Should neutoleptic drugs be banned?

by

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Since their introduction thirty years ago, neuroleptic drugs have been given to tens of millions of people. In Sweden, with a population of 8½ million, about 100,000 people receive these drugs every day. About one third of them have the diagnosis schizophrenia. Other big groups who are given the drugs are retarded people and old people in institutions who are confused or negativistic.

What these recipients of neuroleptic drugs have in common is that they are wards of the state, that they are powerless and wordless, and that they cause trouble for the people around them who are in control. Such drugs are indeed effective in reducing or abolishing troublesome human behaviour. The cardinal indication for neuroleptic drugs is schizophrenia. They are therefore also called anti-schizophrenia or anti-psychotic drugs.

Neuroleptic drugs are given the main credit for the modern revolution in psychiatry. They are generally thought to have greatly helped the victims of schizophrenia. But in reality they have not helped, but rather immeasurably harmed all the people with this diagnosis. They have done their harm in two ways: first, because of direct damage to the brain and to mental functions, secondly, because they are tied together with false and abhorrent views of human problems and human beings.

The drugs have promoted a false definition of schizophrenia as a medical problem with a medical solution. They have prevented us from taking our responsibility. As a consequence, people with schizophrenia have been abandoned. That is the real cause of their tragedy. If they had not been abandoned, most of these young and often gifted people would have been able, like the rest of us, to realize many of the promises and possibilities of their lives.

This paper has three parts;

Part I states three important facts about neuroleptic drugs and schizophrenia and gives evidence and arguments for each statement.

Part II describes effects of neuroleptic drugs in the brain and on the personality.

Part III gives conclusions as to what changes of law are needed and points at some other lessons of the neuroleptic drug tragedy.

(To SYNOPSIS)

PART I: THREE FACTS ABOUT NEUROLEPTIC DRUGS AND SCHIZOPHRENIA

Let me first state three important facts about neuroleptic drugs in schizophrenia:

1. Brain damage is serious and certain.
2. Temporary use of neuroleptic drugs is a trap.
3. After a few years patients in drug-free programs are better by all criteria.
These facts demand fast and radical changes in psychiatric practice. Such changes will not come about from inside psychiatry itself. Therefore forceful political action and strong laws are needed.

**Brain damage is serious and certain.**

It is well known that tardive dyskinesia hits a large proportion of people who receive neuroleptic drugs for long periods. Tardive dyskinesia is a permanent disturbance of motor coordination. The most obvious manifestations are involuntary, uncontrollable movements of the tongue, jaws and face.

**Disturbance in all patients.** – If, say, one third of a group of patients display gross motor disturbances, we can be sure that most, and probably all of the others, also have disturbances. When a brain system is gradually damaged, it usually takes a lot of damage before functions become clinically abnormal. Long before tardive dyskinesia of the face and other gross abnormalities of body posture and of movements have appeared, the person has been robbed of the grace and efficiency of movements that by gifts of nature he should possess.

**Other motor disorders.** – Tardive dyskinesia may seem particularly frightening because it is usually chronic and remains after the drug has been stopped. However, the other disorders that involve all of the muscles of the body of all who receive the drugs, but which disappear when the drug is stopped, are in fact even more serious. These disorders are Parkinsonism, Akathisia and Akinesia.

**Probable total final drug damage.** – Experience tells that when a neuroleptic drug is given for the first time to a young person in a schizophrenic crisis, he will almost always continue to receive the drug for long periods or for life. If the drug had not been given in the first place, the fate of permanent drug dependence could have been avoided, as we shall see below. Therefore the probable total final drug damage to the patient should be taken into account before the early decisions to give neuroleptic drugs in a schizophrenic crisis. Further on, we will also look at the reasons, both pharmacological and psychological, why the drug acts as a trap. The distinction between permanent drug damage and drug damage that my subside when the drug is stopped, is not important if the drug is in fact never stopped.

**Other targets in the brain for neuroleptic drugs.** – So far we have only looked at the brain system for motor coordination. Two other targets in the brain for neuroleptic drugs are the system for hormone control and the limbic system. Obvious manifestations of the drug effects in the former system, in some female patients, are menstrual abnormalities and secretion of milk from the breasts.

**The limbic system.** – The main and the intended target of neuroleptic drugs is the limbic system, which is a center for emotions, for control and appreciation of the inner environment of the body, for sexuality, and so on. The so-called anti-psychotic effect of neuroleptic drugs is a consequence of their effects on the limbic system.

The damage to the system for motor coordination is most obvious, because it is visible and to
some degree objectively measurable. The damage to the limbic system is, however, certainly more serious, because it means a direct disturbance of emotional life and of the highest mental functions. Further below we will return to discuss specifically the limbic system and its relation with the prefrontal cortex.

An iceberg of brain damages. – What has been said already is enough for the conclusion that tardive dyskinesia – which by itself has been called a major medical disaster – is only the visible tip of an iceberg of brain damages caused by neuroleptic drugs.

Temporary use of neuroleptic drugs is a trap

We all know how difficult a psychotic person can be. Therefore it may sound reasonable when somebody suggests that drugs are perhaps "necessary during the acute stage". But that is a dubious, not to say fallacious proposal. It is so for both psychological and pharmacological reasons.

