



# Psychoanalysis and neurosciences: fuzzy outlines? Notes on the notion of cerebral plasticity

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Abstract

“Psychoanalysis versus psychiatry” and “unconscious versus brain” are classic oppositions between different perspectives on the human being and mental suffering. This article draws on certain elements of this discussion and reflects on how new ideas about the brain and biology favor closer interaction between psychoanalysis and the neurosciences. These questions are redefined through the notion of cerebral plasticity, by which the brain is open to interaction with the social environment and the influence of psychoanalytical therapy. Conceiving of the brain as a plastic organ allows for the possibility of interchange between psychoanalysis and the neurosciences.

Keywords: brain; neurosciences; cerebral plasticity; psychoanalysis.

“Psychoanalysis versus psychiatry” and “unconscious versus brain” are classic oppositions between different perspectives on the human being and mental suffering, an old controversy from the early 1960s that emerged with the beginnings of the biologization of psychiatry (Shorter, 1997; Rose, 2007) and was reactivated in the 1980s with the publication of the third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III), regarded as one of the main factors behind the internationalization of the American model (Aguiar, 2004). In view of the importance of psychoanalysis in Argentina, this is a controversy that is very much alive there, especially since the recent publication of DSM-V.

In this paper I will pick up on certain elements of this discussion, which will serve as the basis for some reflections on how new ideas about the brain can foster closer ties between psychoanalysis and the neurosciences.

Psychoanalysis is one of the main therapeutic branches of mental health in Argentina, especially Buenos Aires (Vezzetti, 1995, Visacovsky, 2002; 2008; Plotkin, 2003; Lakoff, 2005). In recent decades, however, biological psychiatry has gained ground in the psy field, inspired by the neurosciences and related currents of psychology like cognitive behavioral therapy. Constituting a social arena for the production of knowledge, the neurosciences have emerged from a heterogeneous combination of areas of knowledge, methods, and disciplines engaged in the scientific study of the brain. The development of imaging technologies heralded a new phase of expansion for neuroscience insofar as it allowed the brain to be seen in action, from a scientific point of view (Dumit, 2004), thus enabling the progressive identification of the neural bases for a variety of mental states and disorders, social behaviors and conducts. The growth of psychopharmacology has itself favored the research of specific neurochemical mechanisms associated with the occurrence of certain mental disorders.

The rhetoric surrounding the “psychoanalysis/neuroscience” discussion is structured around the opposition of “humanism versus scientism” or “theoretical speculation versus scientific knowledge.” Based on this, different (biological or subjective) models for understanding mental suffering are counterposed against different conceptions of mental illness (related to physical or spiritual conditions) and its treatment (talking therapies versus psychiatric intervention based on scientific evidence).

However, this opposition needs to be reviewed in the light of contemporary transformations in biomedicine, which are introducing new perspectives on nature and biology, seeing it no longer as a fixed, immutable category, but as capable of being transformed by technological interventions and the socioenvironmental setting (Rabinow, 1996; Rose, 2007). In the “psychoanalysis/neuroscience” debate, these questions are redefined through the notion of cerebral plasticity, in which the brain is viewed as interacting with the social environment and the therapeutic influence of psychoanalysis.

What I want to do here is not so much to critically analyze the notion of plasticity, defining its scope and evaluating its effects, as to show how this notion opens up an ambiguous space for intervention in subjectivity, in which multiple therapeutic lines and approaches, like psychoanalysis, self-help, medication, and cognitive therapy, can coexist. The focus is, then, on what makes the notion of plasticity effective, not to evaluate whether or not it fulfills its promises of personal liberation or whether it is aligned with neoliberalism, but to understand its cultural significance. In this sense, I suggest that the notion of plasticity

as a concept operates like a hinge or fulcrum, connecting the psychological and biological conceptualizations of the person, because at one and the same time it integrates material (bodily) and symbolic (psychological) changes. The great potential of the notion of plasticity lies in its power to provide arguments that sustain the logic of therapeutic efficacy, which includes – but is not limited to – psychoanalysis. It is in the space of “everyday neuroscience,” to borrow Azize’s (2010) concept, that the notion of cerebral plasticity acquires social relevance.

