Psyche meets matter: body and personhood in the medical-scientific project of Nise da Silveira

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Abstract

In the early 1900s, Brazilian psychiatry was marked by the use of controversial treatments, like electroconvulsive therapy, psychosurgery, and insulin coma therapy. In 1946, the Brazilian physician Nise da Silveira took the front line in criticizing these treatments by setting up a creative activities studio in the National Psychiatric Center (Centro Psiquiátrico Nacional), in Rio de Janeiro. The article examines the theoretical basis for Silveira's medical-scientific project, drawing on documental sources and fieldwork with the study group at the Museum of Images from the Unconscious (Museu de Imagens do Inconsciente), maintained by her disciples. It is argued that her thinking constituted a rejection of the assumptions of physicalism and mechanism and was closer to the ontology of vitalism and romanticism.

Keywords: Nise da Silveira (1905-1999); psychiatry; physicalism; romanticism; vitalism.

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Psychiatry emerged at the turn of the nineteenth century, when there was a breakdown in the ways madness had been managed until then in the west. Thanks to the work of doctors like Philippe Pinel, head of the famous Bicêtre Hospital in Paris, the insane – previously confined together with blasphemers, beggars, thieves, vagabonds, and all manner of social outcasts – started to find a different place of reclusion in psychiatric hospitals (Foucault, 1961). According to the precepts of the budding field of alienism, a madman could be subdued, provided he was submitted to moral treatment, through which the appropriate ways of thinking and feeling could be restored to him. Thus emerged a science of the passions, which originally combined a set of humanist ideals with a clinical methodology based on the imperatives of order and duty (Gauchet, Swain, 1980).

However, as the century progressed, this branch of psychiatry, with its overwhelmingly moral overtones, started to come up against a number of criticisms and claims of ineffectiveness. The fields of anatomic pathology – based on the dissection of bodies – and neurophysiology – engaged in the quest for the location in the brain of the phenomena of health and disease – were the seedbeds for a physicalist reaction to this movement, which gradually gained prestige in the field of mental medicine (Foucault, 1963; Vidal, 2005). In German psychiatry, this new trend, which could also be described as organicist, reached the pinnacle of its expression in the work of Emil Kraepelin, who held that biological disorders were responsible for causing psychiatric illnesses. In Brazil, his ideas were spread primarily by Juliano Moreira, director of the National Mental Hospital (Hospital Nacional de Alienados) between 1903 and 1930, who was involved with German science (Venancio, 2005).

It would be fair to say that the first half of the twentieth century was marked by the hegemony of physicalist conceptions of mental illness, which went hand-in-hand with the theories of eugenics and racial hygiene that proliferated in such diverse settings as Nazi Germany and Latin America, including Argentina, Mexico, and Brazil. The 1930s was particularly propitious for the advent of physicalist treatments, in which the brain was the chief target of interventions, introducing techniques such as electroconvulsive therapy and lobotomy. In the former case, better known as electroshock treatment, electrical discharges were applied to the temporal region. The latter, for its part, was a form of neurosurgery in which a lateral incision was made into the frontal lobe of the brain. Other procedures widely used at the time were designed to impact the whole of the body, like insulin coma therapy (or insulin therapy). Insulin was already used as a hypoglycemic sedative, but now it was injected into people with schizophrenia to improve their mental state (Masiero, 2003; Melo, 2009).

The aim of this article is to discuss the critical reaction to physicalism, here defined as a specific ontological conception by which supposedly "mental," "psychological," or "social" attributes are explained through human corporality, to which a particular logic is attributed (Duarte, 1999) – an approach that was prevalent in Brazilian psychiatry in the mid-1900s. The cornerstone of this study is the trajectory and intellectual work of a physician from the northeastern Brazilian state of Alagoas, who made a name for her opposition to some of the characteristic interventions inspired by physicalism. The doctor in question was Nise da Silveira (1905-1999), who, in 1944, started working at the Occupational Therapy

and Rehabilitation Sector (Setor de Terapêutica Ocupacional e Reabilitação) of the former National Psychiatric Center (Centro Psiquiátrico Nacional), situated in the Engenho de Dentro district of Rio de Janeiro.

Nise da Silveira's readings of authors from the fields of psychoanalysis, art, and philosophy, including Carl Gustav Jung, Antonin Artaud, and Baruch de Spinoza, led her to propose that expressive activities like painting and sculpture should be used as a form of therapy and a way of understanding madness, in stark contrast with certain methods she regarded as aggressive and ineffective. In 1952, she created the Museum of Images from the Unconscious (Museu de Imagens do Inconsciente), a space for therapy, science, and exhibitions, inside the psychiatric complex in Engenho de Dentro, where she worked. Throughout the following decades - even after 1975, when she reached compulsory retirement age, and right until 1999, when she died - she produced a constant flow of intellectual work, including the editing of books and documentaries, the organizing of exhibitions, and the founding of institutions, like Casa das Palmeiras, a pioneer in providing services for former psychiatric inpatients. The argument to be developed here is that her thinking constituted a systematic rejection of certain assumptions regarded as hegemonic throughout the emergence of modern scientific thinking, especially those of physicalism and mechanism, making it closer to the monistic aims of Romantic and vitalistic thinking.

The hypotheses presented here are the result of research undertaken since 2012, which has so far yielded a master's dissertation (Magaldi, 2014) and two published papers (Magaldi, 2016a, Magaldi, 2016b), and is being taken forward in a doctoral thesis. The field of investigation is the set of actors, knowledge, and institutions involved in realizing Nise da Silveira's medical and scientific objectives from the 1940s to the present day, insofar as they still inspire public policies, cultural manifestations, and political activism. Taking an anthropological perspective, the methodology aims to combine: (1) the participant observation of study groups, talks, expression workshops, film screenings, exhibitions etc. at institutions related to the work of Nise da Silveira; and (2) the ethnographic study of archives and documents on the subject – books, articles, interviews, catalogues, biographies, letters, manuscripts, medical records, etc. – at libraries and archives inside and outside the psychiatric complex where Silveira worked. In this text in particular, the books written by Nise da Silveira, published biographies, and the experiences of the present-day study group at the Museum of Images from the Unconscious are the focus.

