

Madness and Text: The Psychiatric Paper as a Business and as a Means of Censorship

Locura y texto: El artículo psiquiátrico como un negocio y como medio de censura

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Resumen: Las revistas son básicamente el único canal a través del cual los científicos pueden hacer que el resultado de su investigación sea conocido por sus colegas. Las revistas científicas seleccionan la información que publican y garantizan su calidad mediante un procedimiento doble ciego de censura por parte de sus pares. Si por un lado este procedimiento parece lógico como método para incluir un estudio dentro de un campo científico consolidado, también es cierto que puede funcionar como un mecanismo para la censura. Si, además, un campo científico como la farmacología está íntimamente vinculado al interés comercial de las grandes empresas, las empresas y las revistas no solo se convierten en proveedores de orientación, sino también en censores que ocultan una parte de la verdad y obstaculizan el avance científico para defender el interés económico de sus patentes.

Palabras clave: Revistas científicas, farmacología, censura, intereses comerciales.

Abstract: The journals are basically the only channel through the scientists can make the result of their research know to their colleagues. Scientific journals select the information they publish and guarantee its quality by means of a double blind procedure of censorship by peers. If on the one hand this procedure seems logical as a method for including a study within a consolidated scientific field it is also true that it can function as a mechanism for censorship. If, furthermore, a scientific field such as pharmacology is intimately linked to the business interest of large companies then the companies and journals not only became providers of guidance, but also censors who conceal part of the truth and obstruct scientific advance to defend the economic interest of their patents.

Keywords: Scientific Journals, Pharmacology, Censorship, Business Interests.

If we were to analyze the publishing practices of scientists and their behavior from an historical and economic point of view, we would conclude that they do not in any way act as rational economic agents. Researchers whose studies are published in scientific journals give their work away for free, or even pay to have it published. For the journals this constitutes a magnificent publishing deal because they do not need to buy the products which they later sell to the scientific community at exorbitant prices (Bermejo-Barrera, 2011, pp. 85-96).

If scientists act this way it is because these journals are basically the only channel through which they can make the result of their research known to their colleagues, but also because publishing in those journals is the basis of their academic and professional prestige, a prestige from which their options for promotion within the academic and research fields will stem.

Scientific journals select the information they publish and guarantee its quality by means of a double blind procedure of censorship by peers; in other words, they submit each paper to at least two experts who will determine and guarantee its value. If on the one hand this procedure seems logical as a method for including a study within a consolidated scientific field, it is also true that it can function as a mechanism for censorship. In fact, the so-called publication bias is a well-known phenomenon in which a study that breaks with the basic ideas of a field, or casts a shadow of doubt upon it, is practically impossible to publish, while studies contributing mere facts — sometimes almost insignificant — are admitted without difficulty in a world where more than three million papers are published annually, quantitatively concentrated among the vast fields of chemistry, medicine and physics, and to a much lesser extent the social sciences. In fact, the number of papers published by social scientists in any one year is equivalent to the number published by chemists in just four days.

Scientific papers are measured by quantity and quality, and their publication results in a profitable business, but also in a mechanism of censure and a mechanism which can close paths of research when journals close *a priori* the possibility of publishing works of certain orientations for not considering them valid. If, furthermore, a scientific field such as pharmacology is intimately linked to the business interests of large companies, then the companies and journals not only become providers of guidance, but also censors who conceal part of the truth and obstruct scientific advance to defend the economic interests of their patents.

Let us take psychiatry as an example. This field is particularly interesting due to the financial benefits linked to it (most psychiatric patients will be medicated for life), and due to the fact that here the logic of scientific and clinical research is

reversed, because illnesses are catalogued according to the marketing of a specific patented molecule, and etiological theories are even created of illnesses based on chance pharmacological discoveries.

Scientific and clinical research generally tries to discover the anatomical, physiological, microbiological or other causes of an illness with the purpose of taking action against those factors in such a way that once the causes are canceled, the clinical symptoms disappear and the disease is cured. For example, when the cause of syphilis was discovered, scientists searched for an antibiotic which could destroy the agent that caused the disease and thus cure it.