### **Classic tensions in the psy world**

As mentioned earlier, the main elements in the psychoanalysis/neuroscience debate are structured around the opposition of humanism and scientism, or the contrast between theoretical speculation and scientific knowledge. The humanism vs. scientism opposition is based on the centrality of subjective experience (not brain mechanisms) as the locus of mental suffering in psychoanalysis. From this perspective, psychoanalytical knowledge is a way of accessing this subjectivity, and this runs counter to the focus of neuroscience, with its quest for regularities in behavior, without taking into account the singularities of human suffering. Meanwhile, pitting scientific knowledge against theoretical speculation implies accessing knowledge about human nature and thereby effectively intervening in experiences of suffering through the construction of scientific values. From this perspective, the main criticism of psychoanalysis is its lack of scientificity.

Both these oppositions extend to the therapeutic strategies employed. Psychoanalysis criticizes the recurrent recourse to psychoactive drugs within a broader criticism of the medicalization of behavior. Neuroscience, for its part, questions the lack of research and control in psychoanalytical interventions, casting into question not only the theoretical grounding of the theory, but its actual effectiveness.

The clashes between the two perspectives reproduce the tension between subject and brain inherent to the mind-body dualism – which has permeated psychiatry from its origins and is expressed in the dilemma between a conception of humans as bodily and cerebral beings and a conception of humans as social and speaking beings (Ehrenberg, 2004). While in psychoanalysis, mental illness is seen as resulting from psychic life, from a biological perspective it is no different than any physical ailment. These two perspectives involve different notions of the person, different models of causality, and different expectations about the potential for change in patients over time (Luhman, 2000). The focus of psychoanalysis is on the notion of the subject linked to the determinations of the unconscious, and tries to put the analysis of subjective experience at the heart of all interventions; emphasis on singularity is key. Meanwhile, biological psychiatry orients its interventions from the consideration that certain manifestations of individual, subjective suffering are variants of a set of signs and symptoms that can be identified and grouped together under the umbrella of diagnostic conditions. Singularity is seen as a single case from a whole spectrum of a disease. As I see it, however, the meanings of contemporary biology challenge the opposition between the paradigms of neuroscience and psychoanalysis in two ways: the idea that the brain is the source of subjective experiences, and the idea that the brain can be transformed, thus opening up space for therapeutic change and, with it, the intervention of psychoanalysis.

Next, we will see the features of the processes of transformation of biomedicine and their direct links with current conceptions about the brain, which are key to this convergence between the orientations of neuroscience and psychoanalysis.

### **Science, biomedicine, and neuroscience: the impact of the “molecularization of vitality”**

In recent decades, biomedicine has undergone a transformation caused by the influence of scientific and technological progress on the production and circulation of medical knowledge. In this process, medicine has converged with the life sciences, including molecular biology, the neurosciences, and genetics, as well as bioinformation and the latest imaging technologies, which offer new inputs and procedures for developing diagnoses and treatments for diseases.

The interconnectivity between science, technology, and biomedicine modifies not just the definition and treatment of medical problems, but also notions of subjectivity, suffering, and personal identity. Social identities and forms of sociability emerge around a variety of medical categories, and daily concerns are reconfigured in the quest for healthy living, where the notion of health is not just expanded and redefined, but hierarchized and turned into a moral imperative.

The sociologist Nikolas Rose (2007) describes and analyzes these processes from the perspective of biopolitics. He postulates a series of mutations that characterize contemporary biomedicine, whose impacts go beyond the field of medicine, shedding light on incipient processes of cultural transformation. One important aspect of these transformations is the “molecularization of vitality” – the fact that through new technologies, life has become a set of intelligible mechanisms involving molecular entities that can be identified, isolated, manipulated, mobilized, and recombined in new interventions that are not constrained by the apparent norms of a natural vital order. In this process, it is the very notion of biology that is subverted: it is no longer a predefined destination, but is open to intervention, to the redesigning of vital capacities. Medical practice has ceased to be geared exclusively towards health/disease: life itself has become the target of biomedical interventions and ethical/philosophical discussions. Genetic screening in early pregnancy, concerns about caring for one’s brain to prevent ageing-related cognitive impairment, painful end-of-life decisions for family members, dilemmas about what to do with embryos in the ambit of assisted reproduction are just a few examples of how opening the doors to technological intervention in biological processes can also imply rethinking the cultural significations of biomedical practices.