Psychological reasons. – The Harvard Guide to Modern Psychiatry (Day & Semrad 1978) (1) warns: "Quickly resorting to drugs convinces the patient that his needs will not be met." In other words, the drug deprives him of the very thing he needs most: hope. It is essentially true to say that schizophrenia is loss of hope, and conversely, that a person with a full measure of hope is not schizophrenic.

Now, during the psychotic crisis, the other person should be there with all his courage, imagination and patience, all his solidarity and endurance. And the patient himself needs his brain intact. Now critically important work is to be done.

If the psychosis is overcome without drugs, the patient's belief in himself and in the other person will have increased. These things – self-confidence, a feeling of self-worth and a belief in other people – are in fact what he needs to definitively overcome with time his schizophrenia. If drugs are used he will learn the opposite lesson and be on the road of increasing drug dependence.

Pharmacological reasons. – Also for pharmacological reasons the patient will be on the very dangerous road of increasing drug dependence. The neuroleptic drugs induce specific changes in the limbic system that make a person more psychosis prone. It is like having a psychosis-inducing agent built into the brain (See below under How neuroleptic drugs act at the receptor level).

This effect of neuroleptic drugs may subside more or less with time, if the drug is discontinued. But then it may be too late. Because of psychotic symptoms which are after effects of the drug, the conclusion has already been reached: "He needs the drug." The trap is a fact.

Combination of drugs and psychotherapy. – The doctor may suggest a combination of drugs and psychotherapy. Again this sounds reasonable, as compromises often do. But again, the proposal is dubious or fallacious. And it may be less than honest. The real motive of the doctor may be, consciously or unconsciously, that he wants a quick and easy solution, even at, the expense of the true interests of the patient.
The latter who, as we know, is more sensitive than most people to dishonesty, thus gets a double message of the very kind that can trigger or help trigger a psychotic break.

Perhaps it needs to be said at this point that, if doctor, patient, and relatives in a difficult situation should decide that a drug for right now, everything considered, is the best resort – and if they do this trying to fully recognize all problems, that is fully sincere and responsible – nobody outside the situation can pass any judgement. The tragedy is that they are likely to reach a wrong decision because of psychiatric misinformation.

Therefore it is essential to warn of these dangers and to remember how difficult it is to avoid short term drug therapy becoming long term, with drug-caused personality deterioration and brain damages accumulating with time.

**After a few years patients in drug-free programs are better by all criteria.**

**The drugs are effective against psychotic symptoms.** – Numerous studies show that psychotic symptoms are reduced by neuroleptic drugs, and also that the risk of relapse into psychosis is reduced by maintenance drug treatment. There are thousands and thousands of reports that prove these points for all the neuroleptic drugs.

"Effective" drugs, but bad for the patient. – A simple thought experiment shows why the drugs, even though they are effective against symptoms, may be bad for the patient: Give neuroleptic drugs to infants. The result will be that crying and troublesome behaviour is reduced or abolished. If maintenance drugs are given, the risk of relapse into crying and trouble-making will also be reduced. The infants are thus "improved" or "cured" by the drugs. We need no scientific studies to be convinced that the drugs, although "effective", are not good for our children.

We are convinced that after a few years children in drug-free programs will be better by all criteria. The very same is true for schizophrenic patients and for the same reasons.

Let us now look at three scientific studies that support our third statement. Key data will be highlighted, since space does not permit a full critical review of the studies.

**A. Family environment**

British researchers have studied the relapse rates of schizophrenic patients living with the a family, i.e., with parents or with spouse. The emotional situation for each patient in his home was rated as favourable or unfavourable. One of the researchers, Julian P. Leff (1976) (2) has reviewed these studies in a paper with the title *Schizophrenia and sensitivity to the family environment*. The percentages in our Table are relapse rates, i.e., the percentage of patients in each of the four categories that relapsed into psychosis. The numbers are taken from Figure 1 in the original paper.

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<th>Patients not on drugs</th>
<th>Patients on drugs</th>
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Patients on drugs in a 'bad' environment relapsed more than three times as often as patients not on drugs in a 'good' environment (53% versus 15%). In the 'good' environment, drugs seemed to make no difference for risk of relapse.

Such studies suggest that what schizophrenic patients need is not brain damaging neuroleptic drugs but a life situation in which they can survive and grow.

**B. The Soteria project in San Francisco**

Soteria house was a home-like residence in the San Francisco area. The staff consisted of non-professional therapists. There was room for six patients at a time. Young, newly schizophrenic persons were admitted to Soteria and they stayed about five months.

Afterwards the Soteria patients were compared with similar patients admitted to a regular psychiatric clinic. The latter received neuroleptic drugs as usual. The Soteria patients received no or little drugs.

After two years, the Soteria patients were equal or superior to the control patients by all psychiatric measures. Our Figure 1 is taken from a paper by Matthews et al. (1979) (3), *A Non-Neuroleptic Treatment of Schizophrenia: Analysis of the Two-Year Postdischarge Risk of Relapse*. It shows that the Soteria subjects relapsed less often. For example, after twelve months about 60% of the control subjects had relapsed but only about 30% of the Soteria subjects had done so.