Medical research requires major investments because it integrates many different scientific fields and must be planned and systemized. There have been numerous cases, however, analyzed in detail by Lawrence Podolsky, in which a discovery came about purely by chance, and one molecule ended up being used because it had been effective in alleviating symptoms, although the mechanisms of its actions was not fully understood. An example of this was the discovery and the effects of acetylsalicylic acid, studied by Podolsky himself (Podolsky, 1997).

Psychopharmacology is a recent field whose history has been studied by such eminent pharmacologists as David Healy (Healy, 1990; 2002), but also by psychologists such as Richard P. Bentall (Bentall, 2011), and science historians such as Andrew Lakoff (Lakoff, 2005). It is a history with many lights and shadows. Lights because many molecules capable of alleviating symptoms have been discovered, although none capable of curing any of the so-called mental disorders, and shadows because it is often the commercial use of a molecule which induces the creation of a theory of the illness, and it is the defense of that particular molecule which persuades the pharmaceutical industry into compiling clinical information to follow its course, but also to conceal its negative effects. David Healy explained this clearly in his monograph on the antidepressant Prozac (Healy, 2004), and on antidepressants in general (Healey, 1997).

We will now undertake a brief journey through the history of the first mental disorder that generated an enormous commercial success: schizophrenia. We will be able to see how this group of illnesses (which have the dubious privilege of being considered the strangest of all illnesses) were reduced to an unproven biochemical mechanism.

Schizophrenia was an almost simultaneous discovery of two of the greatest psychiatrists of all time: Emil Kraepelin, who was the first to systematize the complex map of mental illness, and Eugen Bleuler (Bleuler, 1950). It is a very complex group of illnesses, which can be tackled from different fields:

pharmacological, psychological, social, etc., as can be seen in the main clinical treatise currently in force (Hirsch and Weinberger, 1995).

Schizophrenia belongs to the group of the psychoses (illnesses not clearly organically based, i.e., anatomical, pathological or neurological), which bring about the loss of the perception of reality, the loss of the ability to think and speak correctly, cause cognitive damage, and lead to social and occupational disability. According to Kraepelin, psychoses can be divided into two groups: the schizophrenias or early dementias (because contrary to senile dementia they start in adolescence and are progressive), and manic depressive psychosis, which don't usually lead to cognitive damage as high as that of the schizophrenias, and are characterized by mood disorders which make the patient oscillate among manic phases with hallucinations, deliriums and loss of perception of reality and self-control, and acute depressive phases. This latter psychosis can be dealt with from different perspectives: pharmacological, psychological, social, etc., as can be seen from its main clinical reference treatise (Goodwin and Jamison, 2007), but it has also been the object of an attempt of reduction to an elemental biochemical mechanism, as studied by Healey in his history of mania, or bipolar disorder (Healey, 2008).

Let us take a look at how our story develops:

Eugen Bleuler (Bleuler, 1950) has been the best clinician and researcher of the group of the schizophrenias. He called them a "group" because these disorders are structured into four different types:

- a) Simple schizophrenia
- b) Paranoid schizophrenia
- c) Hebephrenic schizophrenia
- d) Catatonic schizophrenia

These groups would not be clinically rigid because transitional phases take place between the catatonic, paranoid or simple groups, although curiously enough nowadays catatonic schizophrenia is rarely observed and is currently considered to be a clinical entity by itself. Hebephrenic schizophrenia would be clearly delimited because it is associated to certain mental retardation, while those afflicted by paranoid or simple schizophrenia tend to have high IQs.

Bleuler makes a distinction between two types of schizophrenic symptoms: the primary or fundamental (Bleuler, pp. 14-93), and the secondary (Bleuler, pp. 94-226). As we can see, it is a highly complicated set of clinical symptoms that will later be greatly simplified. Within the primary group we find:

- Alteration of the ability of association.
- Alteration of affective abilities.
- Ambivalence of thought and affections.
- Alterations in the ability to perceive reality: alterations of sensorial perceptions.
- Temporal and spatial disorientation.
- Alterations in memory and sense of time.
- Alteration of conscience and loss of identity.
- Alterations of motility.
- Autism.
- Loss of the abilities of paying attention and concentration.
- Alterations of will.

