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Romanticism and schizophrenia. First part: The recency hypothesis and the core Gestalt of the disease

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Descriptions of irrational, incomprehensible, or unconstrained behavior such as is common nowadays in patients suffering from severe mental disorders can be found in the Bible, in Mesopotamian scripts, in classical Greek and Roman literature, and in the writings of many non-Western cultures. However, the presence of full-blown features of schizophrenia as seen today in psychiatric settings is controversial. Typical symptoms, the expected onset, duration and outcome, the impact of the disease on psychic functioning and the associated disability of the disease are mostly absent in those texts. Torrey (1980) and Hare (1988) have claimed that the disease did not exist before the year 1800 (this is known as the recency hypothesis). This would be the consequence of biological factors such as viruses, genetic or dietary factors or environmental contaminants associated to civilization. Others have put the emphasis on industrialization and its repercussions on social conditions such as family structure and migration.

After analyzing the many manifestations of insanity in literary characters, in medical texts and in key historical figures, the arguments presented in this paper tend to support the recency hypothesis. A review of the core characteristics of schizophrenia and its impact on selfhood, intersubjectivity and ipseity, topics relatively neglected in recent psychiatric literature, opens the doors to consider in a second part the relationship between the features of Romanticism, starting by the "discovery of intimacy", and its articulation with the disturbance of ipseity and selfhood characteristic of the disease.

Keywords: Schizophrenia, Hypothesis of the recent appearance (recency) of schizophrenia, History of psychiatry, King Lear, Don Quixote, Individuality, Selfhood, Ipseity, The fundamental alteration of schizophrenia

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Romanticismo y Esquizofrenia. Primera parte: La Hipótesis de la recencia y el núcleo fundamental de la enfermedad

Podemos encontrar en la Biblia, en tablillas de Mesopotamia, en la literatura clásica griega y romana y en los escritos de muchas culturas no occidentales, descripciones de comportamientos irracionales, incomprensibles o fuera de control, tal y como es frecuente en nuestros días en pacientes con trastornos mentales graves. Sin embargo, la presencia en tiempos antiguos del cuadro completo de la esquizofrenia que vemos hoy en día en nuestros servicios psiquiátricos es cuestionable. De hecho, los síntomas típicos, su inicio, sus características, su duración y su estado final no aparecen con nitidez. El impacto de la enfermedad sobre el funcionamiento psíquico y la discapacidad asociada a la enfermedad están en su mayoría ausentes en esos textos. Torrey (1980) y Hare (1988) afirman que la enfermedad no existía antes del año 1800 (esto se conoce como hipótesis de recencia). En su opinión, esto sería consecuencia de factores biológicos, como virus, predisposición genética, factores dietéticos o contaminantes ambientales asociados a otras consecuencias de la civilización. Otros han puesto más énfasis en la industrialización y sus consecuencias sobre determinadas condiciones sociales, tales como la estructura familiar y la migración.

Después de analizar las múltiples facetas de la locura en personajes literarios, en textos de medicina y en diversas figuras históricas, los argumentos que presentamos tienden a apoyar de la hipótesis de recencia. Una revisión de las características nucleares de la esquizofrenia, de su impacto en la vivencia del yo individual, en la intersubjetividad y en la ipseidad, temas que están relativamente descuidados en la literatura psiquiátrica reciente, nos abren las puertas para considerar en una segunda parte la relación entre las características del romanticismo, empezando por "el descubrimiento de la intimidad", y su articulación con la alteración de la ipseidad y de la subjetividad característica de la enfermedad.

Palabras clave: Esquizofrenia, Hipótesis de la aparición reciente (recencia) de la esquizofrenia, Historia de la psiquiatría, Rey Lear, Don Quijote, Individualidad, Mismidad, Ipseidad, Alteración fundamental de la esquizofrenia

INTRODUCTION

Based on epidemiological and historical data, Torrey reached the conclusion, in 1980, that schizophrenia as we know it nowadays may not exist before 1800, and that this fact was the consequence of (modern) civilization as specified by the title of his book: *Schizophrenia and Civilization*¹. Torrey affirms "viruses combined with familiar or genetic factors, although dietary factors and environmental contaminants must be kept in mind. Schizophrenia and civilization, then, are correlated, and the relationship is probably controlled by biological factors." In order to reach his conclusions, Torrey took into account differences in the prevalence and severity of schizophrenia in developed and developing countries and between higher and lower social classes within the same country.

In 1998 Hare² took up again the hypothesis that schizophrenia was a recent disease and no cases were described before 1800. Hare also considered why the prevalence of insanity in the Western world increased during the nineteenth century³-in England first admissions doubled between 1869 and 1900-, but remained low in the non-Western world until the twentieth century, and the fact schizophrenia has become milder in the West during recent decades³. This so called recency hypothesis also explains why schizophrenia prevalence remains relatively stable in spite of being associated with low fertility⁴, which is somewhat discordant with a straightforward genetic effect. Hare coincides with Torrey in suggesting that mutation of an infectious agent or a change in the immunological defenses of the general population might have been a key, necessary biological event. Hare's theory predicts that schizophrenia will decrease in severity and incidence, as this may already be the case³.

More recently, Torrey et al.⁵ have examined the records on insanity in England, Ireland, Canada, and the United States over a 250-year period, concluding, through both qualitative and quantitative evidence, that insanity is a modern-day plague which has not got the awareness it deserves. The prevalence of insanity (including schizophrenia, bipolar disorder and other severe mental illness) has increased since 1750 from less than one case per 1000 total population, to beyond five cases in 1000. Between 1840 and 1955, the number of "mentally ill" people in the United States soared from 2561 to 558922. During that same

period, the U.S. rate of mental illness rose from 0.15 cases per 1000 to 3.38 per 1000. The reasons for this increase in prevalence are controversial. On one side are those who claim that the increase reflects a sustained expanding view on madness⁶ and changes in the characteristics of the inmate population⁷. On the other are those who claim that the disease is actually an epidemic, considering that the increase involve only the more severe cases and is limited to schizophrenia.^{3,5} Torrey et al. identified the year 1750 because that was around the time when Samuel Johnson and a few of his contemporaries in England, first claimed that insanity was increasing. Decades later, writers such as Dickens, Poe, Melville, and Hawthorne wrote their stories on insanity, because their public was intrigued by the subject. There was, in fact, widespread concern about rising insanity in the nineteenth century.

Torrey et al. have devoted decades to the study of the role of infectious agents in schizophrenia⁸, and insist on the opinion that the increase in prevalence is due to possible biological causes (infectious agents, changes in diet and exposure to toxins) brought up by industrialization and especially urbanization. They also believe that the recognition of the presence of an epidemic could enable us to better understand why so many psychiatrically disordered individuals fill our streets, public parks, and jails today.

The recency hypothesis as formulated by Hare is based on three main aspects:

1. There are no cases of schizophrenia before 1800. (Although the evidence recommends putting back the threshold to a generation earlier, in the decade of 1760-1770).
2. The incidence of schizophrenia increase dramatically during the nineteenth century in developed countries.
3. The incidence and severity of schizophrenia has decreased in the course of the last forty years in developed countries.

The first consideration is the main topic of this first part and in what follows we will review the evidence that supports this claim. First we review the evidence in medical, historical and literary materials along history up to the end of the eighteenth century. Then we will look for possible explanations for such a remarkable fact. Finally, we will consider what the core characteristics of the disease are. In a second part⁹ we will review the nature of the events taking place in the Western world in the second part of the eighteenth century and to finish we will put forward a new hypothesis which may explain the emergence of the disease at a particular moment of history, get to know better its impact on subjectivity and the features of the society in which we have to live.

SCHIZOPHRENIA BEFORE 1800

The literary evidence

There is no evidence of schizophrenia in Ancient Greek and Roman Literature. A systematic review of the Greek and Roman texts from the fifth century BC until the second century AD carried out by Evans et al., came to the conclusion that there is evidence that psychotic symptoms were known, but no character meets modern diagnostic criteria (DSM-IV) for schizophrenia.¹⁰ In *The Characters* of Theophrastus (ca. 371 - ca. 287 BC)¹¹ there is a description of thirty-two different types of human beings. Some are familiar to clinicians today due to the presence of poor impulse control or obsessive or paranoid traits, as in the cases of the overzealous man, the superstitious man, the suspicious man, the garrulous man and the vicious man. But, there is not a single case in which the characters of Theophrastus bear a resemblance to schizophrenia. In a similar way, there is no evidence of schizophrenia in the middle Ages.¹²

There is some contradictory evidence put forward by Jeste et al.¹³ concerning ancient India and Rome and by Ellard¹⁴, referring to the records of Richard Napier (1559–1634), an astrological physician and a Church of England clergyman, suggesting that the condition closest to our modern category of schizophrenia is *mopishness*. Mopish means listless, apathetic, or dejected and to mope is to be sunk in dejection or listlessness. As Ellard¹⁴ has pointed out, the meaning of to mope about continues to have a element of aimlessness and inefficiency and suggests that mopishness reflected "a cognitive disorder of the kind that we associate with schizophrenia". Nevertheless the sound of the word mope is somehow suggestive of low feelings (cf. Low German *mopen* 'to sulk', Dutch *moppen* 'to grumble', 'to grouse')¹⁵. Actually, this list of adjectives can be applied to many conditions other than schizophrenia. Turner¹⁶ built his case against the recency hypothesis by taking into account the bias of Napier's patients, all of them belonging to the low social class as well as the symptom interpretations and classifications employed by MacDonald¹⁷.

According to Youssef et al.¹⁸, medieval Islamic physicians probably diagnosed and treated many cases of schizophrenia. However, although they put forward important evidence of the high standard of medieval Islamic medicine, of the descriptions of melancholia and severely disturbed mentally ill people they fail to produce any substantiated cases that resemble modern patients with schizophrenia. For instance, they quote the story of a man who believes that he is a bird, that he builds and wears wings to jump off a terrace, killing himself. In this case, differential diagnosis would have to include several conditions beside schizophrenia. The same applies to other patients displaying odd behavior, who supposedly did suffer from schizophrenia.

Many characters (Othello, Hamlet, King Lear, and Macbeth) in Shakespeare's plays exhibit evident traits of psychopathology (melancholy, delusions, hallucinations) but none remind those of an individual with schizophrenia¹⁹.

Several papers on the psychological and psychopathological aspects of the characters of King Lear play, pay no attention to a possible diagnosis of schizophrenia present in the King or feigned by Edgard. The issue of madness is the core of the plot in King Lear. However, the diagnosis on the King's disease mentioned in the psychiatric literature include dissociative amnesia²⁰, destructive narcissism²¹, dementia with Lewy bodies²², mania, senile dementia, delirium, depression, and brief reactive psychosis and, based on modern diagnostic criteria, bipolar I disorder, most recent episode manic, severe with psychotic features²³. Schizophrenia does not appear in the list.

In general, analysis of the psychological aspects of Lear's madness conclude that it is the manifestation of the fundamental anxieties of old age: the dread of being abandoned to a state of utter helplessness due to grief, solitude or illness, often manifested as a narcissistic tyranny²⁴. The fact is that in Shakespeare's play, madness is displayed as "dotage", associated with "senility" or "rage", and as possibility this is expressed by the King himself: *O fool, I shall go mad; O let me not be mad, not mad sweet heaven*²⁵.

