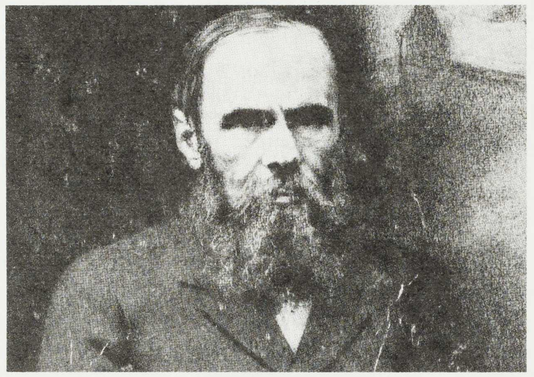
by Liam Brophy, Ph.D.

THE MENACE OF THE MATHEMATICAL MIND

Have you ever wondered what sort of world a man with the mentality of a vivisector would plan for us? What sort of Utopia would issue from the neo-cortex of a writer whose Behaviorist philosophy told him that fantasy and imagination, "the faculty divine," were mere emanations of the brain, like bile from the liver? Such a work of fiction has, in fact, been written, and became a best-seller. It is *Walden Two* by B.F. Skinner, versatile disciple of J.B. Watson, himself a disciple of Ivan Pavlov, of "conditioned reflex" fame. Skinner rightly judged that the best way to get a wide audience to gain a knowledge of one's ideas is to write a story in which these ideas are clothed in flesh and blood. As Skinner wished to show what a perfect Utopian world this could be if people were conditioned and controlled by Watsonian wisdom, he produced *Walden Two*, which literary critics hailed with enthusiasm. He thus added to the long list of Utopias which includes Plato's *Republic*, Thomas More's pace-setting

Sir Thomas More

Utopia, which expressly condemns all cruelty to animals, Edward Bellamy's *Looking Backward*, Bacon's *New Atlantis*, and H.G. Wells' *A Modern Utopia*. They are differing blueprints for a perfect world, and, it must be confessed, a little dull. Many modern Utopias take the U.S.A. as the most promising scenario for a perfect world, free of old prejudices of distinction between classes and even species. Jack London's neglected novel, *The Iron Heel*, is a cautionary tale of America under Socialism. *Walden Two* shows how much better we could be with the application of psychological conditioning on updated Pavlovian techniques. It depicts a state machine run with mathematical precision, controlled by Planners and Managers who bear more than a faint resemblance to supervisors of animal laboratories. The founder of the imaginary community explains: "When a science of Behavior has once been established, there's no alternative to a planned society. We can't leave mankind to an accidental or biased control." It is significant that Skinner helped set up teaching machines and a new branch of experimental psychology, and may be excused for mixing those mental exercises. He may not have intended *Walden Two* as a satire, like Huxley's *Brave New World*, but it reveals yet again the fallacy of relating the results of animal experimentation to humans. There is one complaint from which animals, as far as we know, are free, and this is boredom. It is a malady common to all Utopian citizens, even Skinner's. Even beatific boredom becomes unattractive.



Dostoievsky

In real history it was the men of what Dostoievsky called "the Euclidean mind" who brought dreadful suffering on mankind. It was men such as Robespierre, the "terrible simplifiers," as the French called them, men of "a levelling, rancorous, rational sort of mind" to quote Yeats, who brought reigns of terror into the world because they supposed moral and political problems could be solved with the skill and blood-spilling of a surgeon removing a troublesome vermiform appendix.