The article comprises a literature review of the prevailing treatments used during the period under investigation, focusing particularly on psychosurgery, electroconvulsive therapy, and insulin coma therapy. Next, some of the principles of Nise da Silveira's criticism, her subsequent medical and scientific work, and the key concepts behind it are described. Finally, a brief overview is given of the developments in physicalism in the last decades of the twentieth century, especially since psychopharmacology consolidated its position as the most primary therapeutic approach, with an increase in molecular research, and the emergence of diagnostic and statistical manuals of mental disorders, taken as pillars of contemporary biopolitics (Rose, 2013).

Modern forms of trepanation

In 1935, during the International Neurological Congress in London, a chimpanzee shared the stage with doctors John Fulton and Carlyle Jacobsen. Their intention was to show changes in the wild animal's behavior after the ablation of its frontal lobes, which had made it docile and passive.

At the same time, operations of this kind were inspiring several neurologists from the US – notably Walter Freeman and James Winston Watts – and Portugal – in particular Antonio Egas Moniz – to attempt brain surgery on humans by introducing metal picks to the cranial region. The idea was to eliminate mental illnesses or modify unseemly behaviors. As Masiero (2003) points out, this kind of technique was first discussed in Brazil around 1928 on the occasion of a visit to the National Faculty of Medicine, University of Brazil, by the aforementioned Portuguese scientist, himself a professor at the Faculty of Medicine of the University of Lisbon. In Brazil, for two decades, over one thousand people – including foreigners and children – underwent psychosurgery, even though there was never any consensus as to its efficacy.

There is a terminological difference that should be clarified between American psychosurgery and its Portuguese counterpart. The former was better known as lobotomy (from the Greek *lobos*, lobe, and *tomos*, cut), while the latter went by the name of leucotomy (from the Greek *leuko*, white, denoting the white matter in the brain). The terms eventually became synonymous, despite the different techniques employed by the surgeons at psychiatric hospitals in the Americas and Europe. Both procedures were based on the understanding that human behavior had direct anatomical and physiological roots, and that a modification – or, more specifically, a section – to the brain, the material source of all psychic life, could mitigate its dysfunctions. This perspective drew on nineteenth century locationist theories, which related points on the skull with mental functions, consolidated in the field of phrenology. While Freeman and Watts's operation involved severing the fibers between the prefrontal lobe and the thalamus, Moniz's targeted the frontal lobe. Both techniques were used in Brazilian psychiatry, especially the one practiced in Portugal (Masiero, 2003).

Another procedure widely used at the time was electroconvulsive therapy, better known as electroshock therapy. The Hungarian Ladislas Meduna was the first to venture into the terrain of convulsive therapy with a view to combatting psychiatric symptoms. He put forward the curious hypothesis that inducing seizures in a patient with schizophrenia would attenuate their pathological state because epilepsy and schizophrenia were biological opposites. To do this, he made use of an injection of metrazol. It was in the hands of the Italian psychiatrist Ugo Cerletti that the technique became more clearly defined, especially with use of electricity to cause convulsions – a technique that was first tested on pigs. In 1927 electroshock therapy was launched at a meeting of the Swiss Psychiatric Association. Basically, it consisted of applying electrical discharges to the temporal regions through small electrodes.

A third treatment method inspired by the increasingly influential physicalist approach was insulin shock therapy, created by the Austrian Manfred Sakel in 1933. Unlike

psychosurgery and electroshock treatment, this procedure did not target the brain directly; rather, it consisted of a series of intramuscular injections of insulin. Insulin was already used in medicine, especially in cases of *delirium tremens* and malnutrition. However, Sakel felt it could also be effective for persons diagnosed with schizophrenia, especially in its paranoid and catatonic forms. The aim, through four stages of application, was to lead the patient from hypoglycemia to coma – for which reason the treatment also came to be called insulin coma therapy (Melo, 2009).

The emergence of such medical procedures as psychosurgery, electroshock therapy, and insulin coma therapy indicates certain key trends in the history of psychiatry in the course of the century. It had already been notable for its mentalist and moral overtones, especially in the early years of alienism in the 1800s. While it was committed to the classificatory principles of natural history, psychiatry was then a science that focused its attention on the soul, volition, and understanding, leading it to break away methodologically from the rest of clinical medicine, which became increasingly rooted in the materiality of the body. It was only with the advent of studies in somatology in the nineteenth century that psychiatry drew closer to medicine, moving away from the aegis of alienist dualism and towards physicalism-inspired goals in the study and treatment of madness (Serpa Jr., 2004; Venancio, 1993). Lobotomy, leukotomy, electroshock treatment, and insulin coma therapy, all created in the interwar period, were undoubtedly the supreme expression of the direction mental healthcare was taking in the period in question.