In the character of King Lear there are traits that are interesting from a psychoanalytic perspective such as regression to the infantile disposition of a child wanted to be mothered by his daughters, especially Cordelia²⁶ (*Old fools are babes again*). Freud considered Lear rejecting death, unwilling to face the finitude of his being.²⁷ Tangunma²⁸ sees King Lear as an "emotionally homeless person" with no room for emotional self-expression, that would explain his descent into madness.

King Lear is not deceived by supernatural forces as Macbeth is. His delusions are of his own and consequently he holds on to them in despite all the exhortations of other characters. The inner nature of his delusions prevents him to recognize reality.²⁹

Most important, the drama is all about the conflict between two notions of nature (the words "nature," "natural" and "unnatural" occurs over forty times in the play): 1) the old medieval, feudal view of the doting King (and Gloucester, Albany and Kent) and 2) the new rational, Machiavellian view of Edmund, the natural son of Gloucester (and Cornwall, Goneril and Regan) which represents the dawn of modernity. The conflict has two layers, the psychological and the social one. Lear being at the core of the conflict is the protagonist of a drama which turns into a tragedy. The collapse of reason as the focal point of the play

is an offense to the divine *ordo* which is consequently overthrown²⁹ paving the way to the emergence of "demoniac" powers. According to Tellenbach³⁰ the destruction of the natural man brought about by Lear's madness is the consequence of the demoniac forces in the sense of Goethe. The "demoniac" refers to the internal power capable denoting on the human actions. Human beings can hardly escape them, primarily because they are for the most part unaware of them. These forces adopt the appearance of the angelic, of the divine of providence, while simultaneously, the incomprehensible and arbitrary elements of our existence, that are the farthest from reason, manoeuvre in the background. The dilemma is insoluble because it tends to the impossible, leading King Lear, a man that would rather go mad or die than weep^{25,31}, and to bellow to the storm:

*Rumble thy bellyful! Spit, fire! Sprout, rain!
Nor rain, wind, thunder, fire are my daughters.
I tax not you, your elements, with unkindness;
I never gave you kingdom, called you children.
You owe me no subscription. Then let fall Your horrible
pleasure. Here I stand your slave,
A poor, infirm, weak, and despised old man. (3.2 L
14-20)*

In summary, there is nothing, really nothing, about schizophrenia in Shakespeare's drama, but only madness arising in conflicting transition moments of history. The same applies to characters described in the *Examen de ingenios para las ciencias* ("The Examination of Men's Wits") by Juan Huarte de San Juan³², despite being the author a physician.

The case of Don Quixote requests more attention due to the fact that many psychiatrists and eminent physicians have fallen into the temptation of endorsing a clinical diagnosis to the Ingenious Gentleman and even to Sancho Panza, his faithful squire. Pinel³³ was the first to consider Don Quixote as a typical case of monomania, a disease renamed paranoia by Kraepelin³⁴ and persistent delusional disorder by DSM-III³⁵. Actually most of the diagnoses turn around this diagnosis and not about schizophrenia.^{36,37} Cervantes has been considered without any reason for it, an excellent "nosographer", even considering the novel as a paradigmatic description of schizophrenia³⁸. Hernández Morejón in 1836 mentions the diagnosis of choleric melancholia in the most traditional sense of the humoral pathology.³⁹ Royo Villanova's diagnosis is more precise "chronic paranoia or systematic delusion, expansive type, megalomaniac in form and of the philanthropic variety".⁴⁰ More recently Bailon's diagnosis is atypical depression⁴¹ or paranoid melancholy⁴². In a parallel way, Sancho Panza would fulfill criteria for shared psychotic disorder^{36,37}, if at all.

Alonso Fernández⁴³ considers that Don Quixote suffers from a megalomaniac systematized delusion of self-

transformation, a delusion of metamorphosis in reference to the patient's own identity. The outward projection of this syndrome produces delusional misidentifications of others, objects and animals and include elements of a persecutory delusion which increase the grandiosity of the self. In a latter publication, Alonso Fernández builds his diagnosis around a bipolar disorder⁴⁴ which he had discussed in previous publications.

There are several authors who have dared to point out the causes of the "disease" of Don Quixote. The forensic anthropologist José M. Reverte discards the intake of alcohol or drugs and previous infectious processes and mentions two possible causes, age and vitamin deficiency.⁴⁵ Others have highlighted an extreme celibacy deprived of religious significance, or exhaustion and lack of sleep⁴⁶. Cervantes considers the latter when he writes that Alonso Quijano "spends nights awake and days cloudy in murky" and for that reason "the brain dries and he loses his mind"⁴⁷.

Sánchez Granjel mentions two other possible causes: the repression of a sexual needs imposed on him by his own personal constitution, and the way he was forced to behave because being a gentleman.^{48,49}

From a psychodynamic perspective Don Quixote has been considered as suffering from a regressive identification with the phantasy of an aggressive and impotent father⁴⁶ or as a narcissistic personality, actually as a narcissistic leader who, being out of touch with reality was constantly saved from disaster by his squire Sancho Panza⁵⁰.

In spite of all these opinions the fact is that, as in the case of others characters in the literature, *The Ingenious Gentleman Don Quixote of La Mancha*, is not a pathobiography and it was not Cervantes' intention to write a report on a clinical case. Furthermore, it is irrelevant if Cervantes may have known actual cases at the *Hospital de Inocentes* in Seville or while accompanying his father who was a barber.

The very least that we can say about labelling the character of Don Quixote with a psychiatric diagnosis is that it would be improper to do so. Diagnostics are not supposed to be formulated to define an individual, but to categorise a disease, which is an accident in the life of a person⁵¹. As a consequence Don Quixote defies any diagnostic labelling.⁵² And not only that. What would have happened of Cervantes' character *The Ingenious Gentleman Don Quixote of La Mancha*, if he had laid on a coach for psychotherapy⁴⁶ for his narcissism, or put on antipsychotic medication for his delusions or on lithium for his bipolarity? Absurd!

On the other hand, two different types of insanity have been considered throughout history, only one of them being considered pathological. This difference appears in English

in words crazy and mad. Don Quixote is more a crazy person than mad individual.

In 1509, almost one hundred years before Cervantes' novel, Erasmus of Rotterdam in his *The Praise of Folly*⁵³, considers the crazy goal of fighting to achieve a world full of peace, justice and love. Erasmus considers that the antonym of crazy is discreet. It is so that Cervantes mentions that Don Quixote is engaged in *discretas locuras* ('discreet follies', 'shrewd lunacies') and in another place he refers to *locura entreverada* ('interweaved craziness'), most probably knitted with discreteness.

Others have considered along the same principle, the insanity of Don Quixote as "sublime craziness"⁵⁴, described as lucidity of a revolutionary individual who wants to transform the world. But living foolish is not the same thing as to be the victim of a disease. A mental disease is something that "you have", but crazy "you are", in the second case, madness is the consequence of an existential project itself⁵⁵.

At all events, the story of Don Quixote is not an account about insanity, it is about human life in general⁵⁵, it is the chronicle of a myth⁵² in a period of turbulence. *Don Quixote* is a literary work on a transitional age, as we have mentioned was also the case of Shakespeare's *King Lear*. We will come back to this point later.

In the short novel *El Licenciado Vidriera* ("The Lawyer of Glass")⁵⁶ also of Cervantes, Tomás, the main character, is convinced that his whole body is composed entirely of glass. In spite of the fact that his convictions and behaviour described have a clinical interest, it is clear that it was never the intention of the author to explore the psychology or psychopathology of Tomás, the protagonist.

The historical figures

Some historical figures have been claimed to have suffered from schizophrenia during certain periods of their lives. We will consider those who have attracted more attention.

The Reverend Georg Trosse in the years 1656-7 suffered from affective psychotic episodes, of which he left a precise written description. However no features of schizophrenia were present and the episodes are generally thought to have been induced by alcohol.⁵⁷ Trosse described hearing divine and satanic voices and he experienced visions and suicidal "temptations". He recovered and then relapsed over a period of weeks or months. Jeste et al.¹³ applied DSM-III criteria retrospectively to the autobiography and concluded that Trosse suffered from schizophrenia. However, Hare⁵⁷ reviewed the same case material in more detail and noted that Trosse was so drunk on the day the illness began that he

fell from his horse and had to be put to bed. Indeed, alcoholic psychosis and mood disorder in a man who certainly abused ethanol have been regarded as the most plausible diagnosis.

Heinrichs⁵⁸ mentions another case: Opicinus de Canistris (1296-1350) who wrote an account of his illness in such a manner:

I had forgotten everything and could even not remember how the world looked outside of our dormitory. On June 3, after Vespers, I saw a vessel in the clouds. In consequence of the disease I was mute, my right hand was lame and I had lost in a miraculous way a great deal of my literal memory (= positive knowledge). In the night of August 15, I saw in a dream the Virgin with the child in her lap, sadly sitting on the ground; and through her merits she has given me back not the knowledge, but a double spirit. Since February 1, 1335, I began to retire, bit by bit, from my work in our office (the Poenitentiaria) because of the weakness of my hand. In a spiritual work however this same hand proved stronger than before: since then it has drawn all these pictures without any human help. At present my lost literal knowledge is replaced twofold by spiritual knowledge; my right hand is weak in worldly work, but strong in spiritual endeavors.⁵⁹

Most of the pictures drawn by Opicinus are in the form of concentric rings, very much like those of Hiedgard von Bingen. That most extraordinary woman was supposed of having suffered from migraine attacks and illusions.⁶⁰ This opens up the possibility of considering the self-description of Opicinus as the consequence of a *migraine accompagnée* which would also be the origin of the visions which were put into pictures. In any case, Opicinus resembles in no way to a patient suffering from schizophrenia.

In spite of other opinions⁶¹ King Henry VI of England suffered from bipolar disorder with paranoid and grandiose delusional symptomatology during periods of excitement and apathy, loss of vitality and neglect in self-care in the periods of despair, but he did not suffer from schizophrenia.

The fact that Joan of Arc heard voices and that the voices had an important influence on her behavior, has raised doubts about a possible psychiatric diagnosis. The evidence is that she probably suffered from idiopathic partial epilepsy with auditory features (IPEAF)⁶² or from ecstatic epileptic auras similar to those of St. Paul, of the prophet Mohammed or of Dostoevsky. Alternative proposed diagnoses such as creative psychopath,^{63,64} temporal lobe tuberculoma in the context of a chronic disseminated tuberculosis,⁶⁵ a diagnosis criticized by Nores et al.⁶⁶, or schizophrenia cannot be confirmed⁶⁷.