The secondary symptoms (so called because they may be present as part of other mental or neurologic disorders) are the following:

- Hallucinations (basically auditory and to a lesser degree visual).
- Development of an incidental memory.
- Alterations of language and writing.
- Somatic alterations: constipation, headaches, muscular pains, sleep disorders.

In the specific case of catatonic schizophrenia, the symptoms are the following:

- Catalepsy.
- Stupor.
- Mannerisms.
- Negativism.
- Automatism.
- Ecololaly.
- Ecopraxy.
- Uncontrolled impulsiveness.

During the acute non-catatonic phases the above symptoms tend to be present together with the following:

- Melancholy (depression).
- Mania (agitation).
- Systematic delirium.
- Crepuscular states.
- Confusion.
- Incoherence.
- Rage and attacks of rage.
- Flashbacks.
- Stupor.
- Development of addiction to alcohol or other substances.

Regarding the prognosis, Bleuler established the law of the three thirds, which continues to be valid today in spite of the development of medications. According to Bleuler, one third of the patients suffer one sole attack and recover, another third survive with successively more frequent attacks, and the last third end up in a state of dementia. Numerous therapies can be of help in all these cases. In 1908 with the publication of his book, Bleuler recommended the use of various sedatives, along with psychological and social therapies such as the development of occupational activities and the reconstruction of social abilities.

Starting in the 1920s, however, numerous authors began coming up with great theories of unification of this complex system of disorders on a misfortunate journey which has continued to the present day. Its history has been studied by another psychiatrist, Elliot S. Valenstein, in three books where we can observe what he has called the *war of the soups and the sparks* (Valenstein, 1986; 1988; 2005).

Schizophrenics scare the general public and they also scare physicians. They don't reason; they hallucinate; they become delirious and may be agitated. This is why it is essential to tranquilize them or to have them return to reality. In the ancient world it was thought that the best way to accomplish this was by means of punishment. The dictionary of Hesychius of Alexandria gives the following definition for the cure or catharsis: *katharthenai, mastigothenai*. In English this would mean: for purification, flagellation.

Harsh violence against the mentally ill was applied in the asylums, but during the 1920s violence became shock therapies, which have been studied by Valenstein (Valenstein, 1986), or mutilations.

The main protagonists were Ugo Cerletti, the creator of electroshock therapy, and other physicians such as L. Medina, who came up with ways of causing convulsions among patients in the belief that epileptic seizures were curative.

Cerletti was of the idea that schizophrenia and epilepsy were contradictory and one would cancel out the other; therefore, he thought, producing convulsions would cure the patient. He had arrived at this conclusion through a series of observations and misinterpretations after watching pigs being slaughtered with electric currents and because he had the false idea that there were no schizophrenic epileptics, along with the mistaken assumption that the ratio between neurons and glial cells is inverse. He began by applying electric shocks to the heads of patients without anesthesia. First on one side and then on both, increasing the intensity to over 10,000 times what is now believed would be the intensity of a neuronal discharge. The rate of mortality was 1% per session, and bone fractures were constant until it was decided to administer curare as a muscular relaxant.

The number of shocks was established through trial and error and were continued to be applied until the patient was no longer violent. This treatment became widely used around the world and ended up being applied as a means of punishment by nurses and orderlies. Post mortem examinations showed burns within brains that had been destroyed, since the degree to which patients were tranquilized depended on the amount of brain damage produced by the treatment. It was never explained why this therapy was sedative. It was, however, the most common treatment around the world — and continues to be used — up till the discovery of the first neuroleptic with which we now begin our account.

