found in the material world, not the spiritual. This included human cerebral activity. In this respect he sought to break down the traditional hierarchy which placed humans above animals. As he expressed it:

Generally speaking, the form and substance of the brain of quadrupeds is about the same as that of man. The same appearance, the same makeup in all respects; with this essential difference: that man is, among all the animals, the one which has the largest and most complex brain in relation to the size of his body.¹⁵

Man a Machine clearly reveals La Mettrie's scientific background. His frequent use of comparative anatomy was inspired by the work of Hermann Boerhaave, who specialized in the comparison of animal and human brains. In his references to intellectual functions and their sources, he was indebted to the work of A. Von Haller and his work with the stimuli of muscle fiber. Making use of his medical training,¹⁶ La Mettrie also founded much of his theorizing on contemporary medical literature concerning brain injuries. Backtracking from studies which reported the observations of psychological effects from brain disorders, he reasoned that here was proof of the "mind's" being nothing more than organized matter—a machine. When critics inquired as to how a machine could think, he shot back with "what else could?"¹⁷

Unlike his scientific contemporaries who were content to describe their findings strictly on the merits of their empirical activities, La Mettrie chose the role of polemicist. As much as anything else, *Man a Machine* can be described as a manifesto of radical materialism. In such a role, he left the realm of science and entered that of philosophy. Unlike his philosophical associates, he was willing to reject absolutely the efficacy of any metaphysical explanation of human motivation. Voltaire, Diderot, and Rousseau all were suspicious of spiritual representations of man. Nonetheless, they had all stopped short of an exclusively

¹⁵ La Mettrie, *Œuvres*, p. 299.

¹⁶ See Julien Offray de La Mettrie, *Machine Man*, p. ix.

¹⁷ Justin Leiber, *An Invitation to Cognitive Science*, p. 26.

materialist analysis of humanity. Nor were Helvitius and Holbach—normally less reasoned in their thinking than the others—willing to take up La Mettrie’s extreme materialist position.

It was in this sphere of thought that La Mettrie was a genuine revolutionary. His work “barbarized” the Enlightenment and set it on a course toward materialism and mechanism which proved to be irreversible.¹⁸ After La Mettrie—after 1751—rationalism, which had been the overarching characteristic of the Enlightenment, began losing ground to materialism.¹⁹ Enlightenment thought had been founded upon the principle of the social contract; first Locke’s, then Rousseau’s. Both social contract theories required an essential balance between the happiness of the individual and the good of society or the commonweal. The radical materialism of La Mettrie implied no innate sense of moral obligation to the commonweal on the part of the individual. His materialist description of man/woman was of a creature stimulated only by self-interest. The man-machine’s overriding drive was toward satisfying its own impulses.²⁰ He stated this clearly in his work of 1748, *Discourse on Happiness*:

All things being equal, some [people] are more subject to joy, vanity, anger, melancholy, and remorse than others. From where does this come if not from that particular arrangement of the organs which produces madness, imbecility, vivaciousness, slowness of wit, calmness, impressionability, etc.? For it is among all these effects of the structure of the human body that I dare to classify organic happiness.²¹

“Organic happiness” is the key phrase in this rumination on human impetus. Faithful to his radical materialist philosophy, La Mettrie insisted that emotions, impressions, and ideas are generated by bodily activity. Because of this, human impulses which rationalists would ascribe to intangible human qualities are identified by La Mettrie as human drives. He did not embrace the social contract theory, so beloved by his rationalist contemporaries, but he was no anarchist either. He was quite willing to acknowledge the human desire for a cohesive society in the form of the state. But for him, the state was, like everything else

¹⁸ See Friedrich Heer, *Europäische Geistesgeschichte*, p. 513.

¹⁹ See Michèle Ansart-Dourlen, *Freud et les Lumières, individu, raison, société* (Paris: Payot, 1985), p. 134.