This saints and martyrs are other obvious candidates for consideration as suffering from schizophrenia. However, as

Kroll and Bachrach⁶⁸ have shown in their detailed work on medieval texts that "*people who heard voices ... considered themselves, and were considered by their contemporaries to have had actual perceptual experiences of either divine or satanic inspiration*". A review of the Life of St. Teresa of Ávila, especially Chapter 25 on "locutions which God bestows on the soul", illustrates such phenomena very clearly^{69,70}:

They consist on well-structured words, but they cannot be heard with the bodily ears, although they are very clearly understood; and it is impossible to resist to this understanding. Because when we not want to hear, we can cover the ears or direct our attention elsewhere, so that even hearing there is no understanding. In this God's talk to the soul there is no remedy but, even though I resist, I do listen and understand what God wants to be understood, and it is not enough to want or not want.

One of the most famous cases is Johann Christoph Haizmann (1651-1700), a Bavarian painter whose story came to light in the sanctuary of Mariazell in Austria at the end of the nineteenth century in a book titled *Trophaeum Mariano-Cellense*.

The story goes on like this: After the death of his father in 1668, the destitute painter Johann Christoph Haizmann entered into a pact with the devil which involved nine years of service to Satan. The pact was written in ink and sometime later a second pact was signed with blood. On August 19th, 1677 Haizmann was seized by heavy convulsions and decided to go to the monastery Mariazell, which was well known for the miraculous interventions that took place there. And so it came about, after a round of exorcisms, the ink pact was "miraculously" returned to him by Satan himself, who appeared in the form of a winged dragon and Haizmann suddenly found himself free of the Devil's influence. But, shortly after the seizures began again this time accompanied by hallucinations of Christ and the Virgin Mary, and paralysis in his legs. Haizmann then remembered the pact that had been signed in blood. A second pilgrimage to the monastery led to more exorcisms, and finally the contract written in blood was returned and Haizmann was released from the Devil's domination. Haizmann painted the devil himself in a series of pictures as he appeared in the church of Mariazell to give him personally back his pacts, and the collection has been kept to this day at the monastery. None of the pictures has the characteristics of the productions of people with mental diseases, as they are just representations of the lay beliefs about the devil, bearing a long tail and horns under the appearance of a dragon.

The case was referred to Freud who wrote a paper on it considering that it was a case castration complex resulting in a demonic neurosis.⁷¹ McAlpine and Hunter⁷² have

interpreted the religious experiences of Christoph Haizmann as resulting from schizophrenia, although a careful consideration of the evidence does not, in our view, give sufficient grounds for such a conclusion. Otsuka et al.⁷³ consider that Haizmann's case fits the model of schizophrenia basing their arguments on the concept of "bizarreness". They assert that bizarreness is the manifestation of a relative deviation from the social and cultural norms of a particular epoch, and, as such, being an important indicator of the presence of schizophrenia. Contrary to Otsuka et al. opinion, Haizmann's words and actions are not discordant and bizarre if they are placed in the religious framework of the seventeenth century. Perceptual experiences of either divine or satanic inspiration were considered as real by the contemporaries of Haizmann and the fact is that Mariazell sanctuary was recognized for centuries as a place where satanic possessions could be overcome.

The case of the German-Austrian sculptor Franz Xaver Messerschmidt (1736-1783) who produced a collection of sixty-four busts with highly exaggerated facial expressions may be considered as a case of schizophrenia, in spite of lacking evidence from clinicians. But, if so, his case does not invalidate the recency hypothesis, on the contrary, it gives more strength to it, because the first suspicious symptoms appeared in Messerschmidt in 1770-72, when he began to work on his so-called character heads. Those busts were associated with paranoid ideas and hallucinations, as reported by Ernst Kris⁷⁴. At this period of time, Messerschmidt found himself increasingly at odds with his environment and as a consequence he spent the last six years of his life in an almost complete seclusion, in the outskirts of Bratislava where he devoted himself primarily to produce his character heads. In 1781, Friedrich Nicolai visited Messerschmidt in his studio⁷⁵. It appears that for many years Messerschmidt had been suffering from an undiagnosed digestive complaint, now thought to have been Crohn's disease, which caused him considerable discomfort⁷⁶. In order to focus his thoughts away from his condition, Messerschmidt devised a series of pinches which he administered to his right lower rib. Observing the resulting facial expressions in a mirror, Messerschmidt then set about recording them in marble and bronze. His intention, he told Nicolai, was to represent the sixty-four "canonical grimaces" of the human face using himself as a model.

During the course of the conversation, Messerschmidt went on to explain his interest in necromancy and the arcane, and how this also inspired his character heads. Messerschmidt claimed that his character heads had aroused the anger of *der Geist der Proportion*, 'the Spirit of Proportion', an ancient being who safe-guarded this knowledge. The spirit visited him at night, and forced him to endure humiliating tortures.

Given Nicolai's description of how Messerschmidt worked, without models and with constant reference to his own face in the mirror have led to the conclusion that some of the busts must be self-portraits^{58,76}. The expressions, it follows, are the grimaces evoked by his pain sensations, self-induced pinching, and attempts to fend off the demon of proportion.

Nicolai's description of Messerschmidt does not include the eighteenth-century German words for insanity (*Wahnwitz*, *Wahnsinn* and *Verrücktheit*) as the emphasis is put on the natural forces like imagination and genius and their consequences for both "sickness of the mind" (*Krankheiten des Geistes*) and sickness of the body^{58,76}. Actually, in the absence of a clinical description by a physician, neither the aspect of Messerschmidt's heads nor the psychological traits of the sculptor allows a definite diagnosis of schizophrenia. This doesn't mean that he did not have them, only that they are not evident for us today. In any case, if Messerschmidt had suffered from schizophrenia he would have been the first case in the history of the disease, and the date of the appearance of the first manifestations, 1770-72, would fit with our hypothesis that the cue date to consider the events that are significant for the outbreak of the disease is the decade of 1760.

THE FIRST CASES OF SCHIZOPHRENIA

Taking into account all the evidence that is now available to us, the key date for the events that led to the appearance of schizophrenia is 1760, and this is an essential element of our pathogenic hypothesis. There are descriptions in the medical literature which occur in the last third of the eighteenth century. Cases clearly identified are posterior to the decade of 1760. As we have seen, Messerschmidt may become the *princeps* case, but of course, this is not an argument against the recency hypothesis.

The first descriptions of schizophrenia published in scientific journals in Germany appeared between 1790-1830⁷⁷. Shortly before this, Karl Philipp Moritz edited the first neuropsychiatric and psychological journal, *ΓΝΩΘΙ ΣΕΑΥΤΟΝ - Magazin zur Erfahrungsseelenkunde* (1783-1793). The title consisted on the advice which stood at the entrance of Temple of Apollon at Delphi, *gnōthi seauton*, 'know thyself', followed by the description of the scientific domain of the publication: Journal of Empirical Psychology⁷⁸. Moritz is known for his biographical novel Anton Reiser (1785-1790)⁷⁹, which echoes the ideas of the Enlightenment and is inspired by Rousseau. The novel, one of the very first examples of psychological literature, rendered greater significance to the hero's mental processes than on his outer achievements.

In his call for contributions to the Journal, Moritz solicited reports from anybody who was interested in contributing to the advance of knowledge about the human psyche, aiming to create a "mirror for the human species". The Magazin included articles on the psychology of language and education, on psychotherapy and parapsychology.

The ten published volumes include 124 psychiatric or neurological case reports which have been recently reevaluated.⁷⁸ The psychopathological descriptions are so accurate that delirium, delusional, catatonic or hysterical states and mood disturbances can be clearly identified. Descriptions of ten male and three female patients are highly suggestive of early-onset schizophrenia. Eight individuals were retrospectively diagnosed as late onset schizophrenia or paraphrenia. Here is one example from volume 1 of the Magazin (1783):

Doctor Pihl visited Mr. D, a former local merchant, in order to investigate his mental state and he found him in a peculiar outfit. He was dressed in a sleeping gown and wore several iron rings around his body. On his head he wore a huge construction of linen cloth and caps, affixed with ribbons, fine iron bands and attached paper etc. His bed was also prepared with iron rings and plates, etc. When doctor Pihl asked why he wore this outfit and took such strange precautions, he answered that he had to do so because evil spirits would not let him have a single moment of peace. They seared him night and day, had torn out his lung and liver, snatched large parts of his skin, etc. (...) Mr. D. believed he was a direct messenger of the Holy Trinity, who had now taken over the government of the earth and that the power of all kings and princes was despised and abolished. He in particular had received the order to watch over the keeping of order and justice, and to ensure that houses were in a good state although some of them could be in wretched condition. At the beginning of his madness, Mr. D. had therefore gone into many houses and, to further his task, gave order to their proprietors to have them rebuilt immediately.

This clinical description was followed by other cases that are suggestive of schizophrenia in the German psychiatric literature, all post 1800: J.C. Hoffbauer (1803), J.C. Reil (1803), J.C.A. Heinroth (1818) and K.W. Ideler (1835)⁷⁷.

Meanwhile, in England William Perfect described a series of cases of mentally ill people where some of the traits of schizophrenia are identifiable. Perfect was a general practitioner with an interest in mental diseases who kept a private madhouse at West Malling in Kent. His book was published in 1787^{80,81}. The cases are numbered from one to 108, but the content is not as orderly as the enumeration

would suggest. One of the patients described under the heading of case 77 is a gentleman,

Who although consistent in most other matters, always prefers walking in a retrograde manner; the reason for which he says is to prevent meeting any person whom he dislikes, and to preserve his shoes from wearing out at the toes; and he is so irregular in walking the streets, as to induce those who observe him to point and laugh at him for a fool. Sometimes he is very deliberate in his gait, as if absorbed in meditation; at other quickening his step, accompanying it with ludicrous attitude, but for the most part is fond of walking backwards for the reasons before assigned.

We are forced to admit that this is not a clear-cut case of schizophrenia and that psychiatrists assessing the evidence today would make a differential diagnosis of several possible disorders, and would not consider schizophrenia as the first option.

In 1797 John Haslam^{82,85} published an extremely well documented book on James Tilly Matthews, a tea merchant, who had engaged himself on his own initiative, on an unofficial mission to initiate peace negotiation during the war between France and England. He was arrested in France where he was considered to be insane. Back in England he continued to believe himself controlled by a mysterious "air loom". Considering the government to be under its influence as well, he went so far as shout out "Treason!" in the House of Commons. He was arrested and confined at Bethlem Hospital, by then nicknamed Bedlam.

Matthews was convinced that beyond the grounds of Bethlem Hospital, in a basement cellar by the London Wall, a gang of villains were controlling and tormenting his mind with diabolical rays. They were using a machine that he called an "air loom", of which Matthews was able to draw precise diagrams, and which combined recent developments in gas chemistry with the strange force of animal magnetism, or mesmerism. It incorporated keys, levers, barrels, batteries, sails, brass retorts and magnetic fluid, and worked by directing and modulating magnetically charged air currents, rather in the same way as the stops of an organ modulate its tones. The device ran on a mixture of foul substances, including "spermatic-animal-seminal rays", "effluvia of dogs" and "putrid human breath", and its discharges of magnetic fluid were focused to deliver thoughts, feelings and sensations directly into Matthews' brain. There were many of these mind-control machines, all classified by vivid names: "fluid locking", "stone making", "thigh talking", "lobster-cracking", "bomb-bursting", and the dreaded "brain-saying", whereby thoughts were forced into his brain against his will. To facilitate this process, the gang had implanted a magnet into his head. As a result of

the "air loom", Matthews was tormented constantly by delusions, physical agonies, and fits of laughter and was forced to parrot whatever nonsense they chose to feed into his head.