**C. The Säter project in Sweden**

In the early seventies, Barbro Sandin who was then a woman in her early forties, a mother and a housewife, came to the Säter hospital as a temporary employee. She was touched by a withdrawn, apathetic, drugged young schizophrenic man, whom she took into her home. Over the years the man recovered and returned to life.

Barbro Sandin was put in charge of a very small experimental ward where she and a small staff since 1973 have received and cared for a number of young schizophrenic men, mostly without drugs.

In 1980, fourteen schizophrenic patients, who started psychotherapy with Sandin in 1973-75, were compared with a similar number of matched control patients, who had been admitted to other wards of the Säter hospital (Sjöström 1982). (4)

Sandin's patients were better by all measures. Our Figure 2 shows average time in hospital for

<table>
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<th>Favourable emotional situation</th>
<th>15%</th>
<th>12%</th>
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<td>Unfavourable situation</td>
<td>92%</td>
<td>53%</td>
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the two groups of patients. In the year 1980, the average control patient spent over five months in hospital, while the average for Sandin's patients was one month.

The limbo-frontal complex. – In addition, there are dopamine receptors in the frontal lobe (prefrontal cortex), although their density is not as high as in some parts of the limbic system and in the other two above-mentioned systems. They may, of course, still be critically important.

Because of the close limbo-frontal relationship, and because mental processes have both an emotional aspect, more attributable to the limbic system, and an intellectual aspect, more attributable to the prefrontal cortex, it may in the present context be appropriate to talk of a limbo-frontal functional complex. As we shall soon see, the integrity of the limbo-frontal complex is essential for high level human functioning, for insight and creativity. Neuroleptic drugs, by blocking dopamine signal transmission, cause a serious disturbance in the limbo-frontal complex.

How neuroleptic drugs act at the receptor level

When receptors for dopamine are blocked by the drug, the result is that transmission of signals across nerve junctions (synapses) using dopamine is cut down (Figure 3B). But the nerve cells fight back and form new receptors (1) to make up for the blocked ones (Figure 3C and 3D). The natural, original receptors represent information (sense, signal, order). The new receptors introduce a higher ratio of nonsense, noise or disorder in the system.

If we adopt the terminology used for electronic equipment, such as home stereo music systems, we can say that the drug converts a high-fidelity system into a low-fidelity system. On the drug, the music level is reduced and there is relatively more noise than before (= low volume and low fidelity). Off the drug, the music level is higher than normal, but the noise is even more exaggerated than the music (= high volume and low fidelity).

Effects of neuroleptic drugs at higher levels of brain organization

We can best observe the effects of the drugs at the lowest level, the molecular level (because quantities of dopamine, dopamine receptors, etc., can be measured in a test tube), and at the highest level, the level of experience and behaviour. We have much less knowledge of the drug effects on other levels of brain organization. However, theoretical reasons are convincing evidence that the lasting drug effects on all levels of brain organization can be summarized by the formula: deteriorated S/N (signal/noise, sense/nonsense).

Motor disorders. – If we look for outward manifestations of this deterioration in the brain system for motor coordination, we find them as the various motor disorders caused by the neuroleptic drugs, e.g., Parkinsonism, Akathisia and Tardive Dyskinesia. These ugly, inefficient, painfully purposeless movement patterns have replaced the finely tuned, graceful and efficient body movements of the same person before the drug.

Mental disorders. – Earlier on, we observed that the various motor disorders, serious as they are in themselves, represent only the visible tip of an iceberg of mostly invisible brain damages. The
corresponding drug induced disorders in the limbic system and the limbo-frontal complex are underestimated for at least two reasons:

1. Disturbances of higher mental functions, particularly of subjective states and experiencing, are often elusive and hard to verify objectively. It is well known in neuropsychology that even in cases of extensive brain damage, when persons close to the patient find his personality very much damaged, psychological tests and clinical examinations often fail to reveal any abnormality.

2. Disturbances of higher mental functions are often falsely blamed on the "mental illness" of the patient, when they are actually caused by the drugs. Incredible as it may seem, even the serious motor disorders that early on affected large numbers of patients, were overlooked for a long time by psychiatrists for this reason.

The blindness of psychiatry to the evil effects of its own deeds is as blatant as it is tragic and cruel.

**The outer man as an image of the inner man.** – The motor disorders caused by neuroleptic drugs are thus also important as a concrete illustration of the consequences when a dopamine dependent brain system is exposed to a neuroleptic drug. We can see the outer man as an image of the inner man.

With this illustration in mind, *i.e.*, the picture of people with Parkinsonism, Akathisia, Tardive Dyskinesia, let us now look at the main and intended target of neuroleptic drugs, the dopamine brain system that is most essential for mental functions, the limbic system.

**The limbic system**

The limbic system is closely tied together through reciprocal connections with the prefrontal cortex. The prefrontal cortex is the center for man's highest conative and cognitive functions: will, insight, foresight, etc.

**Schizophrenia treatment: old and new.** – The old surgical treatment for schizophrenia involved cutting off connections between the frontal lobe and the limbic system. The new treatment with drugs instead of brain surgery, similarly has the limbo-frontal complex as its target and blocks nerve transmission by chemical instead of physical means.

