

Directors

Richard Glen Boire

Wrye Sententia

Advisors

John Perry Barlow

Ram Dass

Rick Doblin, Ph.D.

Alex Grey

Lester Grinspoon, M.D.

Laura Archera Huxley

Ralph Metzner, Ph.D.

Jonathan Ott

Dale Pendell

Sadie Plant, Ph.D.

David Presti, Ph.D.

Douglas Rushkoff

Alexander T. Shulgin, Ph.D.

Myron Stolaroff, M.A.

Thomas Szasz, M.D.

Written Comments to the President’s Council on Bioethics Concerning Mind Enhancing Technologies and Drugs

**Submitted by Wrye Sententia, Director,
Center for Cognitive Liberty & Ethics**

I. About the CCLE & Cognitive Liberty

The Center for Cognitive Liberty & Ethics (CCLE), is a nonprofit education, law, and policy center working in the public interest to foster cognitive liberty. The CCLE defines cognitive liberty as the right of each individual to think independently and autonomously, to use the full spectrum of his or her mind, and to engage in multiple modes of thought. The CCLE works to protect the full potential of the human intellect.

The CCLE’s comments before this Council center on those pharmacological and technological interventions that directly affect the mind, and consequently implicate cognitive liberty. The CCLE is concerned with the ethics of treating or manipulating the mind, or as some are now calling it, “neuroethics.” Our focus is on those uses of drugs or other technologies and their attendant social policies that encroach upon individual rights to cognitive liberty and its logical corollary, cognitive autonomy—two faces of the same coin.

Cognitive liberty is an essential human right. The United Nations Universal Declaration of Human Rights and the US Constitution’s Bill of Rights both support a basic human right to cognitive liberty, or freedom of thought.¹ Yet “freedom” is the sort of preeminent democratic value that is often the subject of political hair-splicing and posturing. The complexity of our social fabric, (with its diversity of interests, identities, and cultures), conspires to make any assignation of transcendent value difficult, particularly when, as is the case with bio- or neuroethics, the issues span such elementary, yet increasingly malleable values as individual and collective quality of life. The CCLE recognizes, as does this Council, that the complexity of many of the issues involving brain enhancement are not easily resolvable. However, we hope that by interjecting the principle of cognitive liberty into the discussion, the Council will find useful distinctions in drafting its recommendations.

To the CCLE and our supporters, the question of mind enhancement is fundamentally a question of cognitive self-determination interwoven with an ethics of reciprocal autonomy. While etymologically, autonomy means “establishing one’s own laws,” reciprocal autonomy is interactive. Reciprocal autonomy is not a question of arbitrary legislation, created for oneself, but rather of laws that permit, whenever possible, successful interaction with others based on respect and tolerance for each other’s core values and freedoms. As Dr. J.F.

¹ UN Universal Declaration of Human Rights, Article 18: “Everyone has the right to freedom of thought...”; *Abood v. Detroit Board of Education*, 431 U.S. 209 (1977) [“[A]t the heart of the First Amendment, is the notion that an individual should be free to believe as he will, and that in a free society one’s beliefs should be shaped by his mind and his conscience rather than coerced by the State...”]; *Palko v. Connecticut*, 302 U.S. 319, 326-327 (1937) [“...freedom of thought...one may say...is the matrix, the indispensable condition of nearly every other form of freedom. With rare aberrations a pervasive recognition of that truth can be traced in our history, political and legal.”]

Malherbe, Professor of Social Work at the Université du Québec at Montréal, and author of *The Contribution of Ethics in Defining Guiding Principles for a Public Drug Policy*, has written, “Every unjustified restriction, which adds to the already heavy burden of civilized individuals, can only increase their sense of being the object of some form of totalitarianism, rather than the subject of their own destiny.”²

Decisions about as intimate a freedom as cognitive liberty should be allocated to the individual rather than the government. The CCLE works from the premise that the role of the state, criminal law, science and ethics, should be guided by principles that maximize opportunities for each individual to self-actualize. Public policy decisions should be framed by principles of legal liberalism, rather than moralism, or paternalism. This is not to say that morals or safety precautions have no place in determining appropriate uses of drugs or other technologies, but that the role of the State should not be to determine what is or isn’t moral, what are or are not acceptable, personal, risks. In our opinion, public policy for psychotropic drugs and/or brain technologies should stem from our democratic government’s responsibility for preserving individual autonomy and choice to the maximum extent possible.