Along with electroshock therapy, shocks were also provoked with metrazol or insulin to induce hypoglycemic coma. Inoculation with malaria was performed to cause an increase in temperature leading to febrile convulsion (Valenstein, 1986). Mortality due to insulin induced comas was as high as 10% per session, but continued to be used due to its sedative effects, similar to those of the neuroleptics and the surgical mutilations.

The dubious distinction of inventing psychosurgery or cerebral mutilation is shared between Walter Freeman and Egas Moniz — a Portuguese neurologist and Nobel Prize in medicine whose name was changed so he could become a member of the nobility. The procedure was performed by driving a leucotome (or an orbitoclast in Freeman's case, which was essentially an instrument modeled after an ice pick) through a hole in the skull or through the tear duct under the eyelid and against the top of the eye socket. The instrument would then be swung medially and laterally to separate the frontal lobes from the thalamus. The lesions caused by this procedure can be seen in the x-rays included in Freeman's book (Freeman and Walls, 1942). Since it was not possible for the surgeon to view the damage that the surgical instrument was doing to the brain, it was jokingly said to be the only surgery which could be performed with the feet as well as with the hands. One great surgeon, Santiago Ramón y Cajal, whose approval had been sought by Egas Moniz, considered the technique a senseless brutality, yet it would be disseminated around the world, not only for treating schizophrenics, but also alcoholics, sexual offenders, and people suffering from all kinds of serious conduct disorders, as can be seen in the book by Freeman and Walls.

The technique was considered acceptable because it was applied in asylums to patients confined for life. Freeman and Walls describe the acceptable side effects. Although a great percentage of the schizophrenic patient's intelligence is lost, according to the authors it was necessary to reduce it because these patients had an excess amount of intelligence (Freeman and Walls, p. 289). Among the side effects,

forty-six were persistent, in other words, for life, and in only five cases were improvements observed after surgery.

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|---|--|-----------------------------------|
| - Loss of initiative. | - Amnesia. | - Lack of control, impulsiveness. |
| - Clumsiness. | - Somnolence. | - Mannerisms. |
| - Disorientation. | - Lack of social tact. | - Stupor. |
| - Apathy. | - Instability. | - Ineptitude. |
| - Euphoria. | - Distraction | - Stereotypy. |
| - Tiredness. | - Suggestibility. | - Infantilism. |
| - Loss of the ability to pay attention. | - Tendency to play infantile games. | - Aggressive tendencies. |
| - Slowness. | - Mood swings. | - Indecency. |
| - Procrastination. | - Sarcasm. | - Deliriums. |
| - Motor retardation. | - Hyperactivity in certain cases. | - Catalepsy. |
| - Loss of interest. | - Tendency to display verbal aggression. | - Persecution complex. |
| - Exhaustion. | | - Tendency to blaspheme. |
| - Laziness. | | |

These were the acceptable side effects. As we can see, many of them coincide with those which Bleuler described as the slow cognitive damage caused by acute schizophrenia. Freeman succeeded in causing these symptoms instantly. Sadly, not one single cure, not even with the treatments applied by Egas Moniz, can be attributed to this mutilation. There were also many cases of death during surgery.

The patients of Egas Moniz came to him from asylums, and upon their return they were submissive. Freeman was a travelling surgeon who preached the benefits of his technique, which only required a few minutes after sedation of the patient with an electroshock. The proof of his many successes were the Christmas cards from the grateful families of his patients.

Following Freeman and Moniz, lobotomies were performed in almost every insane asylum in the civilized world. The cruelty of lobotomies and shock therapies explains the success of psychopharmacology, which is only partially effective but less cruel at plain sight.

Psychopharmacology is based on two principles. Every mental disorder has a chemical cause, and if we can identify the molecule which causes it, we can neutralize it. But this is not possible unless we have a precise catalogue of the disorders and their types. This is the purpose of the *Diagnostic and Statistical Manual of Mental Disorders*, known as DSM, based on clinical observations and containing a large statistical base. The DSM is modeled on Kraepelin's concepts and is useful as a cataloguing and diagnostic tool, as well as essential for insurance companies, for diagnosing occupational disabilities, and for the pharmaceutical

companies wishing to associate each disorder with the company's own proprietary molecule.

