Chemicals or Choices

A Preservation Institute Policy Study

The Natural Environment : The Social Environment

The Preservation Institute
2140 Shattuck Ave, Suite 2122
Berkeley, CA 94704

http://www.preservenet.com

In 1990, American doctors wrote 16 million prescriptions for antidepressant drugs. In doctors wrote 28 million prescriptions for antidepressant drugs, up 73 percent in 5 years.[i]

In 1990, fewer than one million American children were diagnosed with Attention Deficit Disorder. In 1995, over 2.3 million children were diagnosed with Attention Deficit Disorder, up 150 percent in five years.[ii]

When mental health care advocates like Tipper Gore say they want to "remove the stigma from mental illness," so people will get medical treatment for it just as routinely as they do for physical illness, we should think about these numbers and project them into the future.

Mental illness is different from physical illness, because its definition is much more elastic. We can say with certainty whether someone has tuberculosis or hypertension, but the symptoms of Depression and Attention Deficit Disorder are vague: diagnosis is based on subjective criteria, not on objective tests. Today, people who want drugs to make them feel better, and who can afford to pay, can generally find doctors who will say they have mental illnesses. If mental health care advocates have their way, everyone will be able to afford to pay – and with the stigma removed, people will be all the more likely to medicalize their difficulties in living, so therapists can give them instant cures.

There are people wandering the street of American cities who desperately need to be treated for serious mental illnesses. But if we "remove the stigma from mental illness" and mobilize the nation's health care system to treat it, the definition of mental illness could expand indefinitely. More and more difficulties in living will be redefined as mental health problems, which people will cope with by taking prescription drugs.

There are two dangers to medicalizing our emotional problems in this way.

First, therapy will be used to adjust people, to make them fit society's demands. If someone has trouble paying attention because he has to work long hours at a boring job, we will define the problem as Attention Deficit Disorder, not as the long hours. Because people want to succeed, they will actively seek to treat this sort of problem with drugs such as Ritalin to keep up with the demands of their jobs, rather than questioning whether such long hours are necessary.

Second, therapy will impoverish people's emotional lives and characters: people who have uncomfortable emotions will be defined as sick and treated with drugs. Recent experience with Prozac and similar drugs has shown that the same drugs that cure clinical depression and obsessive-compulsive disorder can also "cure" people who would never have been considered mentally ill in the past and make them feel more cheerful.

This is the dilemma of mental health care: the same drugs that treat the mentally ill can suppress everyone's emotional difficulties. We need to draw the line, so we can treat people who have delusions and other real mental illnesses, without becoming a society where people cope by taking drugs rather than facing up to the difficulties in their lives.

Difficulties in Living

Our most prominent mental health advocates do not realize this dilemma exists. They seem all too eager to medicalize their own difficulties in living.

For example, Tipper Gore says that she empathizes with the problems of the mentally ill, because she became "clinically depressed" herself after her son nearly died when he was hit by a car in 1989, at age 6. She only recovered from depression after therapy that included treatment with drugs.

Mike Wallace joined Mrs. Gore at a recent conference on mental health, and he said that he had suddenly developed a case of "clinical depression" when he was being sued for libel: "I was, in effect, on trial for my life." Because of this "illness," he was hospitalized and put on medication. Later, when he went off his medication after winning the libel case, he suffered a relapse, so now he is on medication "for the rest of my life. I feel better up here [pointing at his head] than ever in my life."[iii]

The phrase "clinical depression" sounds very scientific, but in reality, the criteria for diagnosing depression are so vague that virtually anyone who wants to treat his feelings of sadness as a medical problem can find some doctor to label him clinically depressed. To diagnose Major Depression, the most serious form of clinical depression, the patient must have at least five symptoms from a list of nine symptoms for a period of two weeks. They must have at least one of the first two symptoms on the list:

- depressed mood most of the day, nearly every day, as indicated either by subjective account or observation by others

- markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day as indicated either by subjective account or observation by others

And they must have a few of the other symptoms on the list, which include fatigue or loss of energy nearly every day, diminished ability to concentrate nearly every day, insomnia or hypersomnia and significant weight loss or weight gain.

In other words, it is enough to justify a diagnosis of Major Depression if someone says that, most of the time during the last two weeks, they have been in a depressed mood, had a diminished interest in pleasure, had less energy and less ability to concentrate, and slept too much. These are subjective feelings, reported by the patient, so this diagnosis is available to virtually anyone who feels sad and wants that sadness to be defined as a disease and cured with drugs. Since anti-depressants can cause psychological dependence, these people could remain on drugs for the rest of their lives.

Tipper Gore's or Mike Wallace's depression can be viewed as either a chemical imbalance or as a reaction to a problem in living. We can say that, because they had a physiological predisposition to depression, their experiences triggered chemical imbalances that caused clinical depression. Or we can say that, because they had sensitive temperaments, her son's near death and his libel trial caused them deep sorrow by unsettling their lives and their concepts of themselves. We can speculate that perhaps the near death of her son made Mrs. Gore wonder whether she had spent too much time on politics, and that perhaps the libel trial made Mr. Wallace wonder about the value of journalism based on personal attacks. This is pure speculation, but the point is that, if they were grieving over these aspects of their lives, they could have gotten prescription drugs to suppress their feelings.[iv]

The idea that depression is a chemical imbalance does not contradict the idea that it is a reaction to difficulties in living. All of our feelings and thoughts depend on the neuro-chemistry of our brains. Feelings that you can deal with by going through the process of grieving or by changing your life also are chemical reactions that you can change by taking drugs.

If you are a hard-working celebrity – a political wife or a television reporter – you are obviously under pressure to control this sort of disruptive feeling by using drugs. You would not want to have your career disrupted for months, because your energy is absorbed by your effort to work through your feelings. If you thought about it that deeply, you might even end up changing your life and spending less time on your career.

There is an obvious temptation to define our difficulties in living as mental illnesses. It is so easy just to take a pill and feel better instantly.

Shrink to Fit

If our feelings are the result of the chemical balances in our brains, why shouldn't we take drugs that let us work more effectively?