A rebel psychiatrist

Nise Magalhães da Silveira was born in 1905 in Maceió, Brazil. She graduated from the Faculty of Medicine of Bahia in 1926, and a year later she moved to Rio de Janeiro, where she worked as a trainee at the clinic run by Antônio Austregésilo, a key figure in the constitution of the field of neurology in Brazil. In 1933 she passed a public competition and was admitted to the ranks of the Healthcare Service for Psychopaths and Mental Prophylaxis (Serviço de Assistência a Psicopatas e Profilaxia Mental) at the National Mental Asylum (Hospício Nacional de Alienados), a site that is now part of the Federal University of Rio de Janeiro. At the time, the country was under a dictatorial regime known as the New State (Estado Novo), and a nurse denounced Silveira to the authorities for owning Marxist books, for which she was imprisoned at Frei Caneca prison. There, alongside Olga Benário, she was immortalized on the pages of Graciliano Ramos's Memórias do cárcere [Memoirs of prison]. Even after she was released, in 1936, Silveira was not allowed to work as a civil servant and was under constant threat of being imprisoned again. Little is known of this period of exile, as at this time she was prevented from engaging in medical practice of any kind. It was only in 1944 that she was admitted back to hospital life, this time at the asylum in Engenho de Dentro, Rio de Janeiro, to which many of the patients from the National Mental Asylum had been transferred because of overcrowding (Frayze-Pereira, 2003; Mello, 2002, 2014).

On her return to public service, Nise da Silveira came into contact with the new treatment methods created in psychiatric laboratories in the previous decade, which had

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recently been introduced to Brazil's asylums. It was not long before she started expressing her resistance to such techniques as electroshock therapy, psychosurgery, and insulin coma therapy. An emblematic case of her encounter with the new standards of care is written up in a biography by writer and art critic Ferreira Gullar (1996, p.46), based on an interview with Nise da Silveira in January 1996:

During all the years I was away, a number of new treatments that were not used before came into vogue in psychiatry. That wretched Portuguese man, Egas Moniz, who won the Nobel Prize, had invented lobotomy. Other new treatments were electric shock, insulin shock, and cardiazol shock. I went to work on a ward with a doctor who was intelligent, but had adapted to those innovations. So he said to me, 'you're going to learn the new treatment techniques. Let's begin with electric shock therapy.' We stood over the bed of a patient who was there to have electric shocks. The psychiatrist pressed the button and the man started to seize. When the other patient was ready to receive a shock, the doctor said to me, 'Press the button.' I said, 'I won't!' And that's where the rebel began.¹

What lay behind this resistance? Further on in her statement, Nise da Silveira also describes a dispute over insulin coma therapy, which sheds some light on it: "One day I gave a patient insulin shock therapy and afterwards the woman didn't come round. I was beside myself. I injected a sugar solution in her vein, but she didn't come round. I tried again until I was successful. Then I said to myself: never again" (Gullar, 1996, p.46). It is clear here that the risks these techniques posed were among the main sticking points for Silveira. However, as we will see, she did not just see these treatments as risky, but as downright aggressive and ineffective. She felt that electroshock therapy, insulin coma therapy, and lobotomy walked a fine line between cure and violence, while also being grounded in questionable philosophical assumptions.

In the first paper in her book *O mundo das imagens* [The world of images], published in 1992, Nise da Silveira indicates the strong and lasting influence of Descartes in the understanding of the relationships between mind and body in scientific medicine. In her interpretation, according to Cartesian conceptions, the body is a machine and diseases arise when its functioning is disturbed. Medical practice attuned to this conception will focus primarily on making physicochemical interventions with the aim of eliminating pathological states in much the same way that some mechanical malfunction might be fixed. When it comes to psychiatry, reason is reduced to an epiphenomenon of the brain, which means organic causes are sought while psychological dimensions are overlooked. This, according to Silveira, was where mechanism and physicalism came together. It was no longer a matter of affirming the existence of reason separately from the body, as in the original form of Cartesian thinking, but of reducing it to the body, or, more specifically, the brain, and thereby understanding it as hardware that needs repairing.

According to Nise da Silveira (1992, p.11), one of the first consequences of this Cartesian conception was the aggressive nature of treatments, "used to fix the sick machine by force." In this sense, she understood electroshock therapy as "lighting from the insideout" (p.11), in reference to its creator, Ugo Cerletti, and described the suffering his first patient experienced: "'No, again! It's horrible' were the words pronounced by the first victim of

electroshock therapy" (p.11). She went on to talk about insulin coma therapy, strongly criticizing its effects, which she described as physiological and psychological regressions. Like electroshock therapy, insulin therapy was designed to induce memory loss, which, its followers argued, confirmed its putative efficacy. Finally, Silveira addressed psychosurgery, citing both Egas Muniz and Walter Freeman. She saw it as a method of treatment that created automatons stripped of their capacity for abstraction and imagination. "All these techniques thus constitute an attack on the integrity of man in his noblest of organs" (p.12). In the other chapters of the book, the doctor refers to the case of Lucio Noeman, who was given a lobotomy against his will and was left, as she describes it, in a state of "irreversible decadence" (p.23).

Again according to Gullar (1996), Nise da Silveira's opposition was galvanized primarily as of the creation of the studio for expressive activities at the Occupational Therapy and Rehabilitation Sector of the psychiatric complex, where she was transferred in 1946 on the suggestion of Paulo Elejalde, then the director of the National Psychiatric Center (Centro Psiquiátrico Nacional). It was the only institution where the interventions under investigation in this paper were not used. There were already some occupational activities on offer there, but nothing more than manual work and cleaning services. In partnership with the artist Almir Mavignier, who was then a clerk at the hospital, Nise da Silveira started to offer painting, sculpture, modeling, and similar activities as alternative treatments. It was not so much an art school as a space for creative freedom, where spontaneous actions were encouraged, all in the wider context of valuing the power of socialization and emotional bonds. Her patients' works attracted the attention of some leading figures from the Riobased concretist art group, including Ivan Serpa, Mario Pedrosa, and Abraham Palatnik, who affirmed their aesthetic worth and had them exhibited in art galleries and museums in Rio and São Paulo (Villas Bôas, 2008, 2015). In 1952, the collection of works produced at the studio became the collection of the Museum of Images from the Unconscious, founded in the heart of the psychiatric complex in Engenho de Dentro.