While neuroethical issues are complex and often deeply philosophical, the CCLE maintains that a solid starting point for practical discussion and analysis begins with two fundamental recognitions that may seem axiomatic:

- 1) As long as their behavior doesn’t endanger others, individuals should not be compelled against their will to use technologies that directly interact with the brain, or be forced to take certain psychoactive drugs.
- 2) As long as they do not subsequently engage in behavior that harms others, individuals should not be prohibited from, or criminalized for, using new mind-enhancing drugs and technologies.

Simply put, the right and freedom to control one’s own consciousness and electro-chemical thought processes, is the necessary substrate for just about every other freedom.

I would now like to elaborate on the two principles mentioned above:

1. As long as their behavior doesn’t endanger others, individuals should not be compelled against their will to use technologies that interact with the brain, or be forced to take certain drugs.

The development of psycho-pharmaceuticals and electronic technologies in use now, or, on the cusp of interfacing directly with brain function, raises numerous cognitive liberty concerns.

The individual, not corporate or government interests should have sole jurisdiction over the control and/or modulation of his or her brain states and mental processes.³

² Ch. 3, Canadian Senate’s Special Committee on Illegal Drugs, “Final Report: Cannabis: Our Position For a Canadian Public Policy” (September 2002). Complete report available online at: http://www.parl.gc.ca/common/Committee_SenRep.asp?Language=E&Parl=37&Ses=1&comm_id=85

³ The sale of Prozac™ and similar antidepressant drugs is currently one of the most profitable segments of the pharmaceutical drug industry. According to IMS Health, a fifty-year-old company specializing in pharmaceutical market intelligence and analyses, “antidepressants the #3-ranked therapy class worldwide, experienced 18 percent sales growth in 2000, to \$13.4 billion or 4.2 percent of all audited global pharmaceutical sales.” (IMS Health, *Antidepressants*, online at: <http://www.imshealth.com/public/structure/navcontent/1,3272,1034-1034-0.00.html>.) Sales of “anti-psychotic” drugs are currently the eighth largest therapy class of drugs with worldwide sales of \$6 billion in the year 2000, a 22 percent increase in sales over the previous year. (See IMS Health, *Antipsychotics*, a summary of which is available online at: <http://www.imshealth.com/public/structure/navcontent/1,3272,1035-1035-0.00.html>.) A report published

While the development of psychopharmaceuticals can be applauded for their potential to aid millions of suffering Americans who *voluntarily* take them, the application of such drugs, in mandatory government contexts raises the chillingly dark prospect of the government *forcibly* administering these new drugs to chemically alter the way that certain people think. Likewise, while electronic technologies that interface with the brain have positive applications, issues of mental privacy and coercion come into play when corporate or government policies mandate use.

One pressing concern of the CCLE is that of government-mandated drugging using psychotropic drugs.⁴ At least two instances in the recent news suggest that this may be something that the US government considers to be within the purview of its power. The first concerns a proposal discussed by the FBI as a potential measure to administer mind-altering drugs to terrorist detainees (not those convicted of terrorism, merely *suspect* detainees) in order to elicit information. Fortunately, torture—which includes the forced use of mind-altering drugs—is banned by international conventions to which the US is a party, and therefore is not yet an option *within* the US (although there was some talk of deporting the suspects to countries where mind-drugging torture would be allowed, an action which also violates US signatory agreements).⁵

The second instance concerns a recent federal court case currently being petitioned to the Supreme Court for *certiorari* review.⁶ In this case, the US government is seeking to forcibly inject a St. Louis dentist, Dr. Charles Sell with a mind-altering drug against his will for the purpose of making him “competent” to stand trial on fraud charges. The CCLE is an *amicus curiae* party to this case in support of Dr. Sell. While the government may control the *behavior* of those in custody of the State, the instant case concerns an explicitly declared *non-dangerous* pre-trial detainee and a government effort to chemically alter his thinking process. In the context of the ever-increasing ability to pharmacologically intervene in the minds of Americans, the Dr. Sell case presents the Supreme Court with the timely and extremely important opportunity to articulate some unequivocal rules that respect freedom of thought and cognitive liberty.