In Rose (2007) and Rose & Abi-Rached (2013), the “molecularization of vitality” is shown as having impacted the field of psychiatry in at least three interrelated ways: the progressive biologization of the categories of psychiatry; the development of new pharmacological technologies; and the emergence of a notion of a neuromolecular brain as the basis for contemporary neurosciences.

As for the biologization of categories in psychiatry, molecular mechanisms have become a mandatory step in comprehending mental illnesses and their treatments (Rose, 2007). The

implication of environmental or biographical factors in the etiology of disorders can be seen by observing the way these factors affect certain molecular mechanisms.

Research into the use of psychoactive drugs in recent decades has been fundamental for finding out about the substances and entities of the brain, for through the action of these drugs it has been possible to see how certain neurotransmitters work.

Finally, a neuromolecular thinking style (Rose, Abi-Rached, 2013) has come about, by which each neuronal process can be linked to molecular events, which are in turn associated to mental states.

Basically, the main feature of this neuromolecular view is that it puts mental processes on the bodily plane, realizing the long-cherished dream (Vidal, 2009; Meloni, 2011) of creating a materialistic view of the human being, heralding a corporal and cerebral view of subjectivity.

### **The cerebralization of subjectivity**

By the cerebralization of subjectivity I mean the impact the neuroscientific perspective of the brain has had on how we conceive of personal identity. From this neuromolecular standpoint, a set of subjective processes (emotions, decision-making, feelings) start to be understood as belonging to a spectrum of human capacities that can be observed in the brain.

These processes are addressed via different notions when viewed from a sociological perspective. Ehrenberg (2004, 2008) proposes the notion of the “cerebral subject” (*sujet cérébral*) to explain how the brain has become a social actor. With the notions of “neurochemical selves” and “somatic individuals,” Rose (2003, 2007) describes how experiences of suffering in daily life and psychopathological disorders tend to be seen as resulting from a chemical imbalance in the brain. All this is understood within the context of a broader trend that leads to a physical understanding of human beings (Russo, Venancio, 2006), where the key aspects of individuality are defined in bodily terms.

The neuromolecular focus states that the mind is what the brain “does” and mental pathology is the behavioral consequence of an error or anomaly in one of the elements now identified as aspects of this organic brain, which can in theory be identified and fixed (Rose, 2007). Rose defines this as an ontological about-turn in the type of person we regard ourselves as, insofar as it implies a new kind of seeing and judging human normality and abnormality and intervening in it.

Imaging technologies have had a major impact in materializing mental processes, since the capacity to observe fosters the illusion of being able to capture subjective experiences. Resignifying emotions in the language of neuroscience is a central process in the cerebralization of subjectivity. Neuroscientific research today announces it is possible to locate and observe the mechanisms of rage, violence, love, dependence, and other emotions (Miczek et al., 2002, 2007; Caspi et al., 2002). This interpretation of emotional experiences in terms of brain activity provides the basis for a cerebral view of subjectivity, a basic precondition for stimulating interest in a variety of therapeutic processes that target the brain. With the brain as the protagonist in subjective experiences, it is assumed that in order to attain personal wellbeing, this organ must be the object of interventions.

Although there is still a gulf between brain processes and mental processes – the subject of various theories and discussions in the field of the neurosciences (Ledoux, 2003) – the notion of cerebral plasticity assumes a degree of interaction between brain and mind that helps understanding subjectivity in terms of the brain and opens the way for dialogue with psychoanalysis.