**Fronto-limbic complementarity.** – The limbic system is the center for emotions, for regulation and contact with the inner environment of the body, for sexual functions and so on. While the prefrontal cortex stands mainly for a verbal and intellectual aspect, the limbic system contributes an intuitive, emotional, nonverbal dimension to mental processes.

Some remarks and observations by leading neurophysiologists can help us to appreciate the role of the limbic system. Paul D. MacLean, who some thirty years ago distinguished and named the limbic system, writes these words in a more recent paper (1973):
...the prefrontal cortex provides foresight in planning for ourselves and others..., it might receive part of its insight – the capacity 'to see with feeling' – through its connections with the limbic brain..., such connections may account for a bond between visual and visceral experience which appears to be essential for effective identification with what is visually remembered." (5)

In a paper with the title The problem of the frontal lobe, Walle J.H. Nauta (1971) writes:

"It is tempting to speculate that the reciprocal fronto-limbic relationship could be centrally involved in the phenomenon of behavioural anticipation... The normal individual decides upon a particular course of action by a thought process in which a larger or smaller number of strategic alternatives are compared. It could be suggested – admittedly on purely introspective grounds – that the comparison in the final analysis is one between the affective responses evoked by each of the various alternatives... The incorporation of an introceptive, intuitive element in decision-making, earlier suggested by Henri Bergson (for example, Chapter 2 of L'Évolution Créatrice)... is expressed in a variety of idioms ('the mere thought of doing such a thing makes me ill')." (6)

Ability to identify with. – Against this background, it can well be understood that an effect of neuroleptic drugs in the limbic system and the limbo-frontal complex, is that the person loses his inspiration, his passions, his motivations, because he loses his ability to identify with himself, with others, and with the rest of the perceived and remembered world. It is this drug effect that people on the drugs try to explain, when they say:

"I am a living dead. I am a zombie. I am an automaton. I have lost my taste, my reflexes... I cannot read a book, not even watch TV. I have no memory..."

All these are, of course, natural complaints from a person with a crippled limbic system.

These complaints from the neuroleptic drug victims are heartbreaking. Doubly heartbreaking because they receive no understanding from the drug psychiatrist in whose objective mind they do not even seem to register. And because they are so muted, since the drug has taken away the very ability to protest, to care, and even to understand what has happened.

Integrative action of mind. – The close interplay between the prefrontal cortex and the limbic system is thus necessary for the highest functions, the integrative action of the mind, for achieving personal unity, interpersonal community and understanding on ever higher levels.

Without an intact limbo-frontal complex, it is impossible to overcome schizophrenia. It must be emphasized that the only possible way out of schizophrenia is forward. Returning to the naivety of previous repressions is impossible. All the sufferings, and everything experienced through the psychotic breakdowns and expansions of consciousness, must be integrated in a further evolved organization of the personality. It is a creative endeavour that depends on the full faculty of a person's mind.

"Anti-psychotic" drugs: a misleading term

The neuroleptic effect. – Initially the main effect of neuroleptic drugs, as we have seen
above, is a reduction of the signal level in dopamine brain systems (Figure 3A). "Optimal neuroleptization," it is said, means that 70% of the patient's dopamine receptors are blocked by the drug. One clinical manifestation of this reduced signal level is that the patients become "quiet, less active, and more or less indifferent to experiences and situations which had previously made them very emotional". As the patient loses his passions, his inspirations and his ability to care, troublesome behaviours are reduced, as well as all other kinds of self-assertiveness and spontaneity. The anti-psychotic effect is thus only a small aspect of this general neuroleptic effect.

"Neuroleptic" is the original term that was used by the French workers who introduced the first drug of this class, chlorpromazine, in the early 1950's. The French workers observed the drug effects with more naive and honest eyes than most later psychiatrists. The saw clearly that the drugs cause a general apathy and indifference. They used the Greek work leptos, which means small, attenuated, to coin the term "neuroleptic", thus meaning reduced nervous or mental energy.

**The anti-psychotic effect** is only one small aspect of the actions of these drugs because:

1. The reduction of psychotic symptoms is just one of many consequences of the general neuroleptic, *i.e.*, the anti-limbic and anti-limbofrontal, effect.

2. The drugs have equally drastic effects on other dopamine-dependent brain systems, *e.g.*, the one for motor coordination and the one for hormone control.

3. The reduced signal level is only the first effect of the drug (Figure 3B). A second effect, which becomes more and more important with time, is increased noise, *i.e.*, disturbed signal transmission (Figure 3C & D). A third effect, higher than normal signal level directly opposite to the originally intended one, appears when the drug is discontinued (Figure 3D). The latter two effects mean that the patient has become more psychotic or psychosis-prone because of the drug.

**Amphetamine** and related drugs also have the dopamine synapse as their target. The effect of such drugs is opposite to the initial effect of neuroleptic drugs. Amphetamine increases psychotic symptoms and can cause psychosis. These agents increase signal transmission, probably by releasing dopamine.