We should remember that in 1733 John Kay had patented the *flying shuttle*, a key development in weaving that was to become a symbol of the Industrial Revolution. Matthews' inner world was inhabited by de-personalized characters, which were only half-human or half-self. In a sense Matthews is a Promethean modern man dominated by technology, in his case a loom, in a similar fashion as the original Prometheus became to be dominated by his discovery, fire.

Matthews also believed that there were many *air loom* gangs all over London, influencing the minds of politicians and public figures, and was convinced that they had a particularly firm grasp of the Prime Minister, Mr. William Pitt Jr. They were lurking in streets, theatres and coffee-houses, where they tricked the unsuspecting into inhaling the magnetic fluid which would place them under the control of the *air loom*. By poisoning the minds of politicians on both sides of the Channel with paranoid "brain-sayings", they were threatening to bring about a national and an international catastrophe

The psychopathology of politics, too, crystallized into Matthews' delusion. In the view of the conservatively-minded political commentators of those years, the seemingly random events of the French Revolution would surely ultimately result in the destruction of the Monarchy and the Church were actually the product of the design of a handful of freemasons. Politicians, according to these observers, were no longer legitimate decision-makers but the mere puppets of plotters. Matthews' delusions chimed with such conspiracy theories: people, including politicians, were not acting of their own free will, but were being manipulated by the vicious gang. The inner world of Matthews was thus the harbinger of the morbid imaginings about a conspiracy theory⁸⁶, which is a common delusion in schizophrenia.

In spite of these manifestations the two doctors in charge of Matthews at Bethlem (Thomas Monro and Bryan Crowther), did not consider him to be insane. Nor Matthews relatives ever accept the possibility of insanity and they even managed to engage two London doctors (Henry Clutterbuck and George Birkbeck), to examine him independently. Both of these concluded that Matthews was in his right mind, and that his alleged symptoms of madness - hostility to authority and insistence that he was being conspired against - were clearly understandable as the response of a sane man unjustly confined. Later on Matthews was sent to a private institution, the Fox's London House, where the director, Dr. Fox himself, was also unable to confirm his insanity.

Haslam, the hospital apothecary, wrote-up Mathew's case in an attempt to demonstrate that the doctors had no understanding either of insanity nor of Matthews' case. The result is the book, *Illustrations of Madness*⁸², from which the above quotations are taken. In addition there are Matthews' writings, including a manuscript he had written in 1804 calling himself "James, Absolute Sole and Sacred Omni Imperious Arch Grand Arch Sovereign Omni Imperious Arch Grand Arch Proprietor Omni Imperious Arch-Grand-Arch-Emperor Supreme", and offering millions of pounds in rewards to every nation on earth for the capture of the "air loom" gang.

Matthews was a refined and educated person, not the kind of individual to be considered as insane in a period where insanity was equivalent to violent behavior. Both at Bethlem and at Fox House he actually much appreciated by others for his diligence and kindness.

Much has been reported on the circumstances that played an important role in the description of Matthews case: Haslam's insanity defense approach, his eagerness to stand up for his position facing the statements of several physicians, five of them in total, leaving aside the fact that he was an apothecary of Bedlam Hospital, and the public and political repercussions of the case, leading to aspersions on Haslam's probity⁸⁷. At his death a House of Commons Committee came to the conclusion, after hearing many witnesses, that Matthews had been a harmless and talented eccentric, and Haslam's persecution of him had been irrational and sadistic. As a result in 1816, John Haslam was dismissed by the Bedlam governors and his career was ruined.

Hare implies that Haslam describes Matthews' case as "singular" because schizophrenia was relatively rare.² Before Haslam, most published case histories are fairly short and do not describe the symptomatology of a case beyond physical appearance, lunatic behavior, and prominently bizarre ideations. They usually contain enough detail for a retrospective modern diagnosis of chronic psychosis, but they do not make any distinction between chronic organic syndromes, affective mania, and schizophrenia-like cases. Thus, while Arnold, Cullen, Crichton and Darwin all have room for schizophrenia-like cases within their classification systems, they are not clearly separated from other chronic psychoses⁸⁴. Instead, Haslam's description is remarkable for its clarity if we take into account the lack of similar contemporary descriptions. Traditional perspectives remained at the surface of the manifestations of insanity, considering (violent) behaviour, as the main, if not only criterion for the recognition of madness. Haslam's description and analysis of Matthews' inner experiences, which are key for the clinical diagnosis of insanity, is the first psychopathological document of the history of psychiatry. Unfortunately, Haslam's importance seems to have been obscure

by the discredit that overtook him at the end of his professional life⁸⁸, and it is ironic that the Matthews' case was the origin of his disgrace⁸⁹.

In France there is nothing in the scientific literature before Philippe Pinel³³, who in 1801 described patients with inappropriate or flattened affect, looseness of associations and "reduced sensibility to external impressions" under the rubric of *démence*. The term appeared in his "Memoir on Madness" (1794)⁹⁰ and the concept was further clarified in his *Traité médico-philosophique sur l'aliénation mentale; ou la manie*³³, but it is in the second edition of this book (1809) where a series of cases are described. In one of these descriptions the scission of the mental activity characteristic of schizophrenia, as portrayed later by Kraepelin³⁴ and Bleuler⁹¹, is clearly mentioned:

The best way to know about dementia is putting it in opposition with the delusional mania, to fully grasp their dissimilarities. In delusional mania the perception of objects, the imagination, and the memory can be harmed but the faculty of judgment, that is to say, the association of ideas is often preserved. The maniac, for example, who believes himself to be Muhammad, and who coordinates everything it does, everything what he says with this idea, is actually a judgment, but combines two ideas without any basis, that is to say, that his judgment is wrong; (...)

On the contrary, in dementia, there is point of judgment, neither true nor false; the ideas are as isolated, and are born one after the other; but they are not associated with any other, or rather the sharpness of thought is abolished. I can quote for example an insane that I had often under my eyes. (...) He approaches me, looks at me, and overwhelms me with a uninterred exuberant loquacity. A moment later, he turns away and goes to another person to overspill him with his eternal and stitching discourse. His look shines and seems to threaten, but as he is as incapable of a hasty anger as well as he lacks a certain link in the ideas and emotions, the quick bursts of childish excitement that calms and disappears for a blink of an eye. (...) and it seems to be driven by a perpetual bearing of ideas and disjointed moral disorders which disappear and fall into nothingness as soon as they are produced.³³

In summary, if a core syndrome of schizophrenia existed in previous centuries then it would have several characteristics that should correlate with the current manifestations of the disease. First, it would have been a disease of young adults and one that was not transitory, but persisted for years. Second, it would have developed in the absence of drug and alcohol use or medical conditions that can give rise

to psychosis⁵⁸. At all events, in the clinical descriptions of patients since the last decades of the eighteenth century there appears to exist a group of them with earlier onset and a more chronic course, characterized by negative symptoms of Crow's type II variety⁹², in which the core symptoms of the disorder are prominent, that may deserve a particular diagnosis such as Pinel-Haslam syndrome⁹³ or better, Haslam-Pinel syndrome. Hare² however has suggested that "a new type of schizophrenia" appeared, particularly the form known as "adolescent insanity" or "developmental"⁹⁴ in the later nineteenth century. This would imply the presence of a phenomenon of anticipation and not one of recency. It is true that along the nineteenth century. Clouston coined the term "developmental" or "adolescent insanity"⁹⁵, and was an advocate of the term "masturbational insanity"⁹⁵ but that was late in the century (1884). One decade earlier Ewald Hecker, in 1871, had published his paper on hebephrenia ("*a form of mental illness ... associated with ... changes that occur shortly after the onset of puberty*")⁹⁶.

The literary evidence

In contrast to previous periods, the nineteenth century flourishes with fictional characters who seem to suffer from something close to schizophrenia. One might say that each literary tradition has his own character: the protagonist in *Louis Lambert* (the first version was published in 1832) of Balzac⁹⁷; Poprishchin in Gogol's *Diary of a Madman* (1835)⁹⁸, and the main character in Büchner's *Lenz* (1835)⁹⁹, among others. The role of madness in shaping modern literature has not been limited to the English-speaking world, and neither has it been confined to one particular genre¹⁰⁰.

Honoré de Balzac's *Louis Lambert*, contains the first modern literary description of a character who displays features of schizophrenia as we know the disease today, something which has been considered in favour of the recency hypothesis. Indeed, if schizophrenia had always existed, it would seem odd that Balzac's novel should be the very first convincing and complete literary account of the disease⁹⁷.

The *Louis Lambert* is included in the *Études philosophiques* section of Balzac's compilation of novels *La Comédie Humaine*¹⁰¹. The plot turns around the philosophical preoccupations of a boy and his only friend. The story is almost an autobiography of Balzac, not only because the events described but also for the philosophical considerations that it touches. Balzac's text includes references to his own essay *Traité de la Volonté* ("Treatise on the Will") dealing with the split between inward and outward existence; the presence of angels and spiritual enlightenment; and the interplay between genius and madness.

Louis Lambert, is described as a bright infant, the only child of a tanner and his wife. Aged fourteen Madame de Staël meets him, and struck by his intelligence, pays for him to enroll in the Collège de Vendôme. There he became close friend with a classmate nicknamed "the Poet" who is the narrator of the novel and is obviously identified as Balzac's himself. Rejected by the other students and reprimanded by teachers for not paying attention, the boys bond through discussions of philosophy and mysticism. Lambert writes an essay (actually Balzac's *Traité de la Volonté*) but a teacher confiscates it, considering it to be "rubbish". Soon afterwards, a serious illness forces the narrator to leave the school. Lambert graduates at the age of eighteen and lives for three years in Paris, meets Pauline de Villenoix and falls passionately in love with her. On the day before their wedding, however, he suffers a mental breakdown and attempts to castrate himself. Declared "incurable" by doctors, Lambert is ordered into solitude and rest. Pauline takes him to her family's château, where he lives in an almost complete state of stupor. The narrator, ignorant of these events, meets Lambert's uncle by chance, and is given a series of letters written by Lambert where he continues his philosophical musings and describe his love for Pauline. The narrator (Balzac) visits his old friend at the Villenoix château, where the decrepit Lambert says only: "The angels are white." In the past Lambert had tried to convince the narrator of the existence of angels, described as "an individual in whom the inner being conquers the outer being". The boy, genius himself, is seen as an example of this process: his physical body withers and sickens, while his spiritual enlightenment expands, reaching its apex with his comment to the narrator: "The angels are white." Pauline, meanwhile, is described as "the angel" and "angel-woman". Lambert died at the age of twenty-eight without having recovered from his insanity.