One obvious danger is that we will use therapy and drugs to adjust people to undesirable social conditions, rather than trying to change those conditions.

One example is the overuse of Miltown, Librium, Valium and other sedatives during the 1950s and 1960s. These were prescribed to suburban housewives so frequently that they

were called “mother’s little helper”; the Rolling Stones even wrote a song about them. It seems clear to us today that sedatives helped housewives fit into their boring, restricted role – and made it less likely that they would try to break out of that role.

Nowadays, Prozac and other anti-depressants are the drugs of choice, rather than sedatives. In America today, working women need anti-depressants to give them the extra energy to deal with all the demands of job and family, unlike the 1950’s housewives who had to be sedated to fit into a role that was not demanding enough. Depression seems to have social causes, since rates differ dramatically among different countries and are much higher among women than among men;[v] the question is whether we will address these causes or use drugs to mask the problem.

The changes in women’s roles during the past few decades – as they shifted from Miltowns to Prozac – make it particularly easy to see how drugs adjust them to fit society’s demands. But if we want a large-scale case study of how drugs are used to adjust people to social demands, our children are an even better example, with Ritalin as the drug of choice.

Five million Americans take Ritalin, and about 90 percent of them are children diagnosed with Attention Deficit Hyperactivity Disorder – though prescriptions for adults diagnosed with Attention Deficit Disorder are also increasing. Ritalin sales have increased nearly 5-fold since 1990. Prescriptions have leveled off during the last few years, but that is because amphetimines such as Adderall are getting a larger market share.

The Ritalin culture is pervasive in the best northeastern prep schools. Many of the students there have been on Ritalin prescriptions since their elementary school days. Since the dosage can vary, students without prescriptions say they can easily buy extra pills. The going rate is $5 per pill, and many students are glad to pay it, because they would not want to start writing a term paper without taking a Ritalin first, to improve their concentration.

Children are being given all these drugs, though there are virtually no studies on the long-term effects of Ritalin use. There are short-term (mostly three-month) studies showing Ritalin eliminates the “core symptoms” of Attention Deficit Hyperactivity Disorder, but there are virtually no studies on its broader psychological effects or the effects of using it for more than 14 months.

And what are the “core symptoms” of ADHD? The diagnosis is based on symptoms such as “often fidgets with hands or feet or squirms in seat,” “often leaves seat in classroom or in other situations in which remaining seated is expected” and “often has difficulty awaiting turn.” There is no objective diagnostic test for ADHD.

This diagnosis is a fad in America and Canada, which use these DSM III or DSM IV diagnostic criteria: the United States has 90 percent of the world’s cases. The diagnosis is very rare in other countries, which use the diagnostic criteria of the World Health Organization’s International Classification of Diseases. In fact, the British Psychological Society recently issued a major report warning doctors not to follow the American

practice of using the label ADHD for such a broad spectrum of behavior, saying that there is no single cause and no simple remedy for children's over-activity and inattentiveness.[vi]

Under our diagnostic criteria, a child can be diagnosed with this disease if he has an active temperament and is bored sitting in a classroom all day – though the same child would have been considered perfectly normal in nineteenth century America, where children spent shorter hours in school and more time on chores and active play. Many children can focus perfectly well on active tasks but have trouble sitting still in a classroom for hour after hour and focusing on what the teacher says. Our response is not to give them an education that suits their temperament; it is to give them drugs that change their temperament to suit the classroom.

Even worse, this diagnosis is being used on preschool children who have to spend all day in day-care centers: if a three-year old child squirms and fidgets because he is bored by sitting in a day-care center all day, he has two symptoms of ADHD. Dr. Lawrence Diller, author of *Running On Ritalin*, describes three typical candidates for ADHD who were brought to him for diagnosis: 4-year-old Stevie and his two younger sisters, who all are dropped off at preschool by their father at 7 a.m. and picked up by their mother at 5:30 p.m. The parents, who are overworked and have a troubled marriage, have been told that Stevie is too aggressive in preschool, and they want an easy fix: prescription drugs. "Settling for Ritalin," Diller says, "we prefer to locate our children's problems in their brains rather than in their lives."[vii]

No one would have considered Stevie mentally ill a few decades ago. No one ever thought about drugging Dennis the Menace to make him easier to handle back in the days when mothers had time to stay home with their pre-school children – the days before the economy accelerated so much that mothers demand Prozac to help themselves fit into high-pressure jobs and Ritalin to help their children fit into day care centers.

Goethe on Prozac

A second danger of medicalizing of our difficulties in living is that drugs which treat mental illnesses also treat normal variations of temperament, and there is no precise standard to tell us which people we should treat. If mental health care spreads, there will be a general narrowing of experience and flattening of character, because strong emotions, such as the emotional turmoil of the adolescent identity crisis, will be defined as diseases and cured.

During most of the twentieth century, psychiatrists thought mental illnesses were like physical illnesses. Each illness was caused by some specific etiology and was completely different from normal variations in temperament, just as asthma and tuberculosis are completely different from normal variations in lung capacity. For example, some people were orderly by temperament. Others had the illness called obsessive-compulsive disorder. There was no connection between the two.

Today, research with drugs such as Prozac seems to show that there is a spectrum of emotional states, with similar chemical imbalances causing mental illnesses when they are extreme and causing normal variations of temperament when they are less extreme. For example, there seems to be a spectrum of character types, with hysteria at one extreme and obsessive-compulsive disorder at the other extreme, and with people who are spontaneous by temperament and who are orderly and conscientious by temperament closer to the center of the spectrum. This is why Prozac does not just cure obsessive-compulsive disorder; it also changes the temperament of normal people who are orderly and conscientious, by making them more spontaneous.