In general terms, the effect of amphetamine is thus: increased signal level and a deteriorated S/N. The latter is due to noise (nonsense) that increases even more than the signal (sense) transmission. The lasting effect of neuroleptic drugs is thus similar to chronic intake of amphetamine. This is the opposite of what a psychosis prone person needs.

While the initial effect on signal level is opposite for amphetamine and neuroleptic drugs, they both have the common effect of increasing noise (nonsense, disorder) in the system.

**The term "anti-psychotic"** is misleading for the following reasons:
1. The drugs have no specific effect on psychosis or psychotic symptoms. Only because of a general indifference and apathy are psychotic symptoms, or at least their overt and active expressions, reduced in many patients.

2. The drugs elicit or aggravate hallucinations and delusions as an acute effect in many patients. This is often overlooked by the psychiatrist. He rarely knows the patient well enough to realize that, even though the latter is now perhaps more quiet, less excited and less aggressive, at the same time he has more and worse delusions and he suffers more helplessly from terrifying hallucinations. Possibly this acute worsening of the psychosis is due to the newly formed dopamine receptors (Figure 3C), to the noise, the disturbing nonsense, that the drug causes in the brain. The power of the word is such that the doctor as a rule does not even think of the possibility that the drug is now causing the patient's worsening psychosis. Instead of taking away the drug, he increases the dose of the "anti-psychotic" medication. At some high drug level, even the psychotic symptoms caused by the drug may be finally suppressed.

3. The drugs induce specific and lasting changes in the limbic system and the frontal lobe that make a person more psychosis prone. The drug makes the patient more and more psychotic, which makes it more and more difficult to do without the "anti-psychotic" drug. This is the pharmacological mechanism in the neuroleptic trap described in Part I of this paper.

Alternative terms. – The name "anti-psychotic" has a hypnotic effect, blinding doctors to what the drugs are really doing with the patients. The term "neuroleptic" correctly suggests one of the many effects of the drugs. More cannot be asked of a name. The term "anti-psychotic" is a falsehood. Of the two common names for this class of drugs (the blockers of dopamine receptors), only one can be allowed among honest people.

Creativity, insight, and the limbic system

Shortly before coming down to Copenhagen for this conference, I had a phone conversation with a woman who some years ago was seriously schizophrenic. She talked to me about insight, what happens in her body when she has a new idea.

Rollo May on creativity. – She related Rollo May's account in his book The Courage to Create. Rollo May (1975) (7) writes about the intensity of encounter (cf. above: "ability to identify with") as a necessary element of the creative act – absorption, being caught up in, wholly involved" – and describes the neurological changes at such moments: "quickened heart beat, higher blood pressure, increased intensity and constriction of vision..." The woman added: "That agrees with my experience: vision is clearer, hearing better, memory perfect".

Rollo May continues: "we have the same picture as Walter B. Cannon described as the 'flight-fight' mechanism, the energizing of the organism for fighting or fleeing. This is the neurological correlate of what we find, in broad terms, in anxiety and fear. But [what we feel in creative moments, moments of insight] is not anxiety or fear. It is joy... joy that goes with heightened consciousness, the mood that accompanies the actualizing of one's own potentialities."

Effect of neuroleptic drugs on high level human functioning. – This kind of high level human
functioning is destroyed by neuroleptic drugs through the crippling of the fronto-limbic functional complex. The drugs take away the ability to experience new insights and to achieve creative personal evolution. The drugs take away the very powers needed to overcome schizophrenia. They destroy the faculty that is distinctive of human beings, creativity, the basis of what we value highest, freedom and self-transcendence.

**Experience of neuroleptic drugs.** – This woman had experienced neuroleptic drugs in high doses, but only for limited periods. She had been rescued from the psychiatric system. Now I asked her about the drug effects, and in a burst of passion she said (verbatim translated):

"All vital functions messed up. You are in a situation of immense anxiety, stress. Your body, your brain needs all resources to get some kind of grasp of who you are, what you do, that you exist. How can you do that work – get well, achieve balance and harmony – when a big part of your functions are gone? It is insane. A big part of your problem-solving ability is gone, when you need it most. Vital functions lost: fine coordination, seeing, hearing, thinking, feeling, getting distance, making distance, perspective... (And after a question from me about her suffering, she continued.) Suffering. What! Am I not a patient? That means suffering, passion, doesn't it? Suffering is being human, I want to have all those things that make me a human being. If being schizophrenic means being defective, you should not take away even more. Not make people handicapped. Teach them to live with their handicap instead...

**Convincing evidence.** – We noted, in Part I of the paper, that groups of schizophrenic patients in drug-free programs after a few years were better, even by psychiatric criteria, than comparable patients treated with drugs. More convincing still is the experience of knowing someone like the woman in this telephone conversation.

If new knowledge is to be remembered and integrated into the personality, to become a motivating force, more than intellectual understanding is required. It requires also an intuitive experience of rightness. It requires a full mind-body, a full fronto-limbic experience.

That is why I appealed to the reader's intuitive understanding of children, to his or her understanding of the necessary conditions for a child to grow towards that which a child is meant to become. Neuroleptic drugs – no matter how medically effective against symptoms – take away a *sine qua non* for human growth, for "évolution créatrice".