One important point to note is that Nise da Silveira was working with patients whose verbal communication was extremely limited. She was also clear in her mind that in the prevailing treatment model there were no consistent attempts to really understand the subjective experiences of psychosis. In this sense, the use of images became the main key to accessing what she called her patients' "inner world."

The notion of the unconscious was, then, central to her. This category was, as we know, established by the father of psychoanalysis, Sigmund Freud. In the late nineteenth and early twentieth centuries, in *fin-de-siècle* Vienna, Freud took a significant step away from the psychology of consciousness to propose a field of study and practice designed to investigate the hidden face of the psyche – a terrain of desires that were not only unknown and unexplored, but apparently beyond the reach of the sphere of reason. In the nineteenth century, German philosophers of the standing of Schelling, Nietzsche, and Schopenhauer had already played a key role in conceptualizing the unconscious as a force that operated against rationalism. Albeit without Freud's therapeutic polish, there was already in these authors' writings an emphasis on the dark dimension of the human spirit (Roudinesco, Plon, 1998). In the very origins of alienism, there was also the thesis that madness was

actually the outcome of passions, which stripped the subject of himself (Gauchet, Swain, 1980). Freudian practice consolidated this thesis and put great emphasis on verbal language as a therapeutic tool. Talking cure, later refined in the method of free association, was the main technique through which unconscious content came to the surface, triggering psychic relief (Freud, 2003).

Freud did not neglect the language of images, devoting his attention to it through dream analyses (Freud, 1980) and the interpretation of works of art (Freud, 1990). However, Nise da Silveira held that one of the main problems in the Freudian approach was the constant subservience of image to word. As she put it in *Imagens do inconsciente* [Images from the unconscious], the classic work in which she best sums up her thinking,

[p]sychoanalysis aims to discover materials repressed in disguise in painted images. And in order to bring them into consciousness, in analytic therapy the image will serve merely as a starting point for verbal associations until the repressed unconscious is reached. ... The images, then, have to be translated into words (Silveira, 1981, p.133-134).

As she saw it, images could themselves provide the primary route for the expression of the unconscious; verbal language was the terrain of logic, reason, concepts. In Silveira's thinking, this connection became even more explicit after her reading of Antonin Artaud, a French writer and playwright who spent the last years of his life as a patient in mental asylums in Paris. In his well-known *Cahiers*, the author recorded his experiences of incarceration, writing unceasingly until his death. For Nise da Silveira, Artaud was one of the few who had managed to express the experience of madness through words. This point is made explicit in a text originally published in her 1989 book, *Artaud: a nostalgia do mais* [Artaud, nostalgia of the more]:

Before Artaud, nobody had ever managed to express these torturous experiences so strikingly in words. Through the image, yes, which is the direct form of expression of deep unconscious processes, many have done so, and do so every day, using pencils and brushes. Through the word, no. Because verbal language is the supreme language of logical thinking, the elaborations of reason. And these experiences, which Artaud articulates in words, take place a thousand leagues from the rational sphere (Silveira, 1989, p.10-11).

As she incorporated visual expression into her therapeutic work, Silveira encountered a constant source of inspiration in the work of Carl Gustav Jung, founding father of analytical psychology. In his theories she found the arguments she needed to sustain that the creation of images was not just a way of accessing the unconscious, but a means of triggering therapeutic efficacy. If the experience of psychosis was fundamentally marked by a fragmentation of the psyche, the act of painting and modeling could have an integrating function. This awareness came primarily from her observation of the recurrence of circular and concentric figures in her patients' work. It is here that the relationship between Silveira and Jung began, as narrated in the second chapter of *Imagens do inconsciente*. In 1954, after bringing together hundreds of such images in the studio in the Engenho de Dentro complex, Nise da Silveira wrote a letter to the Swiss psychiatrist asking whether they were mandalas and how to interpret them. Jung's secretary, Aniela Jaffé, replied a

month later, confirming that theywere indeed mandalas – universal symbols of oneness present in a host of cultures since the remotest past – which demonstrated the tendency of the unconscious to compensate for the chaos of consciousness in cases of schizophrenia. Here, a kind of vitalism can be envisaged, which conceives of the psyche's potential for reorganization and self-healing, much like a living organism:

Like all living systems, the psyche defends itself when its equilibrium is disturbed. Circular or circle-like images give form to the instinctive defensive movements of the psyche, normally appearing shortly after the severe period of an outbreak of schizophrenia, provided the patient has the chance to draw and paint freely in a soothing environment (Silveira, 1981, p.55).

Silveira actually met Jung in 1957 at the second International Congress of Psychiatry, in Zurich. The Museum of Images from the Unconscious was taking part in "Art and schizophrenia," an exhibition of works by psychiatric inpatients from hospitals across Europe. Jung himself saw the works and confirmed that the spontaneous manifestation of these figures arose from the symbolic language of the collective unconscious. As is well known, Jung, who had broken away from Freud, believed that there was an even deeper layer in the depths of the psyche replete with primordial imagery, archetypes, which were present in all cultures throughout the centuries (Jung, 2008). This thinking, clearly associated with the universalist notion of a psychic structure shared by all men, had as a corollary the idea that the experience of psychosis was particularly propitious for the emergence of archetypal themes, like the mandalas observed by Silveira.

