

# Ethics & Medics

A CATHOLIC PERSPECTIVE ON MORAL ISSUES IN THE HEALTH AND LIFE SCIENCES

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## Turning on by Plugging in

Whether you call them "high-tech brain ticklers" or "electronic mind benders" or "electronic consciousness enhancers," it looks as if mind machine vendors have created a sizeable market for their product. Judging from the variety to choose from and the list of manufacturers, one could imagine that this "brain-child" of psychotechnology might become as common as microwave ovens.

Now that there is a good possibility that one of these machines is in a mental fitness center near you, or maybe even in your neighbor's den, it is not too soon to ask the "but-are-they-really-good-for-us" question. That is the point of this article. Before we attempt an ethical assessment of these devices, however, we need to explore what mind-altering machines are, what they do, who uses them and for what purposes.

### What Are They and What Do They Do?

In his book, *Megabrain* (New York: William Morrow, 1986), Michael Hutchison describes the general category of mind-enhancement machines thus:

They are effective devices for presenting humans with concentrated bursts of experiences and stimulations of the type that cause the brain to release or step up production of the brain chemicals associated with pleasure, learning, memory and creativity. They are the technological equivalent of the superenriched environments that researchers found could, in a few minutes, stimulate brain growth that was equal to the amount of brain growth it took a month to achieve in any ordinary enriched environment. (p. 306)

Hutchison points out that mind machines operate on a theory to which some neuroscientists subscribe, i.e., that a person, given the proper stimulation, can control mental states, thoughts, and emotions as well as stimulate brain tissue growth and IQ by attaining hemispheric synchronization or whole brain thinking.

These machines are an offspring of a marriage between technology and neuroscience. Take the CAP Scan, for example. Dr. Charles Stroebel, relying on recent breakthroughs in computerized electroencephalography and biofeedback, designed the

Computerized Automated Psychophysiological Scan (or CAP Scan for short). This rather sophisticated machine allows the user to see his brain pattern as it occurs and, with coaching, to alter that pattern.

The user, wearing an electrode cap, sees an image of what his brain looks like on a television screen. Different colors represent different brain-wave activity: red (beta waves), light blue (alpha waves), dark blue (theta waves) and dark green (delta waves). If the user changes his present state of mind or emotion to some other, like from calm to rage, he is able to watch the difference in brain wave patterns on the screen. The trick is to remember what his body and mind felt like in each of the moods and then, gradually, to learn to reproduce those feelings and "forcibly control" the brain-wave patterns. Stroebel explains that "you find your brain doing something that you're not even aware you're controlling, and there you are in some kind of higher state of consciousness" (*Megabrain*, p. 183).

### What Are They Used for?

If you own or use the TENS, the Alpha Stim, the Alphapacer, the Cap Scan, the Mind Mirror, the Hemi-Sync, the Synchro-Energizer, the Graham Potentializer, the Tranquilite or the Flotation Tank, there are primarily three reasons for doing so: medical/therapeutic, educational, and recreational. The medical/therapeutic purpose is multidimensional. A group of scientists, for example, are testing these mind machines to determine whether they are able to restore normal brain functioning to people suffering from schizophrenia, depression, anxiety, Parkinson's disease, epilepsy, Alzheimer's disease, mental retardation, and Down's syndrome. (continued on page 2)

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The second use for these machines, the educational, is exemplified by scientists or private individuals who want to discover whether these machines enhance mental achievement or stimulate mental excellence. They hope to discover whether skills like mathematical calculation, ability to conduct a symphony, or memory and concentration would markedly improve after exposure to mind-altering devices.

However, by far the most common reason for the use of these machines is recreational. As Hutchison explains, they simply make people feel good. After a fatiguing day at work, some New Yorkers walk into a place called Tranquility Center, located at 141 Fifth Avenue, and submit to a Synchro-Energizer treatment. The person lies on a mat and dons goggles that emit timed flashes of light and earphones that emit soothing sounds. Quickly the user feels himself being transformed from frazzled to calm. Reports from beleaguered New Yorkers rate these pleasurable experiences above any hot tub, vacation in the Bahamas or years of meditation. This thirty-minute treatment brings "instant" calm to those who haven't time to meditate (see *The International Herald Tribune*, Dec. 28, 1987).