The State cannot, consistent with the First Amendment of the Constitution, forcibly manipulate the *mental states* of individuals. Pre-emptive control of thoughts by the government via drugs or technologies should be strictly prohibited. The US Joint Non-Lethal Weapons Directorate (JNLWD) is reportedly pursuing the development of neuro-chemical weapons aimed at combating unruly mental states that may precede disruptive behaviors. In an October 2000 report prepared for the JNLWD by the Institute for Emerging Defense Technologies (a subunit of the Applied Research Laboratory at

by the Lewin Group in January 2000, found that in 1998, antidepressants and antipsychotics accounted for 9% of Medicaid prescriptions. The same report found that within the Medicaid program alone, “Antidepressant prescriptions totaled 19 million in 1998...[and] [a]ntipsychotic prescriptions totaled 11 million in 1998.”(Lewin Group, *Access and Utilization of New Antidepressant and Antipsychotic Medications* (Jan. 2000), prepared under contract for the Office of Health Policy, Office of the Assistant Secretary for Planning and Evaluation, and The National Institute for Mental Health, Department of Health and Human Services. Available online at: <http://aspe.hhs.gov/health/reports/Psychmedaccess/> ; According to Datamonitor, “Antidepressants have become a key focus for pharmaceutical manufacturers due to the huge growth in the market instigated by the launch of Prozac™ in the 1980s. Due to their expansion into new markets away from depression, the therapy class is now valued at \$14bn and is set to continue expanding despite the upcoming patent loss of numerous key products.” Datamonitor, *Market Dynamics 2001: Antidepressants*, Report - DMHC1725 (Dec. 21, 2001). Datamonitor forecasts that the demand for antidepressants will continue to grow and estimates the market value to reach \$18.3 billion by 2008. (Ibid).

⁴ The former Soviet Union had no First Amendment equivalent. It was not uncommon for prison psychiatrists to forcibly drug political dissidents after labeling them “mentally ill.” See, Sidney Bloch & Peter Reddaway, *Psychiatric Terror: How Soviet Psychiatry Is Used to Suppress Dissent* (1977); Clarity, *A Freed Dissident Says Soviet Doctors Sought to Break His Political Beliefs*, *New York Times* (Feb 4, 1976) A1, 8.

⁵ Walter Pincus, “Silence of 4 Terror Probe Suspects Poses Dilemma,” *Washington Post*, Sunday, October 21, 2001; For CCLE commentary and resources, see: “Drugging or Torture of 9-11 Suspects Breaks Constitution, Law, and Treaties” <http://www.cognitiveliberty.org/news/narcointerrogation1.htm>

⁶ *United States v. Sell* 282 F.3d560 (2002), now on petition for *certiorari* to US Supreme Court, No. 02-5664. CCLE *amicus curiae* brief online at: http://www.cognitiveliberty.org/dll/sell_index.htm

Pennsylvania State University), research was undertaken to examine the viability of using psychopharmaceutical agents, or “calmatives” as “non-lethal techniques” of military and civil intervention; listing, among other possible applications, crowd control.⁷ Different environments, the report explains, require tailored means of drug administration: “In many cases the choice of administration route, whether application to drinking water, topical administration to the skin, an aerosol spray inhalation route, or a drug-filled rubber pullet, among others, will depend on the environment.”⁸ Examples of environments include “a group of hungry refugees that are excited over the distribution of food and unwilling to wait patiently,” “a prison setting,” an “agitated population,” and “hostage situations.”⁹

As with emergent drugs, a number of electronic technologies that interact with the brain could promise benefit or peril. Some applications of neurotechnologies, while still in their infancy, are already being used to monitor thought processes for control measures. While something like transcranial magnetic stimulation, (technology which uses noninvasive magnets placed around the brain to alter electronic impulses, and thereby enhance mood) may be valuable as a form of depression therapy, the prospect of its perfected, or future application to alter “improper” or dissident thinking is daunting.¹⁰ The Human Brain Project, an internationally orchestrated research project sponsored by the National Institute of Mental Health, is seeking to, among other things provide a blueprint of so-called “normal” brain activity.¹¹ From brain scanning to brain implants, these kinds of technologies draw attention to questions of mental privacy and should alert us to the real need for protections of mental autonomy.