Alongside the recourse to the notion of the unconscious and the effectiveness of treatment through the production of images, another leitmotiv of Nise da Silveira's work deserves being mentioned before moving forward with our reflections. Essentially, she was interested in the singularity of madness, which ran counter to the diagnostic system then in place. This point is again explicated in her relationship with the thinking of Antonin Artaud. Nise da Silveira had encountered one of her key concepts in a comment by Artaud about a painting by the surrealist artist Victor Brauner: "The being has innumerable and increasingly perilous states," as narrated in the introductory text of her book *Artaud: a nostalgia do mais*:

It seems to me that Artaud was referring to certain terrible events that could take place in the depths of the psyche, shaking the whole being. Digressions in the logical direction of thought; dismemberings and metamorphoses of the body; loss of the limits of one's own personality; agonizing restrictions or terrifying expansions of space; chaos; void; and many more subjective conditions experienced that the painting of the patients at Engenho de Dentro made visible. Images certainly reveal perilous states of being, which resist apprehension within the medical model adopted by psychiatry today (Silveira, 1989, p.9).

Nise da Silveira held that descriptive psychiatry was incapable of conveying the dramatic content of such experiences, merely enumerating core or associated symptoms of schizophrenia. By avoiding the words "schizophrenia" and "disease" and instead using the notion of the "state of being," she made it clear that she opposed psychiatric therapies

and diagnostic systems. She went on, attributing the French playwright with the merit of expressing madness: "These symptoms do not make up a disease, a clear pathological entity, but are manifested as multiple states of dismembering and transformation of the being" (Silveira, 1989, p.9).

All the aforementioned elements serve to offer a very brief overview of the therapeutic conceptions of Nise da Silveira. The systematic investigation of the unconscious and the quest for solutions to its disintegration through sensory experience were amongst her most fundamental motivations.

Another science

Some historical studies have described a major cosmological rupture in the western tradition, responsible for giving rise to modern science. Alexandre Koyré (1979) indicates a crisis of European consciousness that took place in the sixteenth and seventeenth centuries alongside the emergence of a new cosmology, which replaced the closed geocentric world of Greek and medieval astronomy with the model of the infinite universe, first seen as heliocentric and later, acentric, of modern astronomy. According to the author, many historians have sought to analyze the social implications of this change, drawing attention to the passage from a *scientia contemplativa* to a *scientia active et operativa*, or the conversion of the human spirit from theory to praxis; others have highlighted the change of focus from teleology to mechanism as the primary explanatory principle. One way or another, they all share a concern in delineating the bases for a rupture between the old and new world views, although this did not come about in one fell swoop, nor was it straightforward or, indeed, limited to the ambit of astronomy, involving key figures such as Newton, Copérnico, Galileo, and Descartes.

The mechanistic worldview was what mainly consolidated this great transformation. The philosophical perspective of mechanism had shifted the representation of an animate world, which prevailed in the astro-biological model and the medical-philosophical tradition until the Renaissance, towards one in which all reality was analyzed under the model of an agglomeration of material molecules combined according to the laws of movement. Paolo Rossi (2001) made some significant comments on this proposal, describing the mechanism as a project that should be taken forward in a quest for laws, achieved thanks to a model of analysis operating through the abstraction of any sensitive or qualitative elements. For Rossi, Cartesian psychophysiology, responsible for the radical split between matter and spirit, "paves the way for the biological mechanism of doctor-mechanics and the progressive substitution of the vital principles of the tradition of vitalism for the methods of chemistry and physics" (p.255).

The anthropological perspective sustained here understands the importance of not disregarding the knowledge that, in the heart of western cosmology, underpinned the ideas of nascent modernity, understanding it not as a monolithic, absolute rupture, but a process continuously marked by contestations and resistance. Luiz Fernando Dias Duarte (2004, 2006, 2012) sees the Romantic reaction to Newtonian mechanism, expressed particularly in Johann Goethe's *Theory of colors*, as one of the cornerstones of a complex process of

denouncements of materialistic reductionism, the loss of sensitive properties, and the incapacity to apprehend elements in their significant totality. A number of positions were developed in the ambits of science, art, and politics as of the eighteenth century that opposed the rationalistic world view of the Enlightenment, especially in Germanic culture, which took the values of sensitivity, subjectivity, creativity, spontaneity, the spirit, flux, experience, impulse, life, volition, totality, integration, and singularity as their key values.

On the same subject, Georges Gusdorf (1982) describes the emergence of Romantic knowledge in Western Europe in and around the eighteenth century, also drawing particular attention to the German setting, which was responsible for countering the new standard of science, whose most notable expression was mechanical philosophy. The emergence of mechanism had, he claims, guaranteed the success of an analytical representation of the universe, dissociated in countless isolated phenomena, whose cohesion was assured by the rigorous determinism of the laws of science. Taking forward these ideas, Enlightenment thinkers had made progress in putting the universe into the equation, refining their principles by means of generic axiomatic abstractions. Meanwhile, Romanticism returned to a previous model of knowledge that aimed not just to decipher the superficial order of phenomena, but to make connections with the essence of cosmic reality.

At the heart of Romantic knowledge lay a radical rejection of the mathematical mechanism of experimental science and a return to the art of horoscopes, alchemy, and the occult and hermetic sciences in general. In this interpretation, whose ultimate expression was *Naturphilosophie*, the universe was more like a poem than a machine, and was understood as a living whole ruled by a common order. As Peter Hans Reill (2005) points out, the *Naturphilosophen*, like Goethe and Schelling, had taken to the extreme the ambition of a totalizing view capable of uniting spirit and matter, and considered the universe a living entity to be developed according to inherent principles and nature as a product of an unconditional asset that could not be reduced to causal explanations.

Tension between the main principles of rationalism, individualism, universalism, the flattening of levels, and the distancing from the sensitive and its reactive principles was more explicit in the historical controversy between Enlightenment and Romanticism, especially in the eighteenth and nineteenth centuries. However, this does not mean that ramifications of this have not remained in play since then. Indeed, in the period immediately after World War II, such a tension took form in a number of (not always homologous) phenomena that emerged in different ambits of western society, like the arts, philosophy, and politics. Counterculture, Orientalism, and different forms of postmodern expression are some of the clearest examples of the unbroken nature of the subjects raised by the first Romantics. In this sense, a "Romantic urge" (Duarte, 2004) could be seen as one of the cosmological principles characteristic of what has come to be called modernity. It should also be recalled that the nature of this tension is not reciprocal or egalitarian, insofar as one of its constitutive terms always corresponds to the counterpoint, a secondary moment in a dynamic that surpasses and determines it. This is, then, a hierarchical tension marked by a differential value, in that one of the sides, of a reactive state, continues to beat a disadvantage.