**Knowing someone.** – That is also why knowing someone like the person we are now talking with is more convincing than reading data from the Soteria and Säter studies. She is now 27 years old. Four to seven years ago she met, not only one, but most or all of Schneider's first rank diagnostic criteria of schizophrenia. By psychiatric opinion she was in absolute need of neuroleptic drugs and had a most pessimistic prognosis. She displayed at various times all hebephrenic and catatonic symptoms.

If she had not been saved from neuroleptic drugs, we know that she could never have become the alive, competent and creative person that she is today.

In addition, she is now a well-functioning, breast-feeding mother – happy, loving, sensitive,
playful. Clearly, the bodily and emotional adaptations necessary for pregnancy, birth and motherhood require a good limbic system.

In other words, just as the neuroleptic drugs would have destroyed her mental and artistic creativity, they would have deprived her of the specific female creativity required for nurturing her child.

The true task of science is to show us how that which we thought impossible is possible. To give hope. Faced with schizophrenia, its greatest challenge, psychiatry is doing the opposite.

(To SYNOPSIS)

PART III: CONCLUSIONS – NEW LAWS NEEDED & OTHER LESSONS FROM THE NEUROLEPTIC DRUG TRAGEDY

The young person in acute schizophrenia has been in the focus of this paper. One reason is that acute schizophrenia is the cardinal indication for neuroleptic drugs, and that psychiatrists would generally agree that if the drugs are not good for people with schizophrenia, they are not good for anybody.

We have seen that neuroleptic drugs destroy something that is hard to measure and yet is the very thing that makes humans human and human life worth living.

Two other big groups of people who receive neuroleptic drugs were mentioned in the introduction. The potential of, say, a "mentally handicapped" child or of an old and sometimes confused person may not be great by worldly criteria, in comparison with, say, a young schizophrenic person, such as the woman we talked with on a previous page. But our society is committed to rejection of such criteria as ultimate measures of human worth, and to protection of the right of every individual to life and self-realization.

Therefore gross hypocrisy is revealed when, through our institutions, these poor ones are cared for in the physical sense, while their essential humanness is destroyed by the drugs.

Neuroleptic drugs in homes for "mentally handicapped" and for old people

It is an abomination when a doctor visits a home for "retarded", "feeble-minded" people and prescribes neuroleptic drugs wholesale to those who are reported to be "agitated", "restless", "difficult" and so on. And when he continues to the old people's home to distribute the same neuroleptic panacea, here justified by diagnoses such as "senile confusion" and "negativism". As long as the neuroleptic regime lasts, these institutions deserve the inscription: 'All you who enter here, abandon hope'. The Nazis killed their useless people. We let the bodies live, while we kill the souls.

A doctor in this kind of situation should recall that medical ethics, if not his own conscience, forbid him to prescribe any medical treatment that is not in the patient's own best interest, and demand that he respect the patient's autonomy. From this follows that, if neuroleptic drugs or
other heavy mind medications are ever to be given to children (incompetent persons of any age), the final say and the evaluation of the effect should always rest with somebody who loves, cares for, and fully identifies with the child.

The neuroleptic drug phenomenon reveals a racist and fascist element in our society. It is contrary to Christian values that emphasize love – Be your brother's keeper; Love thy neighbour as thyself; What you did to one of the least of these my brethren, you did to me – and the inner man as more important than his outer aspect. It is equally contrary to humanistic and democratic values that emphasize the autonomy, integrity, responsibility and value of the individual.

Who shall control our brains?

People know with their guts and spirit – remember what Nauta (6) said about the limbic system – that the psychiatric view of a human being is limited and incomplete. Therefore they should demand from their lawmakers laws that give them full control and final say about alterations by drugs or other somatic therapies in their own brains, or in the brains and minds of their near and dear ones.

Today, if we dare ask the welfare state for even temporary help, relief, asylum, for ourselves or for somebody we care about, and thus turn to a psychiatric or related kind of medical institution, the fact is that – as a condition of help – we have to give up control of what is done to the brain in our own or our loved one's head. This is an intolerable condition of help. It must be reversed by clear laws.

Crimes and tragedies in the history of psychiatry: past, present, and future(?)

A ban of neuroleptic drugs is the most direct and obvious conclusion from all that has been said here. But clearly there are also other important legal conclusions and lessons to be learned from the neuroleptic tragedy.

The history of psychiatry is frightening. It is easier to see the evil of past therapeutic practices than to see the evil of today's methods. Few would now deny that the lobotomies of large numbers of schizophrenic people 30-40 years ago was a terrible thing. The neuroleptic drug tragedy, involving many more people, is however a disaster unequalled in the history of psychiatry.

The chemical lobotomy by neuroleptic drugs has a cleaner appearance than surgical lobotomy. Other drugs and somatic therapies that look even cleaner, will be introduced in the future, e.g., neuroleptic type drugs that hit the limbo-frontal complex more selectively, and therefore have "fewer side effects", meaning less disturbance of motor coordination and of hormones – while they do as much or more, i.e., catastrophic, harm to the inner man and to our essential humanity.