According to the spectrum theory of mental illness, emotional states depend on chemical balances in the brain. Extreme imbalances lead to bizarre behavior that is seen as a disease, while lesser imbalances lead to different types of temperament that are seen as normal. Thus, the same brain chemistry makes people rationally or irrationally orderly. In a mild form, it makes people feel satisfaction in keeping things in order, so that they keep their houses neat, always get to appointments on time, and are very conscientious about all of their responsibilities. In an extreme form, it makes people have an overpowering need to keep things in order that cannot be satisfied by normal activities, so that they wash their hands dozens of times a day or feel overwhelmingly anxious if the door is not ajar by exactly 6 inches.

Drugs that treat extreme disorders can also treat normal variations of temperament. People who are conscientious by temperament have become more spontaneous by taking Prozac, and also say that they feel better about their lives. There is an obvious temptation to use drugs to treat normal variations of temperament – to engineer people's brain chemistry so they are all happy in the same way. And there is an even greater temptation to use drugs to treat emotional upsets, though they can be central to forming one's character and ideas.

For example, Goethe was more seriously disturbed as an adolescent than many people who are diagnosed today as "clinically depressed." His first book, *The Sorrows of Young Werther*, which describes a brooding adolescent whose depression led him to suicide, was based on his own experience. Would Goethe have been better off – and would the world have been better off – if he had controlled his depression by taking Prozac, rather than brooding over his feelings and developing the emotional depth and maturity that made him one of the world's greatest poets?

Adolescents would have little freedom to refuse treatment, if we mobilized our medical system to deal with mental illness. With pressure from their worried parents and their therapists, they would not have much more freedom to refuse treatment than children who are diagnosed with ADD and put on Ritalin. Yet it is normal for adolescence to be a period of emotional turmoil – not only normal, but essential to developing a strong identity. Would we be better off if health insurance paid for the therapists who prescribe drugs to cure our adolescents' emotions?

Even among adults, there would be economic pressure not to refuse treatment. People who deal with emotional problems by going to therapists and getting drugs could keep

rising on the career ladder. People who resist treatment would be less likely to succeed. And so people would be under economic pressure to use drugs to reshape their personalities to fit the demands of the economic system. Critics have already pointed out that Prozac creates exactly the sort of optimistic, active, outgoing personality that is needed to succeed in today's corporate economy, where you constantly have to deal with new situations and new people.

The therapeutic society would be an emotionally shallow society – a nation of perky, can-do people, who have never dealt with deep feelings.

The Triumph of the Therapeutic

No doubt, Ritalin and Prozac are just the beginning. We can expect an endless supply of new drugs to be developed during the next century to deal with mental illnesses – and with the normal variations of temperament caused by the same chemistry as these illnesses.

Since diagnoses of mental illness have always been flexible, there is a danger that we will define more and more conditions as diseases, so they can be cured by these new treatments. Our emotions and our ideas are all based on the chemistry of our brains. In principle, they can all be defined as diseases and treated with drugs.

In one startling example, the son of the literary critic Lionel Trilling recently wrote that his father's approach to criticism was the result of Attention Deficit Disorder.[viii] When he was driving, his son wrote, Trilling used to stop at red lights and not start again when they turned green. Most people would say that he was a typical absent-minded professor, thinking about literature rather than about traffic, but his son says Trilling acted this way because his Attention Deficit Disorder made it difficult for him to focus and to decide to act. Attention Deficit Disorder was also responsible for his approach to literary criticism: he talked about the ambiguities of texts and the difficulties of interpretation, because of the same difficulty in focusing and deciding.

Presumably, it is possible to develop a drug to treat Trilling's Syndrome, a special form of Attention Deficit Disorder. People who focus on ambiguities and on the problems of interpreting texts could be more successful in business if we find a way to cure them, so they read reports quickly without giving them any deep thought – just as people could be more successful in school if we cure their Attention Deficit Disorder when they are small children and their emotional turmoil when they are adolescents.

It may seem far fetched to think that we could ever go so far in redefining normal behavior as mental disorders, but it was common during the 1960s and 1970s, when the therapeutic ethos was at flood tide. During the 1960s, there were people who interpreted every behavior in psychological terms: if you came to an appointment early, it was an expression of anxiety; if you came late, it was an expression of hostility; and if you came on time, of course, it showed you were obsessive compulsive. Thomas Szasz gives

delicious examples such as “Oblomov syndrome,” described in a prestigious medical journal:

> This “condition” is characterized by “wakeful and sociable apathy or laziness not associated with any other evident mental or physical abnormality.”[ix]

If you are apathetic or lazy, it is not your responsibility to make more of an effort. It is the doctors’ responsibility to cure your disease.

Now that we treat mental illnesses with drugs, diagnoses have become flexible in an entirely new way. For example, the definition of manic-depressive (bipolar) disorder expanded dramatically when doctors discovered that lithium could cure it. During the 1960s, diagnoses of bipolar disorder were very rare in the United States though they were more common in England: people speculated on why the two countries were so different, until a 1972 study using uniform diagnostic criteria found that their rates were actually the same, and only their diagnoses were different. People who would have been diagnosed as manic-depressive in England were usually diagnosed as borderline schizophrenics in America. But when lithium was found to be a cure for manic-depression, diagnoses of that disorder increased dramatically: in fact, manic-depression was virtually defined as anything that could be treated by lithium. Then, during the 1980s and 1990s, bipolar disorder continued to become an even more popular diagnosis – so popular that doctors found that some people diagnosed with bipolar disorder did not respond to lithium. The fact that there was a drug to treat bipolar disorder had made it such a popular diagnosis, that people were being called manic depressives even if they could not be treated with this drug.[x]

During the next century, if someone discovers a drug that treats the sort of Adolescent Brooding Disorder that Goethe had, ABD could also become a popular diagnosis – so popular that most teenagers are prescribed this drug.

Prozac already seems to be expanding the diagnosis of Clinical Depression in this way. Imagine if people living one-hundred years ago heard a story about a mother who began grieving when her 6-year-old son was hit by a car and almost killed, and as a result, was diagnosed as having an illness and given drugs that cured her. Wouldn’t they have considered this just as odd as giving Goethe drugs to cure him of adolescence?

Chemicals or Choices

Liberals like Tipper Gore do not see that the abuse of psychoactive drugs is a threat to human freedom and dignity, because they still have some of the technological optimism that gave people such faith in psychotherapy early in the twentieth century.