The emergence of scientific medicine could also be interpreted in the light of the recognition of this tension. Especially as of the decline of alienism, psychiatry was constituted under the aegis of a classificatory project designed to inscribe the human body and human behavior on the domain of nature, especially with the application of mechanic principles to the functioning of the mind. Nonetheless, of the areas of knowledge that broke away from its original impact, psychoanalysis stood out as a set of theories designed to try and repair the reductionisms attributed to universalism, physicalism, rationalism, materialism – essentially, to the "naturalism" present in the hegemonic project of modern science (Duarte, 2013) – while remaining absolutely committed to it.

This repairing was certainly quite limited in Freudian thinking. Despite his willingness to take madness seriously, evoking both the critical tradition and the tragic tradition (Birman, 2010), there is nothing opaque in his commitment to mechanistic models and his expectation of a future naturalistic proof of his hypotheses. Between the different branches of psychoanalytic knowledge, as shown below, the analytical psychology of Jung, the greatest inspiration for Nise da Silveira, was certainly the one that took the monist aspirations typical of Romantic cosmology furthest.

The problem of the affinity between Jungian thinking and Romantic knowledge is not addressed in this research only from a conventionalizing analytical perspective; it is an ethnographic question that emerged from my participation in the study group at the Museum of Images from the Unconscious, the institution that continues the work of Nise da Silveira. The meetings took place every Tuesday in the institution's lecture hall in 2012, when I was doing the fieldwork for my master's dissertation (Magaldi, 2014), and were open to employees, patients, and the general public. According to the event's program, the aims and objectives were to promote the study of the methods of image interpretation employed by C.G. Jung and Nise da Silveira.

Throughout this ethnographic study, it became clear that Romantic thinking was a common denominator amongst the people engaged in Silveira's medical-scientific project. The guest professor Maddi Damião Jr., a former student of Silveira's, has written a text on the subject, in which he sets the Enlightenment principles of science against Romantic science, accusing the former of reducing the reality of life. He stresses that the specific contribution of Romantic science lay precisely in its preservation of the wealth of living reality, a point expressed particularly well in Goethe's famous line that "all theory is gray, but the golden tree of actual life springs ever green." Damião Jr. then turns his attention to the relationships between Jungian thinking and Romanticism. Although Jung was not obtusely anti-rationalist, his most fundamental aim was the quest for a science of the singular: "a science of the singular deals with the problem of truth, interpretation, meaning and becoming, creation, and it is to this science and this form of thinking that Jung's psychology leads us" (Damião Jr., 2011, p.90).

These Romantic roots of analytical psychology impose a radical opposition to Cartesian dualism, responsible for the separation of body and soul and for granting reason primacy over extension. In the following passage from a manuscript preserved and later published by one of her students, Martha Pires Ferreira, Nise da Silveira makes an explicit attack on the psychophysiology of Descartes in favor of Jung's analytical model, which proposes a

union between body and soul, psyche and matter, prizing the Romantic goal of reunification identified in this text:

There are very clever psychiatrists, do not take it literally when I called it the exemplary stupidity of psychiatry. Jung, for instance, was not just a psychiatrist, he was a genius. He was a man who put the psyche into contact with matter. He combines matter and spirit and draws close to something, in psychology, very near to Einstein. One thing is to consider that matter and spirit are one and the same thing. Another is the Cartesian view, which considers matter, animal, man, a machine that works in isolation, with reason ruling over it all from the big head on high (Ferreira, 2008, p.9).

Other scholars of Jung have also drawn attention to the compatibility between his psychology and Romantic philosophy. In *In search of Jung*, J.J. Clarke (1993) notes that Jung stated explicitly that Germans like Goethe, Schiller, and Schelling were pioneers in the study of the unconscious. It is possible, he goes on, to draw up a significant list of common ground between the thinking addressed here, including the analysis and rehabilitation of the instinct, intuition, and imagination; a concern with dreams and fantasy; a belief in the unconscious nature of art; the notion of a symbiosis between man and nature; the contestation of scientific rationalism; and, most importantly for this paper, a criticism of the mechanistic conception of the mind, reformulated in a broader cosmology, which could be described as a non-dualistic philosophy, or "a unified philosophy of nature that equally includes the world of matter and the spirit" (p.88).

Sonu Shamdasani's (2003) work on the emergence of Jungian thinking in modern psychology seems to confirm this hypothesis by rooting the importance of Romantic thinking to analytical psychology in the genealogy of the notion of "unconscious." He refers to a seminar held in 1938, where Jung drew links between modern philosophy and Romanticism by citing works by von Hartmann and Carus (author of the 1846 book *Psyche*). By mapping out the relationships between these authors, including the whole German intellectual tradition from Kant onwards, Shamdasani effectively distances himself from the "Freud-centric" interpretations that identify the foundations of Jungian psychology in his dissidence from the father of psychoanalysis, expanding on the complex international scenario in which this was able to come about.

Aside from drawing direct connections between these authors, what matters most here is the persistence of the questions inherent to the controversy between Romantic thinkers and the mechanistic hypotheses in the latest developments of modern medicine, especially when it come to the relationship between body and person, a key issue of psychiatry. Nise da Silveira's crediting of the singularity of sensory experience and creative potency with therapeutic functions should also be understood in the light of the recognition of this other thrust of modern western thinking. In an interview published in the journal *Rádice*, 1976-1977, Nise da Silveira was asked about the Romantic connotations of her thinking: "And what's wrong with being Romantic? Isn't Romanticism a countercurrent against the excesses of rationalism?" (Mello, 2009, p.67).