The medical profession, being able to see these dangers more clearly than others, should be the first to warn and urge legal safeguards. For example, laws of the following kinds appear necessary.
A legal right to drug-free care

The necessity of this legal right was shown above as we answered the question: Who shall control our brains? and concluded that it is intolerable coercion when people in distress are given help only on the condition that they accept mind-altering and brain-damaging drugs and other somatic brain intrusions.

We are talking here of a right that is a natural and self-evident consequence of the value system of our society. Some examples have been given, and countless tragic cases could be cited, that illustrate the need for legal protection of this right.

When a patient has invoked this right, or when somebody who rightly represents him has invoked it on his behalf, his position should be respected without questions, in a fully sincere spirit and as a matter of course. In other words, from then on the staff of the institution is to help him according to the best of their abilities as if the drugs did not exist. They simply have one tool less.

Legal protection of committed persons against brain intrusions

More important and more fundamental than physical liberty is the right to protection of one's mind and brain against unwanted chemical and physical intrusions. Today any committed person loses this right.

It is intolerable that this right can be replaced by the whim of any physician, who may order a brain or mind altering treatment that most of his colleagues would not even consider, a treatment that may have gross consequences for the future life of the patient.

Forced treatment must not be allowed automatically because a person is committed. Because some people find that a person has to be locked up, this person should not at the same time lose a right that is more important and more fundamental than physical liberty.

A second legal step, more stringent and thorough than that required for commitment, is necessary before the brain is allowed to be touched against a person's will. It is an outrage that any committed person can be exposed to such measures as ECT and neuroleptic drugs, e.g., in long-acting depot form, because of one doctor's decision. If violations of personal integrity of a kind that is, in principle, and very often in practice, more serious than imprisonment, is ever to be allowed, it must first be established that "all reasonable men can agree that the treatment is to the patient's benefit."

The medical profession – guided by the principle of informed consent, the principle of autonomy and the principle that any medical treatment has to be in the patient's own best interest – must insist that the court for such decisions seeks the advice of someone who loves, cares for and identifies with the patient. Nobody else is better fit to represent somebody who cannot represent himself. If this person's verdict is a "No" to the treatment, the verdict of the court must also be "No".
If patients are given this kind of legal protection and security – against, for example, neuroleptic drug depot injections and electro-shock treatments – then the bad reputation and the great fear of psychiatric clinics may begin to disappear. Morals would rise. Psychiatry and psychiatrists would also greatly benefit.

**Legal affirmation of the four conditions of forced treatment given by the Declaration of Hawaii**

The Declaration of Hawaii was adopted by the World Psychiatric Association at its meeting in Honolulu, Hawaii, 1977. The preamble of the declaration warns of "the possibility of abuses of psychiatric concepts, knowledge, and technology in actions contrary to the laws of humanity".

The declaration gives four conditions, all of which must be met before any forced treatment = "treatment given against or independent of a patient's own will":

1. The treatment is "done in the patient's best interests".
2. The treatment is "limited to a reasonable period of time."
3. "A retroactive informed consent can be presumed".
4. "Whenever possible, consent has been obtained from someone close to the patient".

These rules are in fact unknown or ignored by many psychiatrists. Forced treatment is therefore very often executed in violation of them. Clearly, it is important that these conditions become well known not only by psychiatrists, but also by patients and all psychiatric personnel. Other speakers at this conference have emphasized that international ethical conventions and declarations should be incorporated in national laws. That seems particularly urgent in the case of these conditions for forced psychiatric treatment.

If, despite the best will and effort of those responsible, a forced treatment has been given in violation of the patient's true inner will, the ethical evil and the mental harm to the wronged patient will be less, if the latter can see that a full sincere effort was made to respect him, if he can see that the desire to respect him was paramount.

For this reason, the law should require a prior written document showing the reasoning – of the physician and the staff, and of the court, the need for which was noted above – behind the decision to give "treatment against or independent of the patient's will". The document should, of course, be specific as to why each of the four conditions was deemed to be fulfilled.

In order to avoid future mistakes in the care of this same person and of other patients, it should be of the greatest interest to have later the patient's comment. This important retrospective evaluation should be obtained through a person who has the patient's trust and who was not one of those responsible for the decision.

If a retroactive consent is not obtained, that means that the decision was a mistake. On the other hand, a retroactive consent does not prove that the treatment was legitimate, since the will of the patient may have been crushed. Obviously patients very dependent on the care-giving institution and with a limbic system crippled by neuroleptic drugs are most susceptible to brain washing.
A legal ban of all neuroleptic drugs

The argument for this law is that the harm of neuroleptic drugs far outweighs any benefits, and that the present intolerable situation cannot be corrected soon enough by other means.

Psychiatric opinion holds that neuroleptic drugs are most clearly indicated in acute schizophrenia, and that other uses are more questionable. For example, it is warned that these drugs are "too potent" and "too unsafe" for "trivial" uses. In Sweden about 1,000 people get the diagnosis schizophrenia each year, while about 100,000 persons get neuroleptic drugs on any one day. The indication acute schizophrenia thus accounts for no more then one or a few per cent (say, 0.5 - 2 %, depending on definitions) of the total consumption.

We have seen reasons why neuroleptic drugs are particularly harmful and dangerous when given to a young person in acute schizophrenic crisis. Psychiatrists would generally agree that if neuroleptic drugs are not good for schizophrenic people, they are not good for anybody.