It has been truly said that Descartes was responsible for the deep inhumanity of modern science. We also see him as the chief moulder of modern thought and living, of the bias in favor of quantity over quality, monetary prosperity over richness of mind and personality, and the understanding that progress is a matter of material advancement. Rousseau remarked he cut the throat of poetry. He did more: He cut the throats of piety and pity. Mechanics were much in vogue in the France of his time, and clocks held a deep fascination for him and his tragic king, Louis XVI. At the same time, men of thought were trying to give a satisfactory account of the relationship between mind and matter, and their mysterious interaction. Descartes pondered the same problem, until suddenly his clocks brought him the same illumination and inspiration as the falling apple for that other mathematician, Newton. Descartes, to his own sudden satisfaction, conceived the idea that mind and body in man were as two clocks standing side by side, perfectly synchronized, and ticking simultaneously. God, the Master Mechanic of the universe, sustained an endless miracle in play by ensuring that this body-mind relationship was kept going in millions of human lives. All this may seem very naive to us now, but it was gladly welcomed by many who felt themselves lost in the mistiness of medieval metaphysics. By limiting discussion to "clear and distinct ideas," Descartes relieved thinkers of the nagging worries about free will, and it made life easier for them to regard themselves and others as clever machines. His theories have been given modern dressing as psycho-physical parallelism. What concerns us deeply is the scientific justification he gave to vivisection and all its attendant horrors. With a dogmatism that outdid the theologians in arrogant, unproven assumptions, he wrote: "Animals are machines, and, as such, are incapable of thinking or feeling. The cry of a dissected animal is only a mechanical noise like the creaking of a wheel, or the squeaking of a hinge—it denotes no awareness of pain, physical or mental . . . the greatest of all the prejudices we have retained from our infancy is that of believing that beasts think. No matter thinks; every soul of the beast is matter; therefore no beast thinks." What really matters, as Bentham was to point out, is not whether animals think but whether they suffer, but Descartes performed a vivisection trick on his own conscience, and that of millions to follow: he excised the whole area of pity and compassion from his mathematical mind. But he had his moments of uneasiness. In 1633 he wrote: "I have dissected the heads of various animals in order to ascertain in what memory, imagination, etc. consist." Did he ever expect to find clocks imagining what future time would be like? If they did he would surely have found them watching Dr. R. J. White of Cleveland carrying on the business of head dissections.

Descartes opened the way for every materialistic cause that was lying in wait for just such intellectual justification. Henceforth, if it could be proven that any intellectual discipline, even those like biology and psychology concerned with life, could be reduced to exact sciences, there need be no end to the cruelties and crudities committed in the sacred name of science. The emerging army of vivisectors hailed him as a leader of great intellectual stature who made their trade much easier by absolving them from "pity, and all that mourns in man." Once animals were regarded as "experimental models"—a favourite term to be used later by the Pavlovians — they could be crushed, burned, cut open alive, scalded or starved to death, without mercy or remorse. The use and acceptance of animal models as machines have gone on unabated, and they have become the pet toys of the Behaviorists. But Brandon Kuker-Reines has shown in his masterly refutation of this fallacy, *Psychology Experiments on Animals* (reviewed in *The AV Magazine*, March 1983), "unlike the mathematical models of the exact sciences, from which the concept of the animal model is derived, animal models have virtually no productive statistical value," and he cites many other eminent American medical experts in support of his condemnation of the Pavlovian illogical assumptions and deductions. He proves that not only have animal models failed to make inroads against a single mental disease, but that they also don't even come close to meeting the experimentalists' own criteria for valid animal models.

The public has become increasingly aware of the subtle ways in which their minds are being conditioned and manipulated by politicians, ad men and others intent on Communist or commercial control. Vance Packard has made this disturbingly evident in his book, *The Hidden Persuaders*, and Orwell has shown how Communists pare down language to make even the most intimate thinking processes fit the vast Communist State machine. This is consistent with Marxism, for Marx himself was a man of mathematical mind, a terrible simplifier of immense influence. For different reasons, as the Chinese philosopher Lin Yutang has shown, modern thinking here has become increasingly mechanical. Political parties are "machines," public sentiments are "responses" or "reactions," protests are "defense mechanisms" or "safety valves," while we have become scared of abstract words like "compassion," "mercy" and "goodness." Quite logically, then, Behaviorists and vivisectors would like to see language decarbonized of all emotive or imaginative terms, and of all concepts which make man truly human. In a fine analysis of Skinner's thinking and of all mechanistic approaches to life, that philosopher-biologist, Mary Midgley, has shown in her book, *Beast and Man*, how Skinner has revolted against the imprecision of modern language as clumsy and obese because it records more than what is actually before us. In his narrowed sight he cannot see that the finest things in life are really too big for words.

The logical conclusion of the mechanistic way of thinking is that we are such stuff as wheels are made of, we and all fellow-creatures, and that cybernetic man will take control as we evolve (if that is not too "vitalist" a word) towards a world controlled by machines as has been predicted in other futuristic novels. But, of course, life, like love, laughs at locksmiths, and all the efforts of planners to cage it in mathematical systems. Things like free will, humor and compassion will defy all efforts at amputation to make life fit. ■■