Another figure with whom Nise da Silveira articulated her thinking was Baruch de Spinoza, a detractor of Descartes and one of the key figures behind the Romantic tradition

(Martins, 2011). Spinoza's criticism was based on the inseparability of body and soul and his systematic denial of the notion of a transcendental divinity. He saw the universe as an eternal machine that had no meaning or purpose, the expression of a necessary and immanent causality. In *Cartas a Spinoza* [Letters to Spinoza] (Silveira, 1995), a book of fictitious correspondence, Silveira sets forth the basis of her thinking in continuity with Jungian psychology through a valuing of imagination and the oneness of all things, conceived as modes of existence of divine substance.

Thus, in Silveira's thinking, dualism, as the radical separation of matter and spirit defended by Cartesian mechanism, and its ensuing reductionist development, physicalism, or the attempt to reduce spirit to matter, are rejected in favor of the conception of a world in which matter and spirit, or body and soul, are indissociable insofar as they are composed of a vital sensibility. In this idea we can see an attempt to bring "the psyche into contact with matter" without reducing one to the other. It was, then, a project that could tentatively be called "vitalistic monism," which conceived of a solidarity between person and cosmos and a creative drive inherent to life, which was conducive with Spinoza's thinking, the Romantic tradition, and its more contemporary philosophical and anthropological ramifications.

Contemporary horizons of physicalism

The tension between Nise da Silveira's therapeutic approach and the psychiatric treatments in vogue during her professional life should not lead to any confusion between her proposal and any kind of "mysticism." The attributes of universalism, individualism, and the principle of visualization typical of the modern scientific project constituted the common backdrop against which her contentions were presented. Like the "well-behaved" psychiatrists, our rebellious psychiatrist focused on the systematic quest for a universal basis of human psychology, observed particularly in the notion of the collective unconscious, and the figure of the creative individual as the source of psychic life. The interest in making the invisible visible typical of dissection in nineteenth century clinical medicine, as described by Foucault (1963), was revamped in the language of psychoanalysis in a bid to seek out the images of the unconscious. One way or another, the conceptions held by Nise da Silveira described here allow us to consider certain factors regarding her particularly reactive position in the history of Brazilian psychiatry.

A combination of analytical psychology and expressive activities constituted the first wave of criticism of the physicalism that was hegemonic in Brazilian psychiatry in the first half of the twentieth century. Nonetheless, it is important to consider the fact that Silveira's work was obliterated by the medical circles of her day. Only in the 1980s, thanks to the efforts of the Brazilian psychiatric reform movement, did this picture start to change, albeit slowly; as Melo and Ferreira (2013) explain, Nise da Silveira is still often the target of mythification and her status amongst the country's academic circles is still low. Her name continues to be used by activists, researchers, and cultural producers, who raise her to the status of a pioneering reformer in Brazil, while knowledge about the content of her work is still limited.

Generally speaking, such transformations do not indicate any decline of physicalism as the ontological conception underpinning psychiatric treatments. Rather, this critical horizon has continued in a supporting role. In 1952, the same year that the Museum of Images from the Unconscious was founded, the first antipsychotic, chlorpromazine, was synthesized. Since then, psychopharmacology has gradually become the main stay of mental healthcare. In the last three decades of the twentieth century, the use of psychiatric medications became increasingly widespread along with the institutional changes that marked the progressive passage from the asylum to outpatient care. This context was also marked by changes in diagnostics, particularly after the publication of the third Diagnostic and Statistical Manual of Mental Disorders (DSM). After this came out, in 1980, mental illnesses started to be understood as universal morbid entities, and the doctor/patient relationship started being guided particularly by the pharmacological control of symptoms. Behind a supposed absence of theorizing, the specific theory of disorders underlying this material is revealed, defined by the belief in an objective substrate sustained on biology and physiology (Henning, 2000).

Many studies have indicated the triumphal emergence of a body of knowledge about materiality and biological constraints on the comprehension of human behavior. Several authors (Azize, 2008; Bezerra Jr.,2000, 2007; Russo, Henning, 1999; Russo, 2001; Rose, 2013; Meloni, 2011) have described how, since the 1980s, the plan to make humans "natural objects" in the field of science started to gain ground. In this context, behavioral genetics, sociobiology, evolutionary psychology, and neuroscience are pivotal disciplines devoted to promoting a physicalistic and often reductionistic interpretation of psychic and cultural phenomena.

This process has had particular repercussions on psychological knowledge rooted in propositions not exclusively naturalistic in nature, such as psychoanalysis. This field is immersed in a complex scientific arena, where, at a disadvantage, it is driven to compete with the plethora of emerging biological therapies, like psychopharmacology. Without the classificatory systems of psychiatry, psychoanalysis is obliged to justify its basic conceptions in terms of the natural sciences, often using them to justify itself (Campos, 2000; Bezerra Jr., 2007). The methods of treatment Nise da Silveira stood up against have not been completely extinguished in this setting, especially electroconvulsive shock therapy, which, according to its advocates, is now less aggressive and is given with all due anesthetic care, while also supposedly counting on the consent of patients (Varella, 2012). Since the 1980s, the notion of a psychological subject inhabited by a symbolic inner world has been obscured by what Nikolas Rose (2003, p.54) calls the "somatic individuality," or a "tendency to define key aspects of one's individuality in bodily terms, that is to say to think of oneself as 'embodied,' and to understand that body in the language of contemporary biomedicine."