Scientists are now using Functional Magnetic Resonance Imaging (fMRI), a brain imaging technique, to detect differences in brain blood flow activity between intentionally deceptive and truthful statements.¹² Similarly, what is being called “Brain Fingerprinting,” (a method currently debated in terms of its efficacy) uses electroencephalographic (EEG) recordings of a subject’s brain waves in relation to his or her memory of events, as an improved polygraph with claims of an ability to directly assess a person’s “guilty” thoughts. Proponents of “Brain Fingerprinting” have been working on proposed corporate or government applications, including airport brain-scan security checks.¹³

These examples all underscore the need to set bright line rules that protect individuals from being compelled, or unwittingly subjected to mind-changing drugs or technologies. Compelled use of (legal or

⁷ Calmatives, are defined in this report as “compounds known to depress or inhibit the function of the central nervous system” with an emphasis on those drugs that “can be tailored to be highly selective and specific for know receptor (protein) targets in the nervous system with unique profiles of biological effects on consciousness, motor activity and psychiatric impact.” Dr. Joan M. Lakoski, Dr. W. Bosseau Murray, Dr. John M. Kenny, “The Advantages and Limitations of Calmatives for Use as a Non-Lethal Technique,” University of Pennsylvania, (October 3, 2000) p. 2, 3. Online at: <http://www.sunshine-project.org>

⁸ Ibid.

⁹ Ibid., p. 10.

¹⁰ “Magnets That Move Moods,” *Newsweek* (June 24, 2002), p.57.

¹¹ Human Brain Project, online at: <http://www.nimh.nih.gov/neuroinformatics/index.cfm>. For an informative article on the Human Brain Project, see Jennifer Kahn’s “Let’s Make Your Head Interactive,” *Wired* (9.08 August 2001) 106-115. Online at: <http://www.wired.com/wired/archive/9.08/brain.html>.

¹² See, briefing paper from Society for Neuroscience on Brain Wave Deception Research 2001; <http://web.sfn.org/content/Publications/BrainWaves/PastIssues/2002spring/index.html>

¹³ On proponents pushing to use this technique as an anti-terrorist screening device, see: Lawrence Farwell, “Brain Fingerprinting as Counter-Terrorist System.” <http://www.brainwavescience.com/counter-terrorism>; Steve Kirsch, “Identifying Terrorists Using Brain Fingerprinting” <http://www.skirsch.com/politics/plane/ultimate.htm>. For two critiques of Brain Fingerprinting, see: Wrye Sententia, “Brain Fingerprinting: Databodies to Databrains” *Journal of Cognitive Liberties*, Vol. II, No.3, pp 31-46 (online at: <http://www.cognitiveliberty.org/6jcl/6JCL31.htm>); US Government’s General Accounting Office Report (Oct. 2001), “Federal Agency Views on the Potential Application of ‘Brain Fingerprinting’”(online at: http://www.cognitiveliberty.org/issues/mental_surveillance.htm#Reports).

illegal) psychotropic drugs or technologies should be considered abusive, and can be strictly discouraged by drafting policies that respect the integrity of an individual's fundamental right to cognitive liberty.

2. As long as they do not subsequently engage in behavior that harms others, individuals should not be prohibited from, or criminalized for, using new mind-enhancing drugs and technologies.

For millennia, humans have used various plants and psychoactive substances to occasion states of mind conducive to personal and interpersonal healing, spiritual or religious states, philosophical exploration, or creativity boosting.¹⁴ Some researchers and scholars have concluded that the occasioning of alternative states of consciousness is nothing less than a fundamental human drive, akin to the sexual drive or the drive to sustain life.¹⁵ William James (1842-1910), one of America's preeminent philosophical thinkers on the nature of consciousness, experimented with psychoactive drugs in his pursuit of knowledge, and gave philosophical credence to, the role of alternative states of consciousness in evolving conceptions of the self and society.¹⁶

This touches on a thorny issue raised by Dr. Krauthammer in the Council's inaugural meeting on the topic of "Enhancement." Dr. Krauthammer pointed out the difficulty in distinguishing "enhancement" aided by new legal psycho-pharmaceuticals from the decades-long debates over "illicit" substances in the War on Drugs.¹⁷ Distinguishing "recreational" use from mind-enhancement purposes appears as fraught as attempts to distinguish therapeutic uses from enhancement—one person's mental recreation is another's consciousness tool for self-improvement. Under a liberal democracy, we must recognize that what goes on inside a person's head is entitled to privacy and autonomy. We should police dangerous conduct, not different thoughts. We must also not confuse a possibility of personal risk with social harm. Indeed, the CCLE would assert that making people criminals simply for using a particular psychoactive drug violates the fundamental right to cognitive liberty, oversteps the government's legitimate powers, and, further, has been ineffective in eradicating illicit drug use, while eroding citizen's confidence in government information about drugs.¹⁸

¹⁴ P.T. Furst, *Hallucinogens and Culture* (Novato, CA: Chandler & Sharp, 1976); R.E. Shultes and A. Hofmann, *Plants of the Gods: Origins of Hallucinogenic Use* (New York: McGraw-Hill, 1979).