At the beginning of the century, John Watson, the inventor of behaviorist psychology, became famous by claiming that his scientific discoveries about conditioning would let us raise children with exactly the personalities we wanted; progressive criminologists believed that psychology would let us cure criminals rather than punishing them. This

faith in therapy was still strong until relatively recently: for example, in 1968 the noted psychiatrist Karl Menninger wrote *The Crime of Punishment*,[xi] a book where he argued that it was wrong to punish criminals rather than using psychological techniques to cure them.

Now, it is widely acknowledged that this faith failed – no one has developed successful techniques for conditioning children or rehabilitating criminals – but many on the left still consider this therapeutic approach enlightened and compassionate. For example, a recent letter to the editor of the *New York Times* argued that it is morally better if we believed that crime is caused by brain chemistry rather than by the criminal's choices:

> "No one knows whether certain behaviors stem from deficient brain structures and chemistry or from choice. So we are stuck with deciding whether we should approach the mentally ill with compassion or with punishment. I urge us to err on the side of compassion."[xii]

But if we err by saying that people's behavior is caused by their brain chemistry, not by their own choices, we may treat them more compassionately, but we will also treat them as less than human.

This actually happened when the courts began, early in the twentieth century, to take the enlightened approach of treating certain criminals (such as juveniles) rather than punishing them. A punishment is limited to what the crime deserves, but if you are compassionately treating criminals, you will keep treating them until they are cured, however long it takes. In 1966, a man who had stolen $5 worth of candy when he was sixteen years old won a suit against the state of New York, which had kept him in a mental hospital for 41 years, refusing to release him because his "delusions of persecution" showed that he still needed more treatment.[xiii] The court ruled that the man was not deluded, that he had actually been persecuted by the hospital — one of the first defeats for the legal theory that people who were being "helped" did not need or have any rights. Forty-one years for stealing $5, and all because he committed the crime as a juvenile, so the courts wanted to help him rather than punish him!

If we take this "compassionate" therapeutic approach to people generally, if we redefine every difficulty in living as a psychological problem that therapists should treat for us, then we have moved beyond human freedom and dignity.

This was the goal of the behavioral psychologist B.F. Skinner, John Watson's most famous follower. Skinner wrote that all our behavior and our beliefs are the result of conditioning. Human freedom and dignity have always been illusions. In the past, we did not realize this, so most of the conditioning was random – the result of chance and of education by people who did not understand scientific psychology. In Skinner's ideal future society, conditioning would be carried out deliberately, by therapists, to make sure that everyone is happy. Once we admit that human freedom and dignity are illusions, that people are completely controlled by their conditioning, we will not hesitate to manage this conditioning scientifically.[xiv]

Behaviorism is now outmoded, but if there were a B.F. Skinner of drug therapy, he could make the same argument about brain chemistry. All our feelings and our ideas are caused

by chemical events in our brains, not by our own choices. We should admit that human freedom and dignity are an illusion, so we can control people's brain chemistry scientifically to make them happy.

There is a logical difficulty to this sort of reasoning. If our ideas and feelings are just the result of conditioning or of brain chemistry, then the psychologist's theories are also just the result of conditioning or of brain chemistry. There is no reason to believe the psychologists' theories are true. According to his own doctrine, the behaviorist believes in his theories only because they have been positively reinforced; we could make him believe something completely different by giving him electric shocks whenever he talks about behaviorist theory and positive reinforcement when he talks about some other theory. This sort of conditioning is no different from the way he originally developed his beliefs, except that it is deliberate.

And according to his own doctrine, the reductionist neuro-psychologist believes in his ideas only because certain electro-chemical events have occurred in his brain. In principle, if we learned enough about how the brain works, we could make him have different ideas by directly manipulating the neurons in his brain: brain scans were first developed in 1972, and the most common ones are still relatively crude, but in the next century, neurologists should be able to trace exactly which neurons fire when we have a certain idea, and to eliminate our memory of that idea by disabling those neurons.[xv] We could certainly make him have different feelings about what behavior is good and bad: we can already drug and lobotomize people to the point where they are indifferent about mental illness and mental health, rather than wanting to eradicate illness and promote health, and in principle, we could develop more refined interventions that would control their feelings more precisely. Neurologists can already disable people's judgment of size by stimulating part of their brain, so they cannot tell you whether an ant is larger than an elephant, and it is quite plausible that they could disable people's judgment of value, so they cannot tell you whether health is better than illness.

The reductionist theory that our ideas and feelings are purely the result of our brain chemistry, not of our own reasoned choices, is self-contradictory, because it implies that this theory itself is just the byproduct of our brain chemistry, not a reasoned choice.

Psychologists have shown that our feelings are correlated with changes in our brain chemistry, but that does not mean that the causation all goes in one direction. We know that physiological changes in our brain chemistry – caused by an extreme Thiamin deficiency or taking LSD, for example – can change the way we think and feel. But to avoid the reductionists' self-contradiction, we have to assume that our thoughts and feelings can also change our brain chemistry. For our ideas about the brain to be true, our reasoning must be valid: that is, our brains have to change physiologically in response to the soundness or unsoundness of arguments, just as they change physiologically in response to sounds, sights, and other stimuli from the outside world.

It is plausible that we could evolve the ability to judge the soundness of arguments. Lower animals just respond reflexively to stimuli, but mammals also investigate the world: we have all seen dogs puzzle over smells, and there is an obvious evolutionary

advantage to developing the ability to go beyond reflex reactions and to take some time to decide what animal left a scent. Once a species has developed language, there is probably a similar evolutionary advantage to being able to examine propositions and decide whether they are true.[xvi] Likewise, once a species develops culture, there is probably an evolutionary advantage to being able to use your volition to control your feelings – which necessarily means controlling the body chemistry that underlies these feelings.