According to Nikolas Rose, the 1960s marked the end of the golden age of clinical medicine. From then on, a new series of transformations shook the field of medicine, which came to extend its specific control over disease in a bid to administrate its reproduction and risk, while also optimizing health and body. This was supposed to be brought about by the increased technological sophistication of the diagnosis and therapy systems, which also included an increasingly complex division of labor into specializations in

the field of medicine. This set of changes is conceived by the author through the notion of "molecularization." The "molar" level of seeing the body became typical of clinical medicine, on the scale of limbs, organs, tissues, blood flows, hormones, etc. Although this scale has certainly not ceased to exist – and is, indeed, present in advertising for health products and the rise in plastic surgery – it is now accompanied by another, "molecular," which has become the backbone of contemporary biomedicine. Now, life is primarily comprehended in terms of functional properties and genetic codes, which are understood as mechanisms that regulate behavior.

In molar terms, diagnoses are made according to the pathology of the organs. However, on the next level, the idea is to seek out the molecular structure of the causal agent of each disease. This is particularly noticeable in psychopharmacology. Thus, in the drug industry and in research for treatments, the selection, manipulation, testing, and development of therapeutic agents is basically undertaken in molecular terms, as is the explanation of their mode of functioning. The author shows that even herbal remedies and psychoanalysis have sought to legitimize their apparently mysterious modes of functioning in molecular terms. The gradual expansion and reshaping of diagnostic systems based on molecular research is a trend that should be observed closely. Disorders previously classified together have become increasingly fragmented and specified.

Final considerations

It is worth concluding this overview with a few considerations about the continuities and discontinuities in the physicalist orientation of psychiatry in the middle of the last century and today. One thing that leaps out is the ongoing attempt to suppress symptoms, which can be seen both in the controversies over psychosurgery, electroshock therapy, and insulin therapy and in the use of drugs to treat mental disorders. However, this relationship has come about through a change in the diagnostic system and its interaction with the drug industry. This orientation has brought about the actual definition of nosographic and etiological entities based on chemical alterations of behaviors. According to the new model of neurobiology, behaviors are conceived as diseases that can be cured exclusively through organic materiality.

Nonetheless, it is also fair to say that a new mode of biopolitics has developed in the west, adding nuances to this scenario. Nikolas Rose and Paul Rabinow (2006) have indicated some potential for the development of the notion of biopower in the context of recent biomedical transformations, based on the initial reflections of Foucault (1988). They note in particular the recent proliferation of truth discourses about the vital nature of human beings. They add that the strategies for intervention on collective existence do not only impact national populations, but also emerging biosocial collectives, in terms of race, ethnicity, gender, religion, or in genetic terms. Finally, they discuss a change in the modes of subjectification through which individuals are induced to work on themselves under different forms of authority in the name of individual or collective life or health.

If we are to take these considerations seriously, they impose certain discontinuities in the physicalist thrust that predominated until the mid-1900s. Firstly, Rose and Rabinow propose a description of biopower that is made up of the articulation of a heterogeneous body of social actors, such as NGOs, activists, researchers, doctors' and patients' groups, in constant negotiation over projects for making life (*telos*), including new modes of individualization and conceptions of autonomy and rights. In this sense, biopolitics can be seen as a field of action, or at least an indeterminate field, where hierarchies can be constantly negotiated and even inverted. This diagnosis differs from the one against which Nise da Silveira defined her medical-scientific project, when there was still a very strict hierarchical system and the treatments grounded in medical knowledge could easily take on violating or aggressive overtones and be applied in questionable ways. There is therefore a need to consider the transformations that have given rise to psychopharmacology and diagnostic manuals as part of a potential field of greater negotiation, debate, and margin for action, including the progressive participation of patients themselves, especially since the psychiatric reform.

However, as Luiz Carlos Mello (2009, p.130), director of the Museum of Images from the Unconscious, recently lamented, "psychiatry today is totally based on medicines, antipsychotics... The patient takes the medicine, he paints, he doesn't paint. And they ask me why new artists haven't emerged at Engenho de Dentro; how can new artists appear if they're all doped to the eyeballs?"

This surely brings up some challenges for any attempt to consider the specificity of a putative new biopolitics in a public health system still under consolidation, as is the case of the system in Brazil. Medical violation is still a concrete or latent possibility, and the overuse of medicines and exclusive use of psychopharmacological approaches are the clearest examples of the shadow of this current mode of treatment. In *O mundo das imagens*, Nise da Silveira herself criticizes what she calls "chemotherapy," a method that replaced its precursors as of the 1950s, complaining of its side effects, such as the stultifying sedation of psychic functions. "The problem now was to reduce or quash manifestations of delirium and the motor expressions that accompanied them. Chemical straightjackets had been created" (Silveira, 1992, p.13). While she never completely ruled out psychopharmacology as a therapeutic tool, she was certainly circumspect about it: "Treatment using chemical substances controls symptoms, but does not cure them ... True therapy consists of facilitating cure, supplying the individual with an atmosphere of emotional support" (p.13).

Finally, there is some need to analyze the complexity of the so-called somatic individuality that supposedly makes up contemporary physicalism, insofar as it is verified not just in the field of biological psychiatry and localizationist neuroscience, but also in corporal therapies and the more phenomenological branches of neuroscience with an eye to cerebral plasticity and epigenetics (Russo, Ponciano, 2002; Serpa Jr., 2004). It is possible that Nise da Silveira's own therapeutic proposal was already a compromise between psychological individuality and somatic individuality. For if art has therapeutic properties, it can only be with the body, and more specifically the hands, with the touch of flesh on matter, that it gains form. Bringing the psyche into contact with matter is not, however, the same as reducing it to matter. And this is the difference that lies at the heart of the notions of body and person in the medical-scientific project of Nise da Silveira.

NOTES

¹ This and all the other citations of texts published or accessed in other languages are presented in free translation.

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