¹⁵ Ronald K. Siegel, *Intoxication: Life in Pursuit of Artificial Paradise* (New York: Dutton, 1989).

¹⁶ Dmitri Tymoczko, "William James the Nitrous Oxide Philosopher," *The Atlantic Monthly* (May 1996; Volume 277, No. 5) pp. 93-101. Online at: <http://www.theatlantic.com/issues/96may/nitrous/nitrous.htm> Additional references and resources available at: http://www.cognitiveliberty.org/proj_willjames.html

¹⁷ "But fundamentally, I am [*sic*] yet to see how our debate about enhancement and all the issues that we have raised differ from the debate that people have about whether or not people ought to be able to use stuff that makes them feel better, and whether that should be legal or not." Charles Krauthammer, M.D. in President's Council on Bioethics, Session 5: Enhancement 1: Therapy vs. Enhancement (April 26, 2002); Transcript available online at: <http://www.bioethics.gov/april26full.html#five>

¹⁸ According to the US government's 2001 National Household Survey on Drug Abuse, 15.9 million Americans age 12 and older used an illicit drug in the month immediately prior to the survey interview. This represents an estimated 7.1 percent of the population in 2001, compared to an estimated 6.3 percent the previous year. Additionally, the Survey found that 1.9 million persons used Ecstasy (MDMA) for the first time last year, and that an estimated 8.1 million persons have tried MDMA at least once in their lifetime. In other findings the Household Survey found that: 1.3 million (0.6 percent) of the population aged 12 or older were current users of "hallucinogens," meaning that they had used LSD, PCP, peyote, mescaline, mushrooms, or MDMA (Ecstasy) during the month prior to the interview. Marijuana remains the most commonly used illicit drug. Most drug users were employed. Of the 13.4 million illicit drug users aged 18 or older in 2001, 10.2 million (76.4 percent) were employed either full or part time. An estimated 66.5 million Americans 12 years or older reported current use of a tobacco product in 2001. This number represents 29.5 percent of the population. Almost half of Americans aged 12 or older reported being current drinkers of alcohol in the 2001 survey (48.3 percent). This translates to an estimated 109 million people. (Substance Abuse and Mental Health Services Administration. (2002). *Results from the 2001 National Household Survey on Drug Abuse: Summary of National Findings* (Office of Applied Studies, NHSDA Series H-17, DHHS Publication No. SMA 02-3758). Rockville, MD.) Entire report available online at: <http://www.samhsa.gov/oas/nhsda.htm#NHSDAinfo>

Despite the lessons that should have been learned after the failure of alcohol prohibition, the US government is currently leading an international War on Drugs, budgeting in 2002 roughly 19 billion dollars to police the criminal laws aimed at prohibiting the use of illegal drugs. Inasmuch as this is a real and present instance of government policy with respect to mind-altering drugs, the CCLE believes it presents a glaring example of a failed policy – one that this Council should guard against repeating, or using as precedent, for crafting future policies with respect to mind-enhancement.

II. CCLE Recommendations

The CCLE suggests that a declarative statement of the individual's right to self-determination over his or her mental states incorporated in the language of national policy directives would deter abuses of power while still respecting individual choice.

Discrimination on the basis of what psychotropic drugs or technologies one does, or does not use should be strictly prohibited. The wording of existing discrimination policies could be adapted to incorporate a cognitive liberty clause, protecting against surreptitious technological or pharmaceutical interventions.

Additionally, “drug testing” as an employment screening policy for the purposes of assessing one's mental state, rather than one's performance, should be curtailed.

Again, the CCLE maintains that a solid starting point for practical discussion and analysis begins with these two fundamental recognitions:

1. As long as their behavior doesn't endanger others, individuals should not be compelled against their will to use technologies that directly interact with the brain, or be forced to take certain drugs.
2. As long as they do not subsequently engage in behavior that harms others, individuals should not be prohibited from, or criminalized for, using new mind-enhancing drugs and technologies.

The CCLE respectfully urges that any regulatory recommendations arrived at by the Council take these two principles as bright-line rules.