The novel *Louis Lambert* examines many aspects of the thought process and the activity of the mind. Some critics and biographers have suggested that Lambert's madness reflects (consciously or not) Balzac's own unsteady mental state. The philosophical considerations in Lambert's story are influenced by the Swedish philosopher Emanuel Swedenborg (1688-1772). Actually, Madame de Staël was impressed by Lambert in their first encounter because she finds him reading Swedenborg's metaphysical treatise *Heaven and Hell* (1758)¹⁰². The Swedish writer's ideas are later reproduced in Lambert's own comments about mind, soul, and will. Of crucial importance among these is the division of the human into an "inward" and "outward" being. The outward being, subject to the forces of nature and studied by science, manifests itself in Lambert as the frail, frequently sick boy. The inward being, meanwhile, contains what Lambert calls "the material substance of thought", and represents as the true life into which he gradually moves in the course of the novel.

In *Louis Lambert* Balzac attempts to put together a viable theory to unify spirit and matter. Young Lambert attempts this goal in his *Traité de la Volonté*:

*The word Will he used to connote (...) the mass of power by which man can reproduce, outside himself, the actions constituting his external life. (...) The word Mind, or Thought, which he regarded as the quintessential product of the Will, also represented the medium in which the ideas originate to which thought gives substance. (...) Thus the Will and the Mind were the two generating forces; the Volition and the Idea were the two products. Volition, he thought, was the Idea evolved from the abstract state to a concrete state, from its generative fluid to a solid expression. (...) The Mind and Ideas are the motion and the outcome of our inner organization, just as the Will and Volition are of our external activity. He gave the Will precedence over the Mind.*¹⁰¹

Nikolai Gogol provides one of the most complete early descriptions of schizophrenia in his short story *Diary of a Madman*.⁹⁸ The protagonist, Axenty Ivanovich Poprishchin experiences auditory hallucinations (dogs talk to each other) and delusions (he declares that he is the king of Spain). The story is based on a series of articles about the inmates of insane asylums which had appeared previously in the Russian press. The overwhelming majority of inmates institutionalized in asylums were civil servants who either suffered from an inflated sense of pride or from crippling bouts of timidity. Gogol's tale dramatizes the low-level clerk Poprishchin's gradual descent into madness and eventually his confinement in an asylum. The story is the chronicle of the fate of the faceless Russian everyman in the confusing age of modernity and the average man's quest for individuality in a seemingly indifferent, urban environment.

Karl Georg Büchner (1813-1837)¹⁰³ was an outstanding writer who died very young and therefore could not achieve the fame of some of his contemporaries such as Goethe or Schiller. Büchner's fell ill in November 1833 probable due to a viral meningitis which was followed by several months of depression, an experience that was probably important for the understanding of psychosis depicted in his novel *Lenz* (1835) and in his drama *Woyzeck* (1837)⁹⁹. In March 1834 he wrote: *a constant starting up from sleep and a tumult of thoughts in which I lose my senses*⁹².

Büchner's skills for the psychological analysis is very apparent in his novel *Woyzeck* (1837), which inspired Alban Berg's opera *Wozzeck*. The plot is based on a true story: a barber in Leipzig stabs her lover for no apparent reason. Two years before, Büchner had written a novel based on the life of the poet Jakob Michael Reinhold Lenz, which has been considered as the first literary example of modern European

prose. The novel contains what has been considered as the first description of schizophrenia that appears in German literature^{77,99}:

I have not even the lust of pain or longing since I crossed the bridge over the Rhine, I am undone in myself, not a single feeling comes to me. I'm a machine, and my soul is taken away from me.

The first bright moment for eight days. Incessant headaches and fever, the night barely a few hours tenuous peace. Two o' clock I'm not in bed, and then a steady move up from sleep and a sea of thoughts where I move following my senses. I was shocked at myself, the feeling being dead was suspended over me.

EXPLANATIONS FOR THE OUTBREAK OF SCHIZOPHRENIA AT THE END OF THE 18TH CENTURY

The fact that a disease appears ex novo at a certain moment in history is not unusual and there is always a first description for all of them. The hypothetical reasons for this fact in schizophrenia are various:

Biological factors

Both Torrey¹ and Hare² support the transmissible disease hypothesis: a mutation of a virus produces a strain infectious for humans as happened with HIV disease. There is evidence for a viral theory of schizophrenia and this hypothesis cannot be ruled out, taking into account the relationship between birth season (winter), especially in males¹⁰⁴ and increased rates of schizophrenia, the increased ratio of births in urban areas¹⁰⁵, the increased rate of schizophrenia after the flu pandemic in 1957 in Finland¹⁰⁶ and also after other pandemics in other countries^{107,108}. Population-based data although not observational studies, have provided evidence for an association of schizophrenia with the exposure to influenza epidemics between the third and the seventh month of pregnancy¹⁰⁹. In addition, the virus Borna, a neurotropic virus that triggers various types of immune reactions and induces changes in mood, cognition and behavior is more prevalent in psychiatric population (67%) than in controls (22%) and correlates with the severity of the disorder^{110,111}. There is also evidence of an association of infection with Herpes Simplex Virus type 1 (HSV-1) in people with schizophrenia or bipolar disorder¹¹². Furthermore, pre-natal infection with polioviruses could contribute to the subsequent development of schizophrenia. This hypothesis could explain the declining incidence of schizophrenia¹¹³, the excess of people with schizophrenia in those born in winter months, and the increased rates of schizophrenia

among West Indian immigrants¹¹⁴. There are parallels with other late sequelae of poliovirus infections. These findings suggest the presence of a genetic link between schizophrenia and the susceptibility to poliomyelitis.

A variant of this hypothesis is the overflow of an infectious agent from long established reservoirs into unprotected populations such as happened with the plague when Europeans opened routes to China or with smallpox when traveling to the New World.

A teratogenic hypothesis based on the exposure to environmental toxins has also been formulated. Based not also in the eclosion of schizophrenia, but also on the fact decrease of the incidence of the illness since the mid-1960s in Western countries^{115,116} it has been suggested that the activities of sunspots might be caused by a globally active teratogen may be at the bottom of these phenomena. The preponderance of sporadic cases and the low fertility of genetic cases has been mentioned as a fact supporting the hypothesis¹¹⁷.

An excess of obstetric complications in the history of patients with schizophrenia is a well-replicated finding. The complications seem to be associated with an earlier onset of the disease¹¹⁸. The decline in the incidence of the disorder has been explained by the improvement of care during pregnancy and delivery¹¹⁹.

There is the possibility that a genetic mutation could lead to a vulnerability to the disease. There are still many controversies about the genetics of schizophrenia and in general one would expect that mutations that persist generation after generation should have an adaptive advantage for those affected or at least for the carriers of the mutation. In any case the rate of heritability of schizophrenia is something that we will consider later.

Schizophrenia existed, but went unrecognized

Foucault's thesis on the segregation of madness in the Age of Reason¹²⁰ is that mental disorders were hidden, kidnapped so to say, kept out of the sight in closed institutions, mixed with all sorts of social outcasts. Indeed, the distinction of medical and moral insanity takes place in France during the first years of the Revolution¹²⁰ and shortly after in England¹²¹. As William Battie wrote, in 1757, *Madness (...) is perhaps as little understood as any (calamity) that ever afflicted mankind*, and he went on, *our defect of knowledge in this matter is, I am afraid, in a great measure owing to a defect of proper communication*¹²².

In harmony with this hypothesis, there is the possibility that physicians neither had the knowledge nor the skills to bring to light the characteristic manifestations of the disease.

Very often physicians along history have been unable to recognize a disease previously confounded or misinterpreted as due to the influence of God or of evil spirits or of any other supernatural cause. This is the case of witchcraft until the pioneering book *De Praestigiis Daemonum et Incantationibus ac Venificiis* ("On the Illusions of the Demons and on Spells and Poisons", 1563)¹²³ of Johannes Wier considering sorceresses as "pitiable melancholic women". On the other hand, the number of physicians available at the time and the likelihood of their continued contact with a chronic patient was not exceptional. Intermittent snapshots of individuals would not yield the clinical insights that have been achieved more recently as the result of persistent observations over many years.

The case of Matthews is very illuminating. The apothecary Haslam sustained Matthews' insanity based on his mental state and psychopathology, while the five doctors involved based on Matthews' behavior and well educated manners claimed that he was sane. Again in the case of Matthews dangerousness was the indicator of insanity. The rest of the manifestations recorded in *The Images of Insanity* went unnoticed or were considered as irrelevant.

Turner¹⁶ and other have been very critical with Hare' publication, supporting the notion that Matthews had never been insane, and throwing concerns about Haslam's probity and intentions -i.e., defending his own position against the "medical establishment"- . In any case the descriptions of Haslam are so remarkable that either Matthews suffered from schizophrenia, either Haslam had seen several patients with this disorder and clinical manifestations. On the other hand Matthews testimony is concordant if we take into account his drawings and his verbatim report about the *air loom*.

Scull¹²⁴ has described the two forms of domesticating madness. The first is to tame the wildness of the insane, typical of the eighteenth century when the more traditional stereotypes of insane behavior, emphasized irrational violence, furious raving, and incoherent bestiality. Furious insane people were considered to recover sooner, and in a more reliable manner if receiving punishments and hard treatment, while being tied up in padded cells. The second method, characteristic of the nineteenth-century focuses on the private domestic sphere, the family environment of the home and one's intimate circle: domestic in contrasted with public life. Therefore the methods for the "domestication of madness" reduce rage and despair through moderation, order, and lawfulness and the internalization of control. Madness domesticated (in the second sense) is madness tamed, and more effectively than the eighteenth century could ever have imagined.

The manifestations of schizophrenia change over time

The manifestations of the disease have changed. Ellard¹⁴ has emphasized the fact that every psychiatrist has seen deep changes in the manifestation of the schizophrenia in a few decades and not only because of changes in the definition of the disease or its diagnostic criteria. Catatonia is now a rarity, paraphrenia less so but also.

Negative symptoms, violence and behavioural manifestations are more evident but may be unspecific. That is the case of mopefulness or of Hölderlin. Those who visited the great poet during his illness, and specially Waiblinger¹²⁵ who wrote about his visits to the great poet, described in the first instance the impoverishment of his mental faculties.

In the nineteenth century Benedict in his book *Traité des Maladies Mentales*, published in 1860¹²⁶ Augustin Morel gave the following description of what he identifies as *démence précoce*:

*The case of a child who up to then had been the first to his exams without striving, and almost no study. (...) Unconsciously he lost his joy and became serious, taciturn and prone to loneliness. The boy showed a state of melancholic depression and hate toward his father, even to the extent of wanting to kill him. (...) The young gradually forgot all what he had learned and his brilliant intellectual gifts entered a period of stagnation very distressing. A kind of inactivity bordering on stupidity replaced all prior activity, so that when I saw him again it seemed as if a transition to an irretrievable state of *démence précoce* was in progress.*

The influence of supply and demand

Hare's papers have been criticized trying to explain that the increase in the demand for places in mental institutions, more especially towards the end of the nineteenth century, was the consequence of an increase in the number of institutions, beds and places as well as being associated with an improvement in the skills in clinical case descriptions⁸⁴. Scull⁶ considers that the increase in the interest on mental disorders and on the proliferation of psychiatric establishment was the consequence of an increasing demand.