²⁰ See *ibid.*

²¹ Julien Offray de La Mettrie, *Discourse sur le bonheur*, ed. John Falvey, appearing in *Studies on Voltaire and the Eighteenth Century*, ed. Theodore Besterman, Vol. CXXXIV, (Banbury, England: Thorpe Mandeville House, 1975), p. 126.

in human events, a product of physically-engendered urges. In the case of the state, the urge in questions was—sex:

What is worthy of the favors of fortune can be ascribed to those of nature and consequently to sensual delight. The reason which Seneca gives for declaring so forcefully against it is that sensual delight cannot be a good friend nor a good soldier nor a good citizen, but an unreasoning force as experience proves. Sensual delight does not always weaken those it favors. One sacrifices much to it, but one does not sacrifice everything and whatever may be the power of its domain, the need to ally its pleasure to a reasonable spirit, far from being damaging, affirms their mutual force. The art of feeling, tasting, of perfecting pleasure in whatever way is generally accorded to the French, perhaps because one makes of this a reproach to them. This nation, so voluptuous, yet is it less capable of friendship? Is love of the Fatherland less intense in its heart? Does it not know all about danger when honor or when its king calls upon it? What do I mean by this? The most intense feeling for glory and the most beautiful valor are joined so much by the attractiveness of spirit and taste that it has been called, even by jealous foreigners by the flattering title “Lovely Queen of Nations.”²²

In explaining human creativity as the product of “a wild nature, naturally undisciplined,”²³ he was not describing a Hobbesian state of nature which pitted “every many against every man.”²⁴ La Mettrie’s social theory was far more revolutionary. It was based on his contention that humanity, far from being rationally motivated, had achieved civilized status through functions solely generated by responses to sensual energy. What he suggested was nothing less than a very radical departure from political philosophy since Aristotle.

Because of his radicalism, several of the philosophes were openly critical of his work. Both Holbach and Diderot attacked his ideas as dangerous to public morality.²⁵ His polemics against religious beliefs were widely regarded as detrimental to social order. His *Discourse on Happiness* aroused especial outrage for its relaxed approach to sex. (Apparently the bawdy eighteenth century, the epoch of Fielding, Rousseau, and de Sade, was not ready for a reading of human

²² *Ibid.*, p. 189.

²³ Michèle Ansart-Dourlen, *Freud et les Lumières*, p. 135.

²⁴ Thomas Hobbes, *Leviathan* (New York: E.P. Dutton & Co., 1950), p. 103.

²⁵ See Baron d’Holbach, *Système de la Nature* (Londres, 1779), Book II, chapt. XII, 344; see also D. Diderot, *Œuvres Complètes de Diderot* (Paris: Garnier Frères, 1875), Vol. 3, pp. 217-220.

sexuality which anticipated Freud by one hundred and fifty years.)²⁶ La Mettrie's critics decried his theories on sensuality as an invitation to sexual promiscuity and even crime.²⁷ As was the case after he completed his work on the human soul, he was at pains to dodge—if not blunt—criticism of his work.

In 1750, he published the *Preliminary Discourse*. Appearing as an introduction to a volume of his collected work, the *Preliminary Discourse* was aimed at reassuring the reading public of the benignity of materialism and dispelling popular misconceptions about philosophers. The objective of the philosopher, according to La Mettrie, was to search for truth. This, he went on to explain, was separate from the mission of morality and religion, which was to protect society.²⁸ Moreover, philosophers constituted a cultural and intellectual elite which practiced social virtues, but not for the same mundane reasons as did the rest of the population. His *apologia* went on to explain that philosophers, no matter what their personal convictions, presented themselves as models of civic uprightness and morality.²⁹

Like much of his work, the *Preliminary Discourse* is inconsistent and often contradictory. While insisting that philosophers are paragons of probity and worthy of public emulation, he denied any moral obligation on their part to act out virtuous deeds or to teach by example. Much of the contents of the *Preliminary Discourse* is an eclectic draw upon work of leading writers of the period. Themes articulated by Pierre Bayle, Voltaire, and the whole Libertain movement can be detected.