The neurologist Richard Restak has suggested a thought experiment that makes this point very clearly. Imagine that a neurologist is looking at a PET scan. When he first looks at it, he notices activity in the part of the occipital region that controls vision. Then, as he says to his colleague that the patient is being visually stimulated, he notices activity in the prefrontal areas that are important to planning and in the part of the left hemisphere that controls speech. At this point, he guesses that he is looking at a scan of his own brain activity, and as a test, he reaches out and turns on radio: sure enough, he sees activity in the portion of the frontal lobe that controls movement of his hand and then in the portion of the right hemisphere that appreciates music. This thought experiment makes it clear that his volition caused these changes in his brain.[xvii]

Against Reductionism

Reductionist psychologists simply assume that the causation can only go one way, that the physiological changes must be causing the psychological changes. For example, E. Fuller Torrey, M.D., a leading proponent of reductionism and of forced treatment of the mentally ill, writes:

> "Since the early 1980s, with the availability of brain imaging techniques and other developments in neuroscience, the evidence has become overwhelming that schizophrenia and manic-depressive disorder are diseases of the brain, just as multiple sclerosis, Parkinson's disease, and Alzheimer's disease are diseases of the brain. The brains of individuals with these diseases are measurably different from individuals who do not have these diseases, both structurally and functionally."[xviii]

Then he summarizes some of the physiological differences that have been found, such as enlarged ventricles in the brain and an enlarged amygdala.

But you can use the same sort of empirical evidence to prove that the feeling of stress is caused by physiological changes. People who are under chronic stress have higher blood pressure than other people, and there is no doubt that researchers will ultimately be able to use brain scans to show that different neurons are firing in their brains. But this does not mean that the high blood pressure caused their stress. We all know that the truth is just the opposite: living in a way that puts you under chronic stress causes higher blood pressure.

Likewise, it could be something about their lives that causes the changes in the brain and the disoriented thinking of schizophrenics and manic-depressives. Most likely, there is a genetic predisposition toward these conditions, which involves some physiological

differences, and there are also environmental triggers that cause further physiological differences.[xix]

We know that the brain changes dramatically in response to environment – particularly in early childhood, but also throughout life. For example, researchers have found that people who read Braille have a much larger amount of the cortex assigned to the right index finger, which they use for reading, than most people have. Likewise, researchers who cut off the finger of a chimpanzee found that the neurons that had controlled that finger were incorporated into the brain areas controlling the remaining fingers. Nobel Laureate Gerald Edelman, director of the Neurosciences Institute at the Scripps Research Institute, has shown that the brain recreates itself throughout life, as neural connections that are useful to adapting to our environment are formed, while neurons that are not useful die off. Tremendous numbers of neurons die during early childhood, and neurons that are unused continue to die off throughout our lives – which is why people who are not intellectually active lose their mental acuity as they grow old.[xx] It is hard to avoid the conclusion that, if a young child's family experiences make him withdraw and focus on his inner life, his brain will develop differently than a child who is active in the world: the problems in family life that psychologists focus on as the causes of schizophrenia could easily create the physiological changes that neurologists find in schizophrenics.

Conceivably, scientists may discover at some time in the future that there are specific physiological causes for certain mental illnesses and develop medicines to deal with them, just as we have discovered that bacteria cause infections and developed antibiotics to deal with them. We have already discovered that there are certain treatable medical conditions that can cause senile dementia, including thyroid disease and B vitamin deficiencies. Most cases of senile dementia involve Alzheimer's disease or other progressive degenerative diseases whose exact cause is unknown, but they are presumably caused by physical changes in the aging brain which we may understand well enough in the future that we will be able to treat them. Likewise, we may learn in the future that there is some specific, treatable, physical cause of schizophrenia.

Whatever we may discover in the future, we do not know the causes of schizophrenia yet. The *New England Journal of Medicine* has summed up our current knowledge by saying:

> "treatment of schizophrenia … currently focuses on reversing abnormal neural communication by blocking dopamine or serotonin receptors. Although newer treatments … have already substantially improved the outcome of schizophrenia, they remain blunt instruments that have relatively generalized effects on neurotransmitter systems. As we identify more precisely the cascade of events leading to schizophrenia … we will also identify better and more specific targets for future treatment."[xxi]

But we have not discovered these causes yet, and until we do, we cannot assume that schizophrenia is a disease of the brain. We may ultimately discover that some of the cases we now lump together as schizophrenia are caused by brain diseases or even by dietary deficiencies and others are caused by toxic family life, just as some cases of high blood pressure are caused by diet and others are caused by stressful jobs.

Currently, we use drugs to control schizophrenia, clinical depression, or attention deficit disorder in the same way that we use drugs to control high-blood pressure without

knowing whether the patient's blood pressure was raised by a disease, by a bad diet, or by a stressful life. We have found drugs that suppress the symptoms of these disorders, even though we do not know their causes.

Drawing the Line

The medicalization of our emotional lives has gone on for most of the last century. When Aldous Huxley wrote *Brave New World* in 1932, he envisioned a future society where failure to fit happily into your social role was always blamed on chemical imbalances.

By the 1960s, the triumph of the therapeutic had gone so far that criticizing the concept of mental illness became an important part of sixties radicalism: Thomas Szasz, Michel Foucault and other radical critics of psychiatry went to the opposite extreme and claimed that there is no such thing as mental illness, that insanity is just a label that society uses to control people who are different.