All of this is possible through great simplifications. Let us take an example from DSM IV-TR (pp. 297-324), where we can see how to diagnose schizophrenia, and compare it with Bleuler's criteria. Symptoms which are to be treated for life with antipsychotic medication are the following:

- Deliriums.
- Hallucinations.
- Disorganized language.
- Disorganized or catatonic conduct.
- Negative symptoms: affective flattening, apathy, alogia.

It is possible to perform the diagnosis with just two symptoms, especially in the case of auditory hallucinations.

Psychopharmacology has flourished thanks to this system, in conjunction with the large pharmaceutical companies and associated with scientific journals and medical associations.

We will briefly chronicle the studies cited by Healey and Valenstein, and include data taken from Antoni Talarn (Talarn, ed., 2007), Miguel Jara (Jara, 2007), John Read (Read et al., 2006), Allan V. Horwitz (Horwitz, 1992), and from the system's apologists who emphasize the real effects, but conceal the side effects, such as Edward Dolnick (Dolnick, 2002).

The first neuroleptic was chlorpromazine, synthesized by Pierre Deniker by adding an atom of chlorine to Promazine (an antihistamine). Administered by chance to schizophrenics, physicians observed that it blocked the florid positive symptoms, although it was ineffective with the negative symptoms such as catatonia.

Chlorpromazine was first used in Europe, and little by little its negative effects became known: it provokes tardive dyskinesia, turning the schizophrenic patient into a victim of Parkinson's. It does not stop deliriums, but does reduce hallucinations by 50%. Chlorpromazine was thought to block the neurotransmitter dopamine on its way through the frontal lobes. A deficit of dopamine leads to Parkinson's. Its use was much less cruel than the shock therapies and became widespread in Europe, but not in the United States until business interests made it possible. This occurred when Smith & Kline bought the patent in 1952, and began a promotional campaign hiring 300 medical representatives to convince psychiatrists of the drug's virtues. The campaign was so effective that within eight months, two million patients were being medicated. Six months later, the number had increased

to four million (Valenstein, 1988, 2005). From then on, schizophrenia would be considered a chemically based disorder treatable with neuroleptics.

Thus begins the race of the antipsychotic drugs, which can be studied in the books cited above. The use of these drugs can be read in detail in the previously cited clinical reference books of Hirsch and Weinberger, and Goodwin and Jamison. Then came haloperidol and a series of molecules that were synthesized to replace the ones that were losing value as they were becoming generic. This race not only uses medical representatives — essential professionals — but also colonizes the scientific journals and medical associations.

Let us take a look at some facts: 25% of the budget of the *American Psychiatric Association's* conventions are financed by the pharmaceutical industry, which pays for conferences and travel expenses. In 1988, \$86 million were spent on publicity in the Association's annual conference, and \$1.9 million on the following journals:

American Journal of Psychiatry
Psychiatric News
Psychiatric Services

That same year, two million dollars were spent on the education of psychiatrists, and \$469.000 in scholarships for psychiatry residents. The industry spent \$130 billion on research, and the Federal Government spent \$200 billion.

In 1994, the pharmaceutical industry spent \$150 billion on six thousand research projects protected by confidentiality clauses with the objective of concealing any negative information regarding their molecules. Furthermore, 34% of the authors of articles published in the following magazines had financial interests with the pharmaceutical industry (Valenstein, 1988 and 2005, pp. 198/199):

Science
Nature
The Lancet
The New England Journal of Medicine
Proceedings of the National Academy of Medicine

The pharmaceutical companies are the only ones who can afford the costly research. They attempt to contribute to the improvement of medications and mental health, but they are under the pressure of the law of the market and thus search for molecules which will be profitable due to their elevated price and mass use, molecules that must be replaced when the previous ones become generic.