#### Are They Really Good for Us?

Judging from the information now available, it would appear that the use of mind machines is not intrinsically evil. If objective moral evil does arise, it will originate from the immoral intentions or circumstances that surround the use of these devices. It would follow, therefore, that if these devices are used to reduce pain or to alleviate the suffering of persons with mental disorders while, at the same time, respecting personal dignity, such medical/therapeutic uses would be morally acceptable.

But what if the motive for using these machines is mind-enhancement or recreation? Could there be moral pitfalls in these intentions and accompanying circumstances? A few questions might alert us to potential moral snags.

First, how do machines that sharpen and expand cognitive skills help human beings understand the meaning of human existence? Hutchison, who avidly promotes this product in his book, would like his readers to believe that these machines do enable users to get a handle on what is important in life. But

beware. His meaning of human existence is a planet removed from the *telos* of the Christian life. Hutchison insists that mental evolution is *the end* of human existence, and that mind-expansion machines are the evolutionary tools to get us to that end. "We are in the midst of an evolutionary leap," he says, and "either we must escape to a higher order, or be destroyed" (*Megabrain*, p. 312). But do not the lessons of history and personal experience prove that a lack of moral development will cause our demise with a much greater vengeance than a lack of accelerated mental development? Therefore, we could rephrase our opening question thus: Is there a danger that these machines force us to concentrate so heavily on elevated mental capabilities that *self* becomes the god while the Creator, who is responsible for the capabilities of the human mind, is lost sight of? Could the use of these machines to develop super-minds be just another modern-day "false god" that is held out to us as something that can really save us?

A second question to reckon with is: What effects do mind-altering machines have on personal freedom? Hutchison claims that, unlike drugs which produce some of the same effects, these machines are not addictive. Whenever the user wants to end the experience, he just turns off the machine. But, even if, as some claim, a user can turn off the *machine*, the question still remains: Will the individual be dependent on the *experience*? Will the user find it difficult to function unless he is able to recreate the desired emotional or mental state on a regular basis? And if this is so, would not this state of affairs represent a human dependency that ultimately enslaves the person and, therefore, impinges on personal freedom?

Furthermore, would human freedom be threatened if, as it is reported, these machines produce a mental state in which the user could be easily hypnotized? That is, given this heightened state of suggestibility, could some ill-intentioned person or group of persons lead the mind-machine user into thinking or acting in ways that would be completely outside of the individual's control (a la *Brave New World*)?

A third question that we should keep in mind is: Are these electronically-induced experiences "authentic," as Hutchison claims? They might be real in the sense that they happened and that one can step back from these experiences and describe them, but real life and

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#### CENTER NEWS

The Pope John Center is pleased to announce that Father J. Daniel Cassidy, O.P., Ph.D., has assumed the full-time position of Director of Research. Father Cassidy brings to this position prolific professional experience as adjunct professor of Biological Sciences (University of Illinois at Chicago), professor of Philosophy (University of Dallas) and Visiting Scholar (Institute of Ethics, Georgetown University). He is presently editing a 17-chapter volume for Georgetown University Press entitled "Biological and Clinical Foundations for Ethical Decision-Maker" which is expected to be published in Spring, 1989.

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living are more than just solipsistic experiences. As the Fathers of Vatican Council II point out: "man can fully discover his true self only in a sincere giving of himself" (*Gaudium et Spes*, ch. 2, n. 24). Human beings, by God's design, are socially oriented and need society for their self-fulfillment.

In the same vein, a fourth question deserves our attention: Could these mind-machines be instruments to help us escape reality? Consider this hypothetical case. Ron is a regular mind-machine user. He prefers the highly-focused and complete relaxation states that he can create while using the machine to the guilt feelings which he presently experiences because of his objective laziness and dishonesty at work. So, rather than facing the underlying causes of his guilt, Ron prefers to escape more and more into the machine-induced states of hemispheric synchro-

nization which make him feel good and help him forget all about the less pleasurable but, nonetheless, *real* state of his personal affairs.

### **Conclusion**

The use of mind machines cannot be morally evaluated simply by using pragmatic, utilitarian, or contemporary psychological principles. Rather, the use of mind machines is morally licit if, and to the extent that, they serve the human person. To the degree that the use of these machines preserves and respects human dignity and promotes the full truth about, and the authentic goods of, the human person, to that degree is their use morally acceptable.

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