Szasz claims that what we call mental illnesses are difficulties in living and not diseases at all, making a sharp distinction between brain diseases that have purely organic causes, and mental illnesses, which are actually forms of communicative behavior that society does not accept. For example, Szasz argues that, if someone comes to a doctor with the symptom of a physical disease, such as pain, both he and the doctor agree that it is a symptom; but if someone says he is Napoleon, he thinks it is true and the doctor considers it a symptom, a delusion, only because he does not believe it is true – proving that mental illness is socially defined, not a real illness.[xxii]

But the sharp distinction between brain diseases and problems in living cannot hold up theoretically, as we learn more and more about brain chemestry and our emotions. And it no longer holds up practically, now that we have seen what happened when we deinstutionalized the mentally ill. It became much more difficult to confine the mental ill after the 1960s. As a result, we have seen homeless people die on the street because they refused to be treated for obvious physical diseases, such as bleeding ulcers that made them vomit blood, though they were not competent to make this decision for themselves, because they were schizophrenics who believed that radios were listening to their brain. Anyone who is in contact with the homeless has seen this sort of suffering on the streets of American cities during recent decades: we are not likely to believe that schizophrenia is just a label that society uses to control people who do not conform, as radical therapists said during the 1960s.[xxiii]

Medical treatment is needed for severe illnesses, but it is hard to know where to draw the line. We cannot say that certain people are mentally ill and should be treated with drugs, while others have emotional problems caused by difficulties in living. For many "mental illnesses," such as depression, the spectrum theory of mental illness implies that we will never be able to say that certain people are sick and should be treated, while others are normal. As far as we know today, the chemical imbalances that cause these "illnesses"

when they are extreme also cause normal variations in temperament when they are more mild, and any line that we draw between illness and normality is arbitrary.

There is a danger that we will move toward *Brave New World*, as people use drugs to deal with their emotional problems because it is easier than dealing with the difficulties in living that cause these problems: many of people who use Prozac to deal with depression and who use Ritalin to deal with their children's Attention Deficit Disorder have already moved in this direction, using chemicals to adjust themselves to their corporate jobs and adjust their children to school and day-care. But there are also people wandering the streets who need treatment, people who cannot house or feed themselves and who believe that radios are listening to their brain.

We cannot trust doctors' judgments about who is mentally ill, since doctors are biased toward medical treatment: if the only tool you have is a hammer, your problems will all look like nails. Given the current, subjective diagnostic standards, virtually anyone who wants drugs to cheer them up can find at least one doctor who says they have Clinical Depression and need drug treatment. If we look at how flexible diagnoses have been over recent decades – at the explosion in diagnoses of bipolar disorder and the invention of new diagnoses such as Oblomov Syndrome, it is clear that the definition of illness will expand as new drugs are invented. Today, people who can pay can find a doctor to prescribe drugs; with insurance coverage, everyone will be able to get drugs.

Before we expand medical insurance to cover mental health care, we need standards to determine whether people are so emotionally disabled that they cannot possibly deal with their problems themselves – standards that would let doctors give drugs to schizophrenics who hear voices but would not let doctors give drugs to mothers who are grieving over children hurt in accidents, to teenagers suffering from the emotional strains of adolescence, or to children who squirm and fidget because they are bored by preschool.

It is hard enough to come up with a standard for involuntary treatment for mental illness. During the 1950's, standards were so loose that people who were annoyed by their grandparents could have them declared insane and committed to asylums. Today, standards are so tight that only one-tenth as many people are involuntarily committed as in the 1950s, and we have all seen people on the street having long conversations with other people who are not there.

It is probably even harder to come up with standards for voluntary treatment for mental illness: many symptoms are self-reported, and people are tempted to define their own emotional problems as illnesses, because it is so much easier to take a drug than to deal with the difficulties in living that cause your problems.

Poor people sometimes give up on trying to work themselves out of their poverty, because it is so much easier to make yourself feel good by taking cocaine or heroin; but those illegal drugs just make you feel good briefly and hurt you in the long run. During the next few decades, researchers will develop a nice selection of anti-depressants that you can take every day without any side-effects. Prozac created such a stir because it was rumored to be the first of these, but some people have found that it does have side

effects, and some people are not affected by it at all. Once there is an anti-depressant without side-effects for everyone – a bit like the soma of *Brave New World*, but even better because you can take it, go to work, and do your job more efficiently – there will be an obvious temptation to make yourself feel good by using drugs, rather than doing the hard work of dealing with the family problems, the high-pressure job, or the poverty that makes you feel depressed.

In most states, the criterion for involuntary treatment is that the person must be a "danger to himself and others," and this is interpreted so strictly that it is virtually impossible to confine people involuntarily. Other states use a looser criterion: people can be treated involuntary if they are "gravely disabled," which means that they cannot perform basic tasks such as feeding themselves. This obviously is one criterion that should allow psychotherapy and drug treatment to be covered by insurance. Likewise, treatment for people with delusions or seizures should obviously be covered by insurance.

It is harder to draw the line for clinical depression. It seems that some people are suddenly overwhelmed with depression purely because of changes in their brain chemistry, without anything changing in their lives; but we need to define clinical depression much more strictly than we do now, so we can treat these people without giving drugs to people who are depressed because of some problem in their lives that they do not want to deal with.[xxiv]

Given the current state of our knowledge, any line we draw will be arbitrary. We need to treat emotional disturbances in much the same way that doctors treat hypertension. Like "mental illness," high blood pressure describes a spectrum of conditions, from mild to life-threatening. Like "mental illness," high blood pressure can have many different causes, from purely physical causes to causes that depend completely on problems and stresses in your life, and doctors who diagnose the disease do not always know its cause. Doctors deal with these ambiguities in the obvious way: if blood pressure is so high that it is life threatening, the doctor uses drugs to control it without taking the time to worry about its causes; if blood pressure is slightly elevated, the doctor recommends changes in diet and lifestyle.

Likewise, if emotional disturbance is so severe that it is life threatening or completely disabling, it makes sense to use drugs to control the symptoms, whatever the causes. For anything less than that, unless we can show conclusively that there is an organic cause, it is best to look for the problems in living that cause the emotional disturbance.

Psychologists can help by listening sympathetically and offering advice and counseling, but we should think of this as a special sort of personal conversation, not as medical treatment. If we define the counselor as a doctor who is performing therapy, that implies the person with emotional problems is a patient who submits passively to treatment, rather than an agent who must do the work of understanding and changing his own life. And the fact is that medical training does not make counsellors any more effective at performing the "talking cure." Studies have shown that no school of psychotherapy is more successful than the others: success depends on the therapist's personality rather than on his professional training. Experiments such as the Harvard-Radcliffe Mental Hospital

Volunteer Program, Soteria House, and the Youth Advocate Program have shown that talking to lay people who are sympathetic and want to help solve the problems in in your life is just as effective as talking to professionally trained therapists.[xxv]

Even with strict standards for drug use and a strong bias against medicalizing emotional problems, there will be difficult judgment calls. Judging from *The Sorrows of Young Werther*, Goethe really was so depressed as an adolescent that he was in danger of committing suicide; even if we treat only life-threatening emotional problems with drugs, doctors may well decide to put some future Goethe on Prozac, rather than letting him work through his own emotions.