Social and cultural factors

We have suggested that the factors that led to the outbreak of schizophrenia at the end of the 18th century appeared in 1760. They led during the following years to deep changes in the life of people all over the world.

1760 is the year of the birth of The First Industrial Revolution¹²⁷, which resulted from putting new manufacturing processes into practice and generalizing their use in production: hand manufacture methods were replaced by machines, new chemical manufacturing and iron production processes were implemented, the efficiency of water and steam power was increased, and coal replaced wood as a source of energy. The changes occurred in Great Britain from 1760 onwards and they quickly spread to Western Europe, the United States and Japan.

The Industrial Revolution is a major turning point in history that had repercussions in every aspect of daily life of the whole population. *For the first time in history, the living standards of the masses of ordinary people have begun to undergo sustained growth*¹²⁸. Other consequences were the expansion of newspapers and popular books, due to the use steam power for printing, which reinforced rising literacy and demands for mass political participation. The massive industrialization brought huge numbers of migrants from rural communities into urban areas leading to emergence on unforeseen problems (for example, tuberculosis). Capitalism and socialism as we know them today are direct consequences of the First Industrial Revolution.

Schizophrenia is in itself sensitive to cultural influences. The WHO International Pilot Study of Schizophrenia^{129,130} came to the conclusions that: 1) schizophrenia occur in all cultures and geographical areas investigated; 2) their rate of incidence is very similar in the different populations; and 3) the course and prognosis of schizophrenia is extremely variable, but outcome is significantly better in the developing countries. There is evidence on the fact that in the early nineteenth century the incidence of schizophrenia was higher in the more affluent populations and that it remained so along the following decades¹³¹, something suggesting that urbanization, migration household crowding and their consequences (i.e., transmissible agents) may be among the factors that lead to the outbreak of the disease.

It has been suggested that the late development of schizophrenia was associated with the social and familial consequences of industrialization, in an attempt to explain the increasing incidence of the illness throughout the nineteenth century¹³². The hypothesis is that the social and family structures that existed historically in pre-industrial societies and still today in developing countries exert a comparatively benign effect on patients with schizophrenia, and that these effects are lost during and after industrialization. Thus the severe and chronic forms of the illness became prominent and therefore recognized in the institutions of Europe in the latter part of the nineteenth century. Possible mechanisms are: 1) the rapid increase in size of towns and communities, 2) changes in perinatal and infant mortality and morbidity, and 3) changes in family structure.

The evidence from some early studies as well as from more recent research shows that urbanicity is associated with an increased incidence of schizophrenia and non-affective psychosis. What is more important is that there is a considerable variation in incidence of both kinds of disorders in cities across neighbourhoods, something that suggests that the hypothetical causes considered at present are not sufficient to explain the mechanism underlying the increase in incidence. It is unlikely that social drift alone can fully account for geographical variation in incidence. Further evidence suggests that the impact of adverse social contexts such as population density, social fragmentation and deprivation as risk of psychosis is explained or modified by environmental exposures at the individual level (i.e., cannabis use, social adversity, exclusion and discrimination¹³³). Of course, these alleged mechanisms do not preclude our hypothesis on the role of another individual factor, as we will see later.

As with certain other diseases, the occurrence of schizophrenia may be influenced by the transition from poverty to affluence. This has been explained by the combined effect of variations in the rate of birth, complications due to cephalopelvic disproportion secondary to changes in nutrition, and increased infant survival following improvements in obstetric and neonatal care. These effects help to elucidate the pattern of occurrence of schizophrenia in immigrant groups^{4,134}, and indeed, several studies have found markedly increased rates of schizophrenia among West Indian immigrants to the UK. Although this has been explained by psychosocial factors such as uprooting and lack of sufficient assimilation and other factors mentioned above, we believe that there are other reasons too, as we will see further down.

In order to proceed we must take into consideration two important questions. First, the nature of the psychopathology of schizophrenia and second, the meaning of changes in Western World in the late eighteenth century and how those may be related to emergence of the disease.

THE NATURE OF SCHIZOPHRENIA

The question of what is really schizophrenia from the psychopathological point of view is problematic because the clinical core of schizophrenia has disappeared¹³⁵ from the ICD-10¹³⁶, DSM-III³⁵ and IV¹³⁷. DSM-5¹³⁸ states wrongly in our opinion, that no symptom of schizophrenia is pathognomonic, that the characteristic symptoms of schizophrenia involve a range of cognitive, behavioral, and emotional dysfunctions and that the diagnosis involves the recognition of a constellation of signs and symptoms associated with impaired occupational or social functioning.

As we will see later (in the core Gestalt of schizophrenia) every single feature of the disease shares a common and unique feature, which, again, has disappeared from the current classification systems in psychiatry. As a consequence, current psychiatry has a limited understanding of the diagnostic boundaries and pathogenic mechanisms of the disease¹³⁹.

In our view, some of the errors of alleged cases of schizophrenia in the pre-1800 publications are due to simplistic assumptions being made on the disease and its diagnosis. For instance, establishing the diagnosis based on isolated manifestations such as distortions of the experience of reality or "hallucinatory voices in the absence of visual hallucinations"^{12,140}, or just considering diagnostic criteria in the absence of a sufficient psychopathological analysis of the case¹². Contrary to Hare who considers that hearing voices is a symptom as common as any in schizophrenia, Ellard¹⁴ requests at least one defining characteristic of schizophrenia, and wonders if "voices" might do here.

The notion that apparently healthy people can experience psychotic symptoms such as delusions and hallucinations is becoming an accepted dogma¹⁴¹. Part of this "dogma" is the assumption that the experiences reported by non-clinical samples overlap, or at least show some similarity, with those reported by clinical samples, i.e., that "psychotic-like experiences" exist on a continuum between general and clinical populations¹⁴². Attenuated psychotic symptoms are a common phenomenon in adolescence. Up to 43% of a Spanish sample reported symptoms belonging to magical thinking, ideas of reference, and/or delusion or hallucination experiences, and 8.9% reported four or more psychotic-like experiences¹⁴³.

This approach where the part is being taken for the whole - *pars pro toto* - is called mereological fallacy¹⁴⁴, a concept which can be applied to many fields of neuroscientific reductionist perspectives^{145,146}. For instance, Bennett and Hacker¹⁴⁴ have questioned the attempt of appropriation of psychological aspects by the brain. The mereology fallacy is due to the belief that the brain, which is a part of the human body, is responsible for the mental activity, when it results that the psychological predicates can only be applicable to the human beings (or other animals) as a whole, and therefore, they cannot be applied intelligibly to any of its parts, not even the brain. The alternative, according to Bennett and Hacker, is that the attribution of the psychological predicates to the brain is in first place a philosophic and not a neuroscientific issue, since it is a conceptual question. Therefore, the brain is not the appropriate subject for the psychological predicates.

Here we should to emphasize that there is more in schizophrenia than the observable symptoms, diagnostic

criteria or items in an evaluation scale. In a recent study¹⁴⁷, patients with schizophrenia tend to describe their hallucinations in such terms as the following: *I believe that my brother was dead when he was really alive; watching TV and thinking they were talking to me; I hear a voice that asks me to do something or tells me something about someone; when looking at people, they sometimes seem strange, like they're not real, and the things in the house too; having tried to talk to the thought, thinking it was saying something. In that moment I thought I had power and that others were able to hear me*, and so on. In contrast with these descriptions, healthy controls describe their hallucinations in terms such as: *In my daydreaming I could see my father's face; I'm half asleep, not quite asleep nor fully awake, and I hear people calling me by name; when I'm at home studying, I hear my mother's voice calling me; when I have a slight fever, I hear voices. As a child this happened to me quite often*, and so on.

The conclusion of the study is that it is not sufficient to administer a scale of hallucinatory experiences to do research in this field because hallucinatory or hallucinatory-like experiences cannot be reliably and validly assessed without a precise characterization of the phenomenonic quality of the experience itself¹⁴⁸. The fact is that the clinical diagnosis of any manifestation of schizophrenia requires taking into account the subjective aspect of the experience (how altered experience manifests itself) as well as the features of the intersubjective encounter, of how the experience is expressed to and lived through by the clinician¹⁴³.

Going back to the origins, according to Kraepelin³⁴ *dementia praecox* is characterized by a particular destruction of the internal links of the personality. Later on¹⁴⁹ he is more precise while describing a weakening of emotional stimuli, subsequent to volitional phenomena, which destroys the core of personality, "*which loses its best and most precious part*" (Griesinger¹⁵⁰), resulting in the loss of inner unity of the activities of intellect, emotion and volition in themselves and between each other, metaphorically known as *intrapsychic ataxia* of Stransky¹⁵¹.

According to Eugen Bleuler⁹¹ the specific symptom of schizophrenia is an impaired thought process, a loss of associative connections leading to *Spaltung* ('dissociation'), a disjunction, disconnection, a rupture of the association of ideas:

*"Among the hundreds of associative threads that guide our thinking, this disease appears to interrupt, fairly capriciously, sometimes a single thread, sometimes a whole set and sometimes fragments of them. In this way, thinking often becomes illogical and bizarre."*⁹¹

Above we have seen as already Pinel³¹ concerned the lack of association between ideas, which characterizes the

démence. Furthermore, is a constant from Kraepelin and Bleuler to ICD-8 and DSM-II distinguishing two elements in schizophrenia: 1) a core pivotal clinical feature and 2) positive psychotic features, which are characteristics of the state and are relatively unspecific as they can be present in non-schizophrenic psychotic disturbances.

The core pivotal clinical features, which is also present in a spectrum (including schizoid conditions, latent schizo-phrenia, schizotypal personality disorder and schizoid personality), that affects all domains of consciousness (subjective experience, expression, cognition, emotions, behavior and volition), whose specificity only be grasped from a gestaltic (holistic) perspective and not by considering individual features, named differently: *Zerstörung* ('devastation', Kraepelin³⁴), intrapsychic ataxia (Stransky¹⁵¹), disjunction or *dementia se-junctiva* (Wernicke¹⁵² and Gross¹⁵³), *Spaltung* ('splitting', 'dissociation', Bleuler⁹¹), *dynamische Entleerung* ('dynamic exhaustion', Janzarik¹⁵⁴), alteration of the experience of self or selfhood (López Ibor¹⁵⁵, Blankenburg¹⁵⁶, Wyrsh¹⁵⁷, Scharfetter¹⁵⁸), self-disorder or ipseity disturbance (Sass and Parnas¹⁵⁹), among others.

However, the difficulties or even more, the impossibility of establishing diagnostic criteria for every day practice based on subjective experiences of patients and psychiatrists alike led to the disappearance of the phenomenological distinctiveness of the disease which was substituted by "objective", reifying operational combinations¹⁶⁰⁻¹⁶² of diagnostic criteria. But, the core remained tainting the manifestations of the disease with veiled in notions such as Rümke's *Præcox Gefühl*¹⁶³, a tautological claim, "a scientific absurdity", yet "familiar to every experienced clinician"¹⁶⁴.