Amid appeals to Diderot, who was imprisoned at the time for libel, and to Toussaint, who was in exile, La Mettrie attempted to portray himself as a member in good standing of the intellectual movement of which they were leaders. Yet his opening declarations in support of a lack of any innate human virtue, the possibility of a completely atheistic society, and the amorality of humanity aroused the hostility of the philosophes he was attempting to mollify. Like his *Treatise on the Soul*, the *Preliminary Discourse* was banned in France and did not enjoy the support of those who usually held themselves in opposition to government censorship. As one historian phrased it, La Mettrie “was considered a liability who could only do harm to the philosophes’ cause, as he had drawn extreme conclusions from positions shared with other people, which could make this philosophy appear as dangerous for society.”³⁰ Whether or not they actually saw in the implications of his radical materialism a threat to society, the fact is

²⁶ See Michèle Ansart-Dourlen, *Freud et les Lumières*, p. 11.

²⁷ See Julien Offray de La Mettrie, *Machine Man*, p. xxv.

²⁸ See Julien Offray de La Mettrie, *Œuvres*, p. 6.

²⁹ See Julien Offray de La Mettrie, *Machine Man*, p. xxv.

³⁰ *Ibid.*, p. xxvi.

that La Mettrie proved to be a devastating force in the demise of the old regime. His denial of the presence of a soul in man and woman struck at the heart of Roman Catholic theology by bringing into question the very necessity of the Church. To undermine the legitimacy of Church teaching was to weaken the edifice of the Church as an establishment. As an institution, the Church had been the historical supporter of the monarchy. By the eighteenth century, the most elaborate outcropping of the Church's support for the monarchy was the divine-right theory. This held that the monarch was God's anointed and thus answerable only to God. If priests were rendered irrelevant by a representation of reality which had no place for them, what credentials could they possibly have to validate the rule of the monarch?³¹ La Mettrie's philosophy, in all of its muddled thinking and crudity, constituted a debilitating critique of religious, social, and political institutions which had endured for centuries.

Whether by design or by happenstance, La Mettrie was in the vanguard of those who would fashion the scientific discoveries of the seventeenth century into a battering ram which played a major role in ending the old regime and, indeed, transforming the complexion of western culture from that time forward. The political and social revolution did not commence until 1789. The revolution which unalterably pitted science against metaphysics began in the 1740's. La Mettrie's works *Man a Machine*, *Man a Plant*, and *The Natural History of the Soul* were at the same time manifestos and weapons of this scientific revolution. From that point on, it was to be the scientist, not the priest, who would be the arbiter of morality, truth, and knowledge.³²

In light of the unprecedented bloodshed which attended certain (though not all) stages of the French Revolution and the wars which followed, it seems reasonable to reflect on the role which La Mettrie's portrayal of humanity may have played in such carnage. Taken to its logical conclusion, his philosophy reduced men and women to objects; worthy only of manipulation and regimentation. One can almost sense La Mettrie's thinking at work in the bloody excesses of the year of the Terror (1793-94) during which the guillotine flicked off over four-thousand heads in Paris alone.³³ Similarly, the changes in the practice of warfare which came out of the French Revolution surely bespeak the view that human effort and blood had become a national commodity; one to be expended freely in the interests of the nation's martial aspirations.³⁴

³¹ See John Morrow, "The Impact of Four Enlightenment Writers on the Foundations of the *Ancien Régime*," unpublished graduate research paper, 1996, p. 5.

³² See *ibid.*, p. 4.

³³ See F. Boshier, *The French Revolution* (New York: W.W. Norton & Co., 1988), p. 194.

³⁴ See Robert B. Holtman, *The Napoleonic Revolution* (Baton Rouge, Louisiana: Louisiana State University Press, 1984), pp. 43-47.