The introduction of a new drug may be accompanied by deception. An example would be Zyprexa, an antidopaminergic, antihistaminergic, anticholinergic and antiserotonineric, recommended for schizophrenia, bipolar disorder,

depression and anxiety (Healy, 2008). Upon the drug's approval, the *Brief Psychiatric Rating Scale* established that out of 18 symptoms (without differentiating primary from secondary) on a scale from 1 to 7, after six weeks of administration, there was an average improvement of 2.82% of the 126 possible items, without specifying which. It is denied that the drug may produce tardive dyskinesia, as was the case with previous antipsychotics, but it is not possible to know this for sure in such a short span of time because this malady appears after long use of a drug, sometimes after many years. Furthermore, no information was given as to whether the patients were receiving other prior treatments, something essential for making conclusions, nor was any information given regarding the duration of the disorder (Valenstein, 2005). None of this, however, has prevented the massive commercialization of this drug whose side effects will be communicated to the manufacturer by psychiatrists bound to contracts protected by xxx confidentiality clauses.

We could narrate countless such stories, like that of the SSRI (Selective Serotonin Reuptake Inhibitors), which have succeeded in making the general public believe that every acute case of sorrow is a case of depression (Horwitz and Wakefield, 2007; Illouz, 2008), and that there are scarcely any psychological factors at work in depression or anxiety, even though drugs are only effective in 50% of those patients who are treated with drugs without receiving psychotherapy, but in 80% of patients in which drugs are combined with psychotherapy, something that is chemically unexplainable (Cia, 2007). According to Richard Bentall, placebos have a similar rate of effectiveness (Bentall, 2011).

Eli Lilly's success with its Prozac was the result of marketing it together with the serotonergic theory of the disorder, thanks to the publication of 50,000 copies of its manual for family practitioners — the professionals in charge of prescribing the drug because they are more numerous than psychiatrists. Family practitioners are permitted to prescribe drugs with a quick diagnosis following the guidelines of DSM IV.

If depression were simply due to a lack of serotonin, could we then say that headaches are a result of a lack of acetylsalicylic acid? Obviously not, although it tends to alleviate headaches just as Prozac sometimes alleviates the symptoms of depression — without acting upon its root causes. This view is comprehensible, though, if we take into account that the symptoms of depression correspond in part to those of the neuroses of old, which are no longer part of any clinical chart, or to the classic melancholia. Eli Lilly, however, sold \$2.5 billion worth of Prozac in 1996 alone, of which \$1.73 billion were sold in the United States. Its competitor, Pfizer's Zoloft, sold one billion dollars, thus totaling sales of \$4.5 billion of SSRIs in that one year.

The clinical use of these drugs has increased quickly. In 1996 there were 600,000 children in the United States medicated with Zoloft, Paxil and Prozac, an annual increase of 298%. The same occurred with Ritalin — the miracle cure for

attention deficit disorder — with 2.5 million children under medication in 1995, a full 5% of the school age population, compared to 3% the previous year. Then we have the antipsychotic Zyprexa used for treating restless fetuses, as described by David Healy (Healy, 2008).

It is obvious that advances in psychopharmacological research, clinical use of drugs and financial interests go hand in hand. The problem comes when those interests establish absolute control, concealing the side effects of the drugs they place in the market, promoting them as miracle cures to an ever greater number of people for the sole purpose of earning greater profits, and denying the complex nature of the so-called mental disorders in areas as complicated as sexuality, the thinking process, language, social and occupational problems, religious ideas, etc.

Psychiatric research has a complex epistemology which has been the object of study by numerous authors such as Rachel Cooper (Cooper, 2007), Jennifer Radden (Radden, 2004), Edward M. Hundert (Hundert, 1990), Maxwell Bennet (Bennet, 2007), and Tulio Maranhao (Maranhao, 1986). It is not possible to search for simple causes, but this is exactly what is being done thanks to a great reductionist process and to the control which the large publishing concerns have managed to establish over the field of psychiatry. The journals published by these companies are now considered the only depositories of scientific truth. They are protected by their publishers, and they are financed by the pharmaceutical industry and professional associations.

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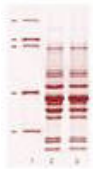
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