The two main features of schizophrenia, the developmental singularity and belonging to a spectrum are closely interrelated. Schizophrenia does not arise abruptly, ex nihilo, but is nearly always preceded by a premorbid trajectory which permeates the life style¹⁶⁵ of those affected. In addition, schizophrenia belongs to a spectrum of disorders (schizoidia, latent schizophrenia, schizotypal disorders, schizoid personality), which share the core phenotypic features of the full blown disease. This twofold conceptualization of Parnas is not conflict free¹⁶⁶ as we will see in the second part, although as we see latter the case of Hölderlin argues in favour of it.

Bizarrenes

We have mentioned bizarreness when dealing with Haizmann's case. Bizarreness and related concepts have been considered as characteristic of schizophrenia, tinting many of its clinical manifestations (bizarre delusional ideas, peculiar distortions of reality...). Kraepelin¹⁶⁷, defined

delusions in *dementia praecox* as having "an extraordinary, sometimes wholly nonsensical, stamp," while delusions in paranoia or affective psychoses present themselves "with all the improbability and uncertainty of their origin." Later on, bizarreness was considered by all classical authors to be the hallmark of schizophrenia. The typicality of schizophrenia, says Jaspers¹⁶⁸, resides in the Gestalt emerging in the encounter with the patient: "all these personalities have something baffling (...) (to) our understanding in a peculiar way; there is something queer, cold, inaccessible, rigid and petrified." For Bleuler⁹¹, schizophrenia is characterized by an element of strangeness "seen nowhere else in this particular way." The source of this bizarreness was viewed by Kraepelin, Bleuler, and Jaspers as residing in a certain disorganization of mental activity, a coexistence of mutually incompatible elements in the patient's experience, cognition, emotion, and action that places the patient at, or beyond, the boundaries of interpersonal understanding¹⁶⁹.

Bizarre is a problematic term difficult to define, and it is also a crucial concept within the core characteristic of schizophrenia. "Bizarre delusions" is the heaviest-weighted clinical criterion of schizophrenia in DSM-IV¹³⁷.

Bizarre delusions have been defined strictly in terms of delusional content - mainly in terms of the physical impossibility or the cultural or historical incomprehensibility of the delusional claims -, but this is not enough. In DSM-5¹³⁸, delusions are deemed bizarre if they are clearly implausible and not understandable to same-culture peers and do not derive from ordinary life experiences. On the other hand, reliability of bizarre delusions as diagnostic criterion is inferior to that for delusions in general and the concept is probably inadequate for scientific usage¹⁷⁰ as only a small fraction of patients receive their schizophrenia diagnosis because of the presence of bizarre delusions (4%-8%)¹⁷⁰⁻¹⁷². Due to this poor reliability, and in contrast to DSM-IV, a single bizarre delusion is no longer adequate to meet criterion A of schizophrenia of DSM-5¹³⁸.

The fundamental alteration of schizophrenia

Schizophrenia deeply destroys personality due, to a process that Kraepelin³⁴ named *Zerstörung* ('devastation') that consists more on the loss of associative connections of the mental activity (*Spaltung*, 'dissociation', Bleuler,¹⁵¹) rather than on a deficit of specific or isolated psychological functions or due to the presence of abnormal mental contents. The main consequence of this process is a deep repercussion on the functioning of the structures of subjectivity, leading to a considerable mental deterioration (*verblödung*, lit. 'stupefaction').

For more than a hundred years psychopathology has sought to identify a fundamental alteration able to explain the whole of the clinical manifestations of the disease. For Karl Jaspers¹⁶⁸ the primary delusional ideas, typical of schizophrenia, were characterized for being incomprehensible, in other words, their origin was not the result of a coherent rational process. This incomprehensibility is the psychopathological main feature of the disease. For Eugen Bleuler autism is the fundamental alteration, concept that he describes in the following manner¹⁷³:

Schizophrenics have lost contact with the outside world; they live in a world that is unique to them. They have invested it with their desires and wishes (...); they themselves have cut as much as possible any contact with the outside world. This detachment from reality, accompanied by the relative or absolute domination of the inner life, we call autism.

Autism consists on an isolation of external reality accompanied by a pathological preponderance of the inner life. The person who suffers from schizophrenia reacts poorly to stimuli from an environment whose perception generates rejection. The purpose of this behavior is to focus the attention on the internal fantasies, although in some patients this isolation serves to keep away emotions, already very exalted, as a result of an increased sensitivity. The mental split with the outside is not absolute, so consciousness in relation to daily events can be relatively well preserved in parallel to a certain degree of autism ("double bookkeeping"). An absolute isolation is present only in the most severe cases of stupor.

Autistic thinking has its origin in the dissociation of the mental activity typical of the disease and it is influenced by the affective needs of the subject. The content of autistic thinking is primarily symbolic, shaped by analogies, fragmented and integrated by accidental associations. In this manner, the objective reality is replaced by hallucinations and the patient perceives their world of fantasy as real and reality as an illusion.

Other authors have proposed similar conceptions. For Minkowski¹⁷⁴ in schizophrenia there is a decreased sense of the dynamic and vital connection with the world ("loss of vital contact"), often accompanied by a hypertrophy of the intellectual and static activities ("morbid rationalism", "soft geometry"); Blankenburg¹⁵⁶ emphasizes the loss of the normal sense of the obvious ("natural obviousness"), a loss of the usual common sense which allows normal people to cope easily with social and practical world; Kimura¹⁷⁵ considers as relevant the distortions of the experience of the encounter of the self with others (in German *mitsein*, in Japanese *ki*); Berze¹⁷⁶ describes a primary failure of the mental activity and for Janzarik¹⁵⁴ there is a dynamic exhaustion (*dynamische Entleerung*).

The problem is that the most recent descriptions of the disease rather than follow this line have aimed to divide schizophrenia into different subforms (paranoid, catatonic, hebephrenic, simple, undifferentiated) and, what is worse, to discriminate symptoms groups or independent syndromes (positive, negative and disorganization), abandoning the effort to find a "red thread" linking them all.

The disturbance of the experience of the self

The description of the disturbance of the experience of the self (*Selbstbewusstsein*) is a fundamental contribution of Karl Jaspers¹⁶⁸ and Kurt Schneider¹⁷⁷. The basic notion is that each individual experiences him or herself as a single person because he or she thinks feels, tends toward something, wants to and functions thanks to a particular consciousness. All these activities also start from a point, as well as everything that we perceive from the outside, which through our feelings, is directed towards the end point of the activity of the individual. This central point of consciousness we call I.

The experience of the I has well-defined characteristics. The I experiences himself as:

1. Distinct from the objects and people in the outside world
2. Simple or single
3. As a unit that remains identical over time
4. Existing, which consists of experiencing oneself alive or the fact of existing
5. Active, because awareness of activity is based on the impression of what I internally experiment is mine (sameness, *Meinhaftigkeit*)

The experience of the self can be disrupted briefly in healthy individuals and in exceptional situations, in schizophrenia the disturbance of the experience of the self is more frequent and severe.

A dimension missing in the notion of Jaspers and Kurt Schneider thus formulated is that: the experience of self is inseparable from the experience of the body, since it is an incarnate experience in a here and a now. The experience is of a self that occupies a space and exists at a particular time. Likewise, the everyday experience of the body consists on the immediate inner sensation of the body that is located in a particular place and at a particular time and that there is located in our self. In normal conditions, this is something that underlies all experience, but we are not aware of it. The body and the self are present in the experience but "in parentheses", intuited¹⁴⁴, sensed. Sartre referred to the body

as "*passé sous le silence*"¹⁷⁸ (overlooked), López Ibor wrote about the silence of body¹⁷⁹, for Lhermitte¹⁸⁰ it's a subliminal experience and Frederiks¹⁸¹ considered that we have a peripheral awareness of the body. All these expressions are applied identically to the experience of the self.

One aspect that has limited the opportunity of the concept of experience of the self is that it failed to articulate around it all the manifestations of schizophrenia. Kurt Schneider¹⁸² himself only accepted its presence in those first rank symptoms that involve a rupture between the self and the world, but not in the rest, which resulted in an interesting controversy with Wyrsh¹⁸³ and López Ibor¹⁸⁴ during the Symposium on schizophrenia organized in Madrid in 1956 by the latter. These two authors claimed that alterations of the experience of the self should be considered as the fundamental alteration of the disease. Discussing, for example, to hearing thoughts spoken aloud, López Ibor comments:

*Patients hear that someone screams them their own thoughts (...) sometimes even before having even thought on them. But these, their own thoughts, have lost the quality of belonging to the self and therefore they become for the patient something "said" or "thought about" earlier. Thoughts are heard occurrences devoid of the quality of belonging to him or her. These thoughts that patients would prefer not to think, or at least not say, are stolen and then broadcasted without solution*¹⁵⁵.

The clinical manifestations of schizophrenia are a Gestalt

The notion that the fundamental alteration of schizophrenia is a *Gestalt*, that is to say, a disturbance of the personality which has to be grasped in a global, holistic way, is a contribution of the phenomenological tradition in psychiatry^{156,174}. The conception is consistent with classical psychopathological descriptions and some psychoanalytic conceptualizations. It is present in the ICD-10¹³⁶ definition of the disorder ("*The disturbance involves the most basic functions that give the normal person a feeling of individuality, uniqueness, and self-direction*"), as well as in DSM-III³⁵ and DSM-III-R³⁶ ("*The sense of self that gives the normal person a feeling of individuality, uniqueness, and self-direction is frequently disturbed in schizophrenia*"), while there is no trace of it in neither the DSM-IV¹³⁷ nor the DSM-5¹³⁸.

Gestaltic means that there is not an impairment of a single or to be isolated psychological function, but a global deficiency of the first person experience of the agency and ownership of consciousness of mental activity that can only be apprehended as a totality, in an holistic way. The experience is in itself incomprehensible in the sense of

Jaspers¹⁶⁸ and may only be grasped intuitively as a *Praecoxgefühl* (praecox-feeling) as in Rümke¹⁶³. This way Hofer¹⁸⁵, and Tellenbach's¹⁸⁶ statements on the nature of the manifestations of endogenous psychosis as phenomena and not as mere symptoms or isolate dysfunctions, can be understood.

The fundamental alteration and the symptoms of schizophrenia

However, and this is of high importance, the core alteration of schizophrenia is not only the ground from where several symptoms flourish, it is present in each one of the manifestations of the disease. Dörr¹⁸⁷, following the phenomenology of intersubjectivity of Husserl, and the concept of "apresentation" - which is the first thing which is added to the body presentation of the other - which, at the end is a significant part of the *alter ego* experience, has underlined the importance of this fact. In the paranoid syndrome, for example, where the other appears as imbued with tremendous power, whereby the patient is pursued, besieged, and, last, invaded in the privacy of his own consciousness through the experiences of influence and self-referral. But also auditory hallucinations, that a superficial glance might appear as an "objective" manifestation, which could even be attributed to alterations of the complex function of hearing, they can be seen as a particular disturbance of the relationship with the other, transformed here into a virtual presence, anonymous, timeless and invasive.

The self and schizophrenia

Although the most important breakthroughs in the understanding of schizophrenia is research on alterations of the *inner-self* for the first time described a century ago¹⁸⁸ it is nowadays that schizophrenia is being conceived as "*a disorder involving subtle but pervasive and persistent aspects of subjective experience*", in which certain characteristic distortions of the act of awareness are present¹⁸⁹.