Notwithstanding, La Mettrie's radical materialism became a basic component in scientific thinking throughout the next century, and into the present. His bequest to scientists who came after him was the conundrum of a strictly materialist being which was capable of rational thought. His theories of human action driven by pleasure or sensuality were vague and lacking in specificity. Still, his polemical insistence that metaphysics had no place in the analysis of human endeavor forced priests and rationalist philosophers out of the game. Such a view of humanity left the field entirely in the possession of scientists. For them this was too good a situation ever to relinquish, hence the scientists would prefer grappling with the dilemma of explaining how a finite organ—the brain—was capable of an infinite number of abstract ideas. In the absence of any transcendent theory of human intelligence, researchers were forced to deal with empirical, materialist explications of the mind's exertions.

The starting point for neurological theorizing was La Mettrie's declarations on sensual stimuli. Everything from basic survival to the most sophisticated culture was, for La Mettrie, a matter of pleasure. Unlike his contemporary, Rousseau, he made no appeal to the collective ideal of the *Patrie* or the nation.³⁵ La Mettrie's radical materialist social psychology rested upon the individual's derivation of pleasure from his/her liberation from social conventionalities and opinions. Having thus been liberated, the individual then achieves augmented pleasure from his imaginings of his relationship with others as well as the discovery (through imagination) of his sensual being and the avenues to increased pleasure through interaction with others. The pleasure principle served not to isolate the individual but to bind him to society as he learned to take pleasure from relations with others.³⁶

Individual freedom or the rights of man—to use eighteenth-century parlance—was similarly a product of the human drive to attain pleasure. La Mettrie's radical materialism stood in absolute opposition to any spiritual or rational premises which ascribed human freedom to God's will or to any other metaphysical presence. Instead, he identified a "wild nature" in human beings. This was yet another aspect of the drive for pleasure. Unlike the pleasure principle which gave sensual reward for social relations, this impulse was based on gratification of individual desires. It could be said to be the same phenomenon to which Freud would refer as primary narcissism.³⁷ La Mettrie anticipated Freud with his talk of the "wild nature" of man. At the end of the next century, Freud constructed his theory of the libido and its unquenchable demand for

³⁵ See Michèle Ansart-Dourlen, *Freud et Les Lumières*, p. 78.

³⁶ See *ibid.*, p. 134.

³⁷ See *ibid.*, p. 135.

pleasure. While La Mettrie never provided the detail for his theory of sensuality (which Freud was to provide later), he certainly set the stage for Freudian psychology and, indeed, much of the psychological description of human motivation into the twentieth century.

The anthropological and sociological theories of Wilhelm Reich, even more than those of Freud, bore the mark of eighteenth century materialism. Reich insisted that political activity in its broadest terms was nothing more than an extension of the individual's impulse toward sensual gratification. Here can be seen a detailed extension of La Mettrie's hedonistic perspective on human motivation.³⁸ Reich's dalliance with communism is well documented. Like many another intellectual in the nineteen-thirties, he saw liberal democracy falling victim to economic, ethical, and political crises for which it had no solutions.

Reich turned to naturalistic explanations for humanity's age-old quest for political answers. He had an optimistic rendering of human sensuality where Freud tended to be skeptical. The nature of men and women, according to him, was spontaneously oriented toward sensual gratification which did not constitute a threat to others. True enough, he theorized, history is replete with examples of man's inhumanity to man; but human tendencies toward hostility were secondary. Often they were triggered by external situations. Everyday frustrations arising from obstacles placed in the path of the natural human drive toward socially cohesive behavior resulted in antisocial acts. Reich added that such antisocial conduct, though attributable to environmental causes, was compulsive; he recognized no quality of free will in such activity. But just as in instances of human behavior aimed at building society, human antisocial behavior was libidinally propelled.