But only a small minority of cases involve this sort of difficult judgment. In the overwhelming majority of cases, the main obstacle to drawing the line is a misguided notion of compassion: the Tipper Gores of this world want to use medical technology to help people, and they do not see that they are diminishing their humanity by redefining their thoughts and feelings as nothing more than brain chemistry. The therapeutic approach to crime was an early example of what can happen when compassion makes us deny people's responsibility, but we face a much greater danger now that drugs make it cheap and easy to offer therapeutic treatment to everyone. We need need strict limits on this new technology, if we want a society where people deal with their difficulties in living, rather than popping a pill whenever they are unsettled emotionally.

We are deciding the essence of what it means to be human. If we are emotionally upset, is it because we are struggling people or because we are defective biochemical mechanisms?

When there is any doubt about where to draw the line, we should not "err on the side of compassion" by saying that people's behavior is the result of their brain chemistry, not of their own choices. We should err on the side of human freedom and dignity.

[i] "The number of US office-based visits resulting in a prescription for an antidepressant drug … increased from 16,534,268 in 1990 to 28,664,796 in 1995, a 73.4% increase. Between 1990 and 1995, the number of office-based visits at which a diagnosis of depression was documented increased 23.2%." Sclar DA, Robinson LM, Skaer TL, Galin RS, "Trends in the prescribing of antidepressant pharmacotherapy: office-based visits, 1990-1995," *Clin Ther* 1998 Jul-Aug 20:4 871-84; 870

[ii] "Data from the National Ambulatory Medical Care Survey (NAMCS) for the years 1990 through 1995, for children aged 5 through 18 years, were utilized for this analysis. Results indicate that the number of office-based visits documenting a diagnosis of ADHD increased from 947,208 in 1990, to 2,357,833 in 1995." Robison LM, Sclar DA, Skaer TL, Galin RS "National trends in the prevalence of attention-deficit/hyperactivity disorder and the prescribing of methylphenidate among school-age children: 1990-1995." *Clin Pediatr* (Phila) 1999 Apr;38(4):209-17.

[iii] *New York Times*, June 8, 1999, p. A20.

[iv] It is interesting that one of the criteria for Major Depression is "The disturbance is not a normal reaction to the death of a loved one": Tipper Gore could not have been diagnosed with Major Depression if her son had actually died, rather than almost dying. Though it is a matter of speculation, it seems that a better diagnosis for both Tipper Gore and Mike Wallace might have been Adjustment Disorder with Depressed Mood: this minor form of depression is "A reaction to an identifiable psycho social stressor (or multiple stressors) that occurs within three months of onset of the stressor(s). The maladaptive nature of the reaction is indicated by either of the following: impairment in occupational (including school) functioning or in usual social activities or relationships with others [or] symptoms that are in excess of a normal and expectable reaction to the stressor(s) …." This type of depression generally fades away as time passes, and it does not usually require treatment with drugs – a great disadvantage for people who lead busy, high-pressure lives and want an instant cure. Another type of depression that is often treated with drugs is Dysthymia, which is chronic mild depression. The diagnostic criteria for Dysthymia are "Depressed mood (or can be irritable mood in children and adolescents) for most of the day, more days than not, as indicated either by subjective account or observation by others, for at least two years (one year for children and adolescents). Presence, while depressed, of at least two of the following: poor appetite or overeating, insomnia or hypersomnia, low energy or fatigue, low self-esteem, poor concentration or difficult making decisions, feelings of hopelessness. …" In other words, if a child is in a depressed mood for a year because he is doing badly in school or because the other kids are cruel to him, and he has low self esteem and overeats as a result, he can be diagnosed as having this disease and given drugs to cure him. But maybe it would make more sense to give him tutoring so he does better in his classes, or to do something to control the other children's cruelty.

[v] For example, the Cross-National Collaborative Group estimated that the lifetime depression rate in Taiwan is 1.5%, in the United States is 5.3 %, and in West Germany is 13.5 %. In addition, it found that women are about twice as likely to develop depression as men, and this is generally attributed to socio-psychological causes. Myrna M. Weissman, et. al., "Cross-National Epidemiology of Major Depression and Bipolar Disorder," *Journal of the American Medical Association*, July 24/31, vol. 276, no. 4, pp. 293-299.

[vi] Harvey McConnell "ADHD Just Doesn't Add Up to Brit Psych Society," *The Medical Post*, Jan. 21, 1997

[vii] Lawrence H. Diller, *Running on Ritalin : A Physician Reflects on Children, Society, and Performance in a Pill* (New York, Bantam Doubleday Dell, 1998). Another interesting book on the social implications of Ritalin is Richard J. DeGrandpre, *Ritalin Nation: Rapid-fire Culture and the Transformation of Human Consciousness* (New York, W.W. Norton & Company, 1999), which argues that most of the hyperactivity of our children is caused by a rapid-fire culture that focuses on instant gratification and has changed our perceptual expectations and our experience of time. It is not surprising that children who are brought up on

a diet of television cartoons, action movies and video games feel bored and have trouble concentrating when they try to read a book.

[viii] See "Filio-porn" by Leon Wieseltier, *The New Republic*, May 17, 1999.

[ix] Thomas Szasz, "Should the FDA Ban H_20?" *Inquiry*, vol. 2, #8, April 2, 1979, p. 6.

[x] See Peter Kramer, *Listening to Prozac* (New York, Viking Penguin, 1994) p. 42-44.

[xi] Karl Menninger, *The Crime of Punishment* (New York, Viking, 1968).

[xii] *New York Times*, June 8, 1999. P. A30.