William James (1890)¹⁹⁰ initiated the first systematic description of the self or better to say of the selves and its different form. According to James, in the widest possible sense, a man's Self is the sum total of all that he can call his, not only his body and his psychic powers, but also his clothes and his house, his wife and children, his ancestors and friends, his reputation and works, his lands and horses, and his yacht and his bank-account.

In schizophrenia and in schizophrenia spectrum disorders an impairment or deterioration of the basic structure of subjectivity^{159,191,192} has been described, and thus also of the

relationship self-world and self-others^{159,168,169}. This is a disorder of the self, which affects the very structure of consciousness, "*that give the normal person a feeling of individuality, uniqueness, and self-direction*"³⁵. The resulting dysfunction is that of a decline in the sense of belonging of the personal experience of subjectivity, a more accurate way, of the agency and ownership (*Meinhaftigkeit*)¹⁷⁷.

The core self or minimal self and the ipseity

Already William James¹⁹⁰ considered a core self. At the core of the self there is always the bodily existence felt to be present at every single moment. This is the basis of the personal identity¹⁴⁵. This "core the self"¹⁹³, rooted in the lived body and is experienced not as an entity in one's field of awareness, but as the point of origin for experience, thought, and action, as a medium of awareness, as a source of activity, or general directedness towards the invisible world¹⁹⁴. Therefore the name of *core self* or *minimal self*.

The word self has many meanings in diverse disciplines and several overlapping of meanings^{159,191}. Therefore there is a need to clarify some of those terms overlapping. Selfhood is the quality that makes a person or thing different from others¹⁹³. In the most basic sense selfhood is the consciousness of the presence of oneself, of the personal presence, which is in itself beyond description. It is the experience of existing as a living subject identical to him or herself, the subject of the experience of agency and ownership. Ipseity, from the Latin *ipse* 'self', 'himself', is the quality that establishes one's individual identity. Selfhood and ipseity are closely linked concepts¹⁹⁴. Insofar as subjectivity reveals itself to itself, it is an ipseity. The ipseity is linked to the question of self-understanding, to the question "who am I?"¹⁹⁵. When confronted with this question, I am forced to reflect on and evaluate my way of living, the values I honor, and the goals I pursue. I am forced to confront the life I am living. Thus, the answer to the question is not immediately accessible; rather it is the product of an appraised life.

In a similar way, Ricoeur¹⁹⁵ and Dörr¹⁹⁶ differentiate two dimensions of identity: the mineness or substantial identity and the self, or ipseity. Mineness refers to every aspect of our lives that we consider ours, such as when we say my thoughts or my memories. Ipseity, adds to this experience a historical element, which is the coherence of a life. This second dimension of identity has a fundamentally ethical connotation, because it relates to the other. The historical element is a coherent to be shared, and is the fundament of a relationship with it implies a compromise: he or she can rely on me and I take responsibility for what I assured.

Ipeity denotes the inner self, also called pre-reflective self¹⁹⁷. Ipseity arises from a part of the self that is devoid of

the components of the reflective self, which itself is composed of those characteristics of the self that can be attained by reflection, for example the physiognomy (somebody is tall or small) or the character (somebody is well disposed or impulsive). Instead, the pre-reflective self appears as content free, and its existence provides a center of gravity in which the ownership and mineness of self-experiences rests. The experience of the pre-reflective self is, like the experience of the body, silent¹⁷⁹, peripheral¹⁸¹, barely an intuition. Both of them, the experience of the self and the experience of the body are indissoluble. In other words, the self is not an abstract being, it is an embodied being-in-the-world¹⁹⁸. More precisely, the self has experiential reality; it is taken to be closely linked to the first-person perspective, which makes the experiences subjective. This experiential sense of self has been described as minimal self¹⁹⁹. That is why ipseity has been defined as "*the experiential sense of being a vital and self-coinciding subject of experience or first person perspective on the world*"²⁰⁰.

The core or minimal self is implicit in any act of conscience. The core or minimal self is devoid of any temporal dimension, and consists on the experience of the property of the actions of the self and a distinction can be made between sense of being the author of the acts of self (agency) and the ownership (mineness) of the same. Both aspects are altered in schizophrenia. At the same time there is a narrative self, involving personal identity and continuity over time. It's a concept that is consistent with notions of Gazzaniga on the left hemisphere as "interpreter" and episodic memory²⁰¹.

The concept of a stable core self has been questioned by dialogical psychology²⁰², according to which self-experience emerges from the dialogue of several "self-facets". Again, different levels of self-experience are likely to be involved here, with the "dialogical self" being more akin to the "narrative self" mentioned above. In any case, and impairment of that experience in schizophrenia may result from in a difficulty to sustain this dialogue in interpersonal situations²⁰³.

Disturbances of the minimal self, characterized by abnormal sense of the body, body ownership and agency have been proposed as the phenomenological phenotype of schizophrenia. A recent meta-analysis has shown that, overall, patients with schizophrenia showed deficits in the sense of the minimal self, driven by abnormal sense of body ownership and sense of agency²⁰⁴. Interestingly, the disturbed sense of agency in schizophrenia suggests an exaggerated self-consciousness rather than a diminished sense of self²⁰⁵.

Idios kosmos and koinos kosmos

Self-experience and body-experience are indissoluble as we have seen, but they are also indissoluble from the

experience of the world and from others. This interaction between the inner-self and the outside world play a crucial role in the understanding of schizophrenia. Binswanger²⁰⁶ has recovered Heraclitus' distinction between the *koinos kosmos* ('shared world') and the *idios kosmos* ('private world'), between the world of common man awake and the private world in which the dreamer is immersed. The common world is intersubjective, the private purely subjective. The common world is the world that of the community, the society, and is governed by a coherent, logical, and practical ways to behave with each other in a way which is specific and predefined.

Very often it has been assumed that delusional patients are hostages of their own *idios kosmos*, their own private world in which the patient is enclosed, a world with connections to specific references, specific practices, a particular code, and idiosyncratic forms of incarnations and expression. This is not so. A delusional patient is not a dreamer, he or she are persons that are unable to discriminate *koinos* from *idios*, as Kuhn stated²⁰⁷, as we all do spontaneously. The ambiguity in which we all live is unattainable for people with schizophrenia.

These aspects are interrelated with a concomitant disturbance of the field of awareness labeled "disturbed hold" or "grip" on the world^{159,208} manifested as disturbances of spatiotemporal structuring of the world, and of such crucial experiential distinctions as perceived-vs-remembered-vs-imagined, are grounded in abnormalities of the embodied, vital, experiencing self. This disturbed hold or grip, typically involving perplexity or loss of common sense^{209,210} is often associated with forms of hyperconsciousness.

Synthesis

Schizophrenia is characterized by an alteration of the ipseity, also known as core self or minimal self, normally implicit in every act of conscience¹⁵⁹. Phenomenology in psychiatry considers schizophrenia to be a progressive disorder marked by autism and a deep alteration of the structures of subjectivity, manifested in the relationship with the oneself (self-disorders), the world (lack of natural evidence) and the other (eccentricity, solipsism and isolation)¹⁴².

Deprived of all sense of reality of consensual experience, the subject necessarily apprehends the world as a product of his or her own imagination. However, the coherent core, the self-experienced, appears as an object, limited and directed by something beyond control. The self is both omnipotent and helpless. The subjective and objective collide against each other. Solipsism instability reflects its intrinsically contradictory nature.

How this state of solipsism occurs? In people with schizophrenia it seems that something interferes with the broad scope of the attention that makes that many of our thoughts and perceptions are experienced as a whole. On the other hand, there is often an intense and narrow focus of attention on an object or everyday event, which becomes strange, inhuman, perhaps threatening. The understanding what something means is not regularly altered, but the connotative meaning may have been lost entirely. Predetermined guidelines are discarded and the usual presumption about what is going to happen, based on what has happened, does not materialize. The end result is the creation of a feeling of alienation of others, of the own feelings and even of the own body.

The ipseity disturbance hypothesis claims that apparently diverse symptomatic manifestations of schizophrenia may hide underlying similarities, as with positive, negative, and disorganized syndromes, which, though superficially different, and may share forms of disturbed ipseity¹⁵⁹. The ipseity-disorder model views both florid psychotic and "negative" symptoms as manifestations of subtle but profound alterations in the very foundations of subjectivity and selfhood¹⁵⁹. The core Gestalt of schizophrenia, is an alteration of the basic, pre-reflective sense of self which normally accounts for the subjective experience of agency, coherence, unity, temporal identity and demarcation, and is accompanied by a pre-reflective sense of immersion in the world^{139,159}.

What is new with the ipseity-disturbance hypothesis is a conceptualization which seeks to be flexible enough to encompass the diverse and varying symptoms yet specific enough to be clinically useful and relevant for research (neurocognitive, neurophysiologic, of brain imaging, and others).

In short, we can summarize saying that schizophrenia is part of a spectrum (schizoidy, schizotypal personality disorder, etc.) characterized by a deep alteration of the structures (framework) of subjectivity (consciousness), manifested in relation to the self (ipseity, self-disorder), the world (lack of natural evidence), the others (eccentricity, solipsism and isolation). On the other hand, this experience is so unique and different from any other that the patient again and again refers to it as ineffable.

In Parnas words referring to patients who suffer from schizophrenia¹³⁵:

The patients feel ephemeral, lacking a core identity, profoundly (often ineffably) different from others and alienated from the social world. There is a diminished sense of existing as an embodied subject, self-present and present to the world, distortions of first person perspective with anonymization or deficient sense of

"mineness" of the field of awareness ("my thoughts are strange and have no respect for me"), spatialization of experiential contents (e.g., thoughts being experienced as spatially located extended objects) and failing sense of privacy of the inner world. There is a significant lack of attunement and immersion in the world and pervasive perplexity, i.e. inadequate pre-reflective grasp of self-evident meaning ("why is the grass green?") and hyper-reflectivity ("I only live in my head", "I always observe myself"). (...) The basic disorder often translates into altered and strange existential patterns, e.g. solipsistic grandiosity, bizarre attitudes and actions, "double book-keeping", mannerist behaviors, or searching for new existential or metaphysical meaning (e.g., adherence to sectarian political or religious groups).

We are not claiming that a valid retrospective diagnostic research to support or weaken the recency hypothesis should be based on the phenomenological perspective. That would be an impossible task because the core Gestalt of schizophrenia is manifested in an interpersonal relationship where the doctor is the most appropriate "diagnostic tool", so to say. Our intentions are to analyse how the characteristic of post-industrial societies and Romanticism impact on persons vulnerable to schizophrenia or schizophrenia spectrum disorders. Maj has questioned if the notion endorsed by the phenomenological tradition - "autonomous, free and in control" -¹⁶⁶ can be generalized outside Western cultural contexts. Our answer is definitely not, that is the thesis of the present paper. Of course, the development of the individual self is unavoidably influenced by cultural systems provided with a meaning (the "collective self") and therefore the pattern of self-disorder in schizophrenia may be different from that described in Western cultures.

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