Reich's psychology recognized only one constant: the tendency toward the satisfying of sensual urges. In fact, he broke with Freud over the issue of aggressive impulses. Unlike Freud, who identified the existence of basic self-destructive compulsions, Reich insisted that human aggressiveness was only the manifestation of the desire to be in control. This, he maintained, was an affirmation of the "self" and a perfectly healthy human proclivity.³⁹ Unlike La Mettrie, who acknowledged the human capacity for viciousness, Reich chose to ignore the problem of evil. La Mettrie explained the human propensity for violence on the basis of "physiological organization" which resulted in hostile behavior in some individuals.⁴⁰ As for Reich, he was willing only to theorize in light of his belief that the human organism always responded to its own needs.

³⁸ See *ibid.*, p. 139.

³⁹ See *ibid.*, p. 140.

⁴⁰ See *ibid.*, p. 141.

Reich and Freud, like La Mettrie, were practitioners of medicine and self-conscious scientists. They refused to consider the ethical or moral dimensions of the human race, limiting themselves to a tightly hedged-in materialist analysis of human activity.

While Freud and Reich only implied the “man-as-machine” thesis in their work, La Mettrie provided the foundation for a continuous school of thought with regard to human cognitive abilities. Divested of all its metaphysical qualities, human cognition was fair game for several theories which took the scientific community by storm around the middle of this century. The years after the Second World War witnessed the birth of the discipline called cognitive science. The first notable activity in this new scientific endeavor came with the work of Alan Turing. In 1950, Turing constructed a rudimentary apparatus for the proving of mathematical formulas. The so-called “Turing machine” was contemporaneous with early computer technology, but its function went much further than simple computation.

The epistemological goal behind the Turing machine was that of creating a means of establishing formalized proofs of scientific data. The scientific data in question was of the mathematical variety. Bertrand Russell and Alfred North Whitehead had attempted to identify universally applicable axioms in their *Principia Mathematica* (1910-1913). It was Russell’s goal to provide axioms by which every truth in all branches of mathematics could be proved in a clearly laid out manner. But in 1931, the German mathematician, Kurt Gödel, demonstrated that some of Russell’s propositions, though true, were unprovable. The quest for absolute mathematical provability went on. Gödel employed the standard mode of using mechanical procedures as means of checking formalized mathematical proofs.

Turing turned the practice on its head by suggesting that instead of using mechanics as instruments of proof, why not look at mechanics—machines—as “the most basic subject matter of mathematics?”⁴¹ His reasoning was that mathematics began with counting. The earliest counting, he went on, was performed by a natural machine: the human mind. In the mathematical theories of Gödel and Turing, the mind is a machine for constructing other machines; the other machines being mathematical equations. Nor was the mind limited to the production of numbers. Turing noted that mathematics required symbols. The mind produces symbols—be they words or pictures—in infinite combinations and varieties. The machine which Turing constructed, at least in its first incarnation, was not a matter of wires, transistors, and blinking lights. Rather it consisted of a series of mathematical formulas expressed by symbols

⁴¹ Justin Leiber, *An Invitation*, p. 54.

more or less universally recognizable. Later, Turing machines would take advantage of the information revolution and become what are commonly identified as computers.

The Turing machine represents the most concerted scientific effort to replicate the human mind. It is the most sophisticated embodiment of La Mettrie's hypothesis. Turing's work and his machine are of central importance to the field of cognitive science which in the late twentieth century is attempting to carry forward La Mettrie's assumptions regarding the character of the human intellect. Indeed, after almost two centuries of obscurity, La Mettrie has experienced a revival in certain neighborhoods of the scientific community. Amongst cognitive scientists, he enjoys the status of patron saint, or perhaps that of prophet. Naturally, there is a bit of touchiness over the fact that La Mettrie was neither respected in his own time nor much read after his death. Snide references are made to mid-Victorian writers who condemned him for his theories on sensuality.⁴² Also the circumstances of his death have occasioned some grumpy remarks about historical accuracy. Apparently he died shortly after having overindulged in a sumptuous course of paté laced with truffles.