From the three initial statements of this paper, taken together, it follows that neuroleptic drugs are indeed bad for schizophrenic people. These statements have been supported by the evidence and arguments given in the rest of the paper. It then also follows that the drugs are bad for other people. Accordingly, neuroleptic drugs should be banned.

The residual discussion as to whether there may be some legitimate uses of neuroleptic drugs that would warrant a consumption in the vicinity of 0% of today's level, is irrelevant in this context. It should not be allowed to cloud the main issue and to delay the political decision.

No doubt the resistance of the psychiatric system to the needed change will be enormous. Psychiatrists will lose their most efficient system for management and control. Those who are motivated more by desire for prestige and power then for truth and the well-being of patients and society, will resist the change. But, deep in their minds, perhaps even they will be relieved. An experienced psychiatrist, on the threshold of retirement warned: "But Lars, you have to remember: then everything they have done all their life is wrong" and "it is a system that works".

The psychiatric profession is in a dilemma. We are reminded of the truth that what is really blameworthy is not one's past errors, but rather one's refusal to face them and learn from them. We see that, when it comes to the most serious things, we are more willing to forgive others than ourselves. We see that forgiveness, and first of all self-forgiveness, is a liberating virtue.

Psychiatrists as a group are not more mature in this respect than others. They need outside help to kick the destructive drug habit. Many of them will welcome such help, if only silently.

The answer to our question is: Yes, neuroleptic drugs should be banned. The next question is: Do we have the moral will and courage to eliminate an element in society that is contrary to our highest values? If so, the evil of neuroleptic drugs shall be eliminated by forceful political action.

When we look at other times and cultures, we see clearly that momentous evils were covered up
or justified, considered "necessary", in the name of the reigning religion or other totalitarian ideology. The neuroleptic drug phenomenon shows that the same is true in our own society.

We still hope that our "religion" is different, because humanism – science – democracy is, in principle, self-critical, self-corrective, self-reflective in accordance with the structure of man's highest mind, which – thanks to its selfreflexive structure (?) – is free, creative, responsible and without set limits.

We hope, but today as always, it takes courage and action to make of hope a new reality.

The tools of psychopharmacology are as great a threat to the inner man, as the tools of war to the outer man. Scientists and physicians should be sobered by seeing their responsibility for this evil.

Almost thirty years ago Michael Polanyi (1957) wrote an article in Science (8) with the title Scientific Outlook: Its Sickness and Cure, and he said:

"Today... the power exercised previously by theology has passed over to science; hence science has become in its turn the greatest single source of error...

I am convinced that the abuses of the scientific method must be checked, both in the interests of other human ideals which they threaten and in the interest of science itself, which is menaced by self-destruction, unless it can be attuned to the whole range of human thought."

Innumerable scientific studies show that neuroleptic drugs are effective in reducing psychotic symptoms. Such studies typically extend over two years at most. In every respect, thus also with respect to time, such studies take only a small fraction or aspect of the patient's life into account. We have seen, for example, that the short term psychiatric "improvement" may be correlated with long term personality deterioration.

The ratings and measurements of psychiatry have their uses. But when these partial truths are allowed to stand for the whole truth, the result is evil. Truer measures of human beings are those in the eyes of another of his kind who sees him and loves him; and those of his own hopes and dreams. Psychiatry has not understood this moral imperative. It has become therefore a tragic and cruel mismeasure of man.

It seems fitting to conclude this paper, at a conference on laws and legal institutions in relation to psychiatry, with a quote by Charles Darwin that appears on the first page of a book by Stephen Jay Gould (1981) (9) with the title you just heard, The Mismeasure of Man:

"If the misery of our poor be caused not by the laws of nature, but by our institutions, great is our sin."

Footnote –
On the evidence that neuroleptic drugs cause proliferation of dopamine receptors:
Brains from animals that have received neuroleptic drugs contain elevated numbers of dopamine receptors. Brains from schizophrenic persons who have received neuroleptic drugs contain about twice as many dopamine receptors as brains from normal persons. This is true both in the limbic system and in the system for motor control. References in Mackay (1982) (10).

**REFERENCES**

1. Day, M. and Semrad, E.R.:

2. Leff, J.P.:

3. Matthews, S.M., Roper, M.T., Mosher, L.R. and Menn, A.Z.:

4. Sjöström, R.:

5. MacLean, P.D.:

6. Nauta, W.J.H.:

7. May, R.:

8. Polanyi, M.:

9. Gould, S.J.:

10. Mackay, A.V.P., Iversen, L.L., Rossor, M., Spokes, E., Bird, E., Arregui, A., Creese, I.,
Snyder, S.H.: 
Increased Brain Dopamine and Dopamine Receptors in Schizophrenia. *Arch Gen Psychiatry* 39: 991-997, 1982.

**ADDENDUM**

After completing this paper, the author found two reports by psychiatrists who have arrived at similar conclusions and who both reject neuroleptic drugs. One is a brief paper by a British psychiatrist with "57 years" of experience. The other is a book by an American psychiatrist. It is clear the the three of us have arrived at similar conclusions independently of each other.

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