[xiii] Thomas Szasz, *Ideology and Insanity: Essays on the Psychiatric Dehumanization of Man* (Garden City, NY, Doubleday Anchor, 1970) p. 106.

[xiv] See B.F. Skinner, *Beyond Freedom and Dignity* (New York, Alfred A. Knopf, 1971).

[xv] X-Ray computerized axial tomography (CAT) scans were developed in 1972, as computers became powerful enough to create a three-dimensional picture of the brain from a series of two-dimensional projections. Magnetic Resonance Imaging (MRI) is based on detecting the energy of the nuclei of hydrogen atoms in the brain tissue, and is more sensitive and less hazardous (because it does not use x-rays). But both of these just give a "snapshot" of the brain, rather than showing its activity over time. Positron Emission Tomography (PET) lets researchers see a "video" of the brain's activity over time, by following the concentrations of an injected radioactive tracer, but it shows which parts of the brain are using glucose and oxygen, rather than showing the action of the neurons themselves; this is not very precise, because blood flow and metabolism take a few hundred milliseconds, compared with a few milliseconds that it takes for the neurons to change. Other more precise methods of observing the brain are being developed, such as magnetoencephalography (MEG) and functional magnetic resonance imaging (fMRI). Researchers predict that, because of these new techniques, "In the near future, neuroscientists will be able to … make educated guesses about personality and 'cognitive style' (how a person uses memory, his patterns of thinking and response) on the bases of 'brainprints' composed of a combination of MRI, PET, MEG, fMRI, and who knows what other emerging technologies." Richard Restak, M.D., *Brainscapes* (New York, Hyperion, 1995) p. 88.

[xvi] See Terrence W. Deacon, *The Symbolic Species : The Co-Evolution of Language and the Brain* (New York, W.W. Norton & Company, 1997).

[xvii] Restak, *Brainscapes*, p. 89.

[xviii] E. Fuller Torrey, M.D., "Schizophrenia and Manic-Depressive Disorder Are Diseases of the Brain" (Arlington, VA., Treatment Advocacy Center).

[xix] These changes may also be caused by the neuroleptic drugs used to treat schizophrenia, which have been shown to cause physical changes in the brain. Torrey's best known study used patients who had all been given heavy doses of neuroleptic drugs for an average of at least 10 years. See Peter Breggin, M.D., *Toxic Psychiatry* (New York, St. Martin's Press, 1991) p. 115.

[xx] See Edelman, Gerald M., *Bright Air, Brilliant Fire: On the Matter of the Mind* (New York, Basic Books, 1992).

[xxi] Editorial in *The New England Journal of Medicine*, February 25, 1999, Vol. 340, No. 8. But it is interesting that this editorial begins "Schizophrenia is a disease of the brain that is expressed clinically as a

disease of the mind. Both its symptoms and signs and its associated cognitive abnormalities are too diverse to permit its localization in a single region of the brain. The working hypothesis shared by most investigators is that schizophrenia is a disease of neural connectivity caused by multiple factors that affect brain development." If we have not found its physiological causes yet, then we cannot be sure that schizophrenia is a disease of the brain. It could be caused by families that cause emotional chaos that causes the physiological changes researchers observe.

[xxii] See Thomas Szasz, "The Myth of Mental Illness," *Ideology and Insanity: Essays on the Psychiatric Dehumanization of Man* (Garden City, NY, Doubleday Anchor, 1970, essay originally published in 1960) p. 14. As a libertarian, Szasz takes a purely voluntarist view of freedom. He argues that people who want treatment should be able to have it; but it is essential that they use private therapists; if the treatment involves a private contract between the client and the therapist, the therapist is the client's agent, and this is very different from therapy sponsored by the state or by your relatives, where the therapist is an agent of other people, not of the person receiving therapy. Likewise, he argues that people with mental illnesses should be considered competent by the law and should not be subject to involuntary treatment; if their delusions make them harm other people, they should be dealt with by the criminal justice system, like anyone else. As a libertarian, he is also against any drug laws: people should be able to use the drugs of their choice, without having to get them prescribed by doctors. All this made some sense when he first wrote "The Myth of Mental Illness,," in 1960, when the mental hospitals were filled with people who were involuntarily committed by the government or by their families. But it does not tell us anything about how to deal with a future where people voluntarily take Ritalin, Prozac, and other drugs, so they can succeed in the economy. Drug use could involve a market failure that libertarians' laissez-faire theories cannot deal with. We have already seen that athletes have to use steroids, unless there is a law against it: anyone who does not use them will not be able to compete. The same thing could happen with psychoactive drugs that help you succeed in the economy. The market cannot deal with this problem, because drugs are what the economist Fred Hirsch calls a positional good. See Fred Hirsch, *Social Limits to Growth* (Cambridge, Mass, Harvard University Press, 1976) pp. 27-51.

[xxiii] For a very pure statement of this view, see Thomas Scheff, "Schizophrenia as Ideology" in Phil Brown, ed., *Radical Therapy* (New York, Harper & Row, Harper Colophon Books, 1973). Several other authors in this anthology make this point, as did many books published during the 1960s: the three best known are Thomas Szasz, *The Myth of Mental Illness. Foundations of a Theory of Personal Conduct* (New York, Harper & Row, Hoeber-Harper Book, 1961), Michel Foucault, *Madness and Civilization: A History Of Insanity in the Age of Reason*, Richard Howard, trans., (New York, Mentor Books, 1965) and Ken Kesey, *One Flew Over the Cukoo's Nest* (New York, Viking Press, 1962).

[xxiv] In the past, depression was divided into reactive or exogenous depression, caused by some external event, and biological or endogenous depression, which had no external cause. These classifications were dropped, largely because both types responded to the same drug treatment. But high blood pressure will also respond to the same drugs, whether it is caused by a disease, by your diet, or by stress in your life. We should probably revive these classifications and be much more hesitant to use drugs for exogenous depression – though we should still use them (of course) if there is immediate danger of suicide.

[xxv] See Breggin, *Toxic Psychiatry*, p. 380 et. seq.