The uncharitable remarks which later commentators have made regarding the circumstances of La Mettrie's death (the *Encyclopedia Britannica* referred to him as having "led a gay, carefree life . . ."⁴³) are often the grounds for portraying him as a martyr. Cognitive scientists have often cast him in the role of a victim of the forces of reaction. By boldly stepping forth to repudiate the "divine spark" theory of the human intellect, so the argument goes, La Mettrie earned the hatred of all conservative thinkers who would stop at nothing to besmirch his character. Far from having been a carefree wastrel, as the legend has it, he was hounded for his scientific theories and died an agonizing death. A variation of this martyr legend holds that La Mettrie has been the victim of a conspiracy of silence. Radical materialists point to the shortage of English translations of his work. They see this as a sure indication that the truth of his theories has been stifled by a refusal to publish his work. How, his supporters wonder, can "an ostensibly free society . . . bury an indigestible but all too obvious line of thought and, perhaps as well, the individual who proposes it?"⁴⁴ In what can best be described as some sort of romantic fantasy, one cognitive scientist even warns that "cognitive science is an exciting but also, clearly, a dangerous occupation."⁴⁵

⁴² See *ibid.*, p. 27.

⁴³ *Encyclopedia Britannica*, 14th edition., V. 13, p. 626.

⁴⁴ Justin Leiber, *An Invitation*, p. 28.

⁴⁵ *Ibid.*, p. 29.

Fantasies aside, La Mettrie's description of the human state is the unchallenged foundation of most current scientific statements regarding our cognitive processes. Aristotelian declarations about the soul are noticeably absent from any prevailing scientific studies of what is commonly referred to as "the mind."⁴⁶ It is not excessive to claim that considerations of the nature of human cognition have been expropriated by the scientific realm. The result is that all metaphysical propositions which have been advanced by way of explanation for cerebral activity have been disallowed. La Mettrie would have been pleased.

One of the striking ramifications of this state of affairs is that the historical boundary between the human and non-human has begun to be broken down. Within the scope of cognitive science there is a minimizing of the unique nature of human intellectual capacity. Assuming that "personhood" depends upon cognitive abilities, and that such cognitive abilities are no more than the "endless arrays of electrochemical switches, neurons, all determined by . . . physical laws,"⁴⁷ it becomes possible to argue that animals as well as computers ought to be accorded personhood just as human beings are. In a science-based morality, it is virtually impossible to argue for the qualitative difference between humans, animals, and machines. Having invalidated metaphysical descriptions of humanity, as did La Mettrie, cognitive scientists now venture unabashedly into the moral landscape of personal identity.⁴⁸ Using a combination of genetic, neurological, and mechanical scientific data, they are able to present a case for the non-exceptional nature of humankind. As one cognitive scientist expressed it, "we are just strands of human DNA that, programmed in the proper way by the surrounding environment, growing from embryo to fetus to babe, neurologically processing all the way, end up being able to pass the Turing test."⁴⁹

Such is the philosophical legacy of La Mettrie. Though spurned by his Enlightenment contemporaries for the recklessness of his ideas, he has emerged in the latter part of this century as the harbinger of a scientific view of humanity. It is one of the supreme ironies of the history of ideas that this man's work should provide the philosophical underpinning for a climate of opinion which is all but pervasive in our culture.

⁴⁶ Adel K. Afifi and Ronald A. Bergman, *Basic Neuroscience* (Baltimore, Maryland: Urban & Schwarzenberg, 1980), p. 446; See also Sandra Ackerman, *Discovering the Brain* (Washington, D.C., National Academy Press, 1992), p. 6.

⁴⁷ Justin Leiber, *Can Animals and Machines be Persons?* (Indianapolis, Indiana: Hackett Publishing Co., 1985), p. 54.

⁴⁸ See *ibid.*, pp. 6-7.

⁴⁹ *Ibid.*, p. 34.