## **Cerebral plasticity**

The adult brain has fantastic neuroplastic power. It can be ‘rewired,’ activating latent or disconnected wires and forming new wires. Or disconnecting wires and circuits with faulty activity or negative effects for their owners, such as the ones that mark depression, for example ... The power of self-directed neuroplasticity is that it gives one a tool for ‘rewiring’ the brain, in other words, for change (Bachrach, 2014, p.105, 109; emphasis in original).<sup>1</sup>

One of the dogmas that marked scientific studies of the brain until a few decades ago was the idea that the brain only develops in early childhood. Experiments on animals and people with brain damage have demonstrated that the brain can be modified, since it has the capacity to adapt to change and is thus in continual development throughout life. This capacity is called cerebral plasticity.

The notion of cerebral plasticity can be understood in three different senses (Malabou, 2008). It can refer to the development of neural connections (in children), the modification of neural connections (synaptic plasticity throughout life), and the capacity for repair (after brain lesions).

The most significant impact of this conception of the brain is that it puts brain architecture on a temporal plane (Rose, Abi-Rached, 2013), allowing that the brain can change over a lifetime. The notion of plasticity is fundamental for this, because it indicates that life experiences can lead to lasting alterations in the expression of genes and brain structures (Franklin, 2003). This notion also allows processes of continuity between what is psychological and what is neuronal, insofar as it is understood that subjective experiences have biochemical markers, which in turn modify personality structures (Fraser, 2001).

The notion of cerebral plasticity has sparked a number of philosophical, sociological, and anthropological debates worth investigating here. Some authors have analyzed the theory of cerebral plasticity in the light of the contemporary sociocultural setting, considering it a biological justification for a particular type of political, economic, and social organization. One of the main references here is the philosopher Catherine Malabou (2008), who, alongside her critical analysis, presents a proposal for the recuperation of an emancipatory dimension of cerebral plasticity.<sup>2</sup> Other studies also suggest that the idea of a plastic, flexible brain capable of being transformed by personal agency is anything but liberating, constituting yet another mode of social control exerted by the individual him/herself in the form of self-control, in the context of a neoliberal society that puts social control under individual initiative. O’Connor and Joffe (2013), for example, show how the brain has become another object of control and care in healthcare management practices today and how the vocabulary of neuroscience has become a new way of legitimizing individual responsibility for mental health. Cromby,



Newton, and Williams (2011) postulate that the neurosciences have built up a vision of subjectivity based on the neoliberal principles of choice, flexibility, self-care, and individual accountability. They also reserve criticism for the neoliberal agenda, especially the reduction of the research budget and the criminalization of the use of recreational drugs. They argue that the neurosciences have a contradictory influence on studies of subjectivity and the social and human sciences, since on the one hand they could take over and impair the analytical complexity of the social sciences, but on the other they could also offer up information that could broaden our understanding of the way cultural influences are materialized in bodies. Meanwhile, Pitts-Taylor (2010) analyzes the spread of neuroscientific ideas in the media and agrees that the images conveyed about the brain are akin to neoliberal subjectivity. She also adds that the neurosciences serve ideologically to neutralize global capitalism, since the language of neuroscience is imbued with the modes of thought and assumptions of neoliberal capitalism. In the Brazilian academic world, Azize (2010), Nucci (2015), and Lisboa (2015) all offer interesting contributions to the problematization of the concept. Nucci (2015) discusses the different conceptions of the notion of plasticity circulating in the ambit of the neurosciences based on an analysis of the scientific output of a group of researchers who define themselves as “neurofeminists.” Meanwhile, Lisboa (2015) examines the application of the concept of plasticity to the field of neuroeducation, stressing how the comparison of the brain to a muscle is used to promote the idea of stimulation and reeducation. Finally, Azize (2010) describes and analyzes the emergence of a brain-oriented view of the person in the discourse behind the spread of neuroscience. When it comes to the discussions about cerebral plasticity, he suggests that there is an elective affinity between two aspects of the discourse of contemporary neuroscience – the communication and popularization of neuroscience and the logic of business management – in that both are based on the idea of a working, productive individual. The parallels specifically lie along two axes: the way the brain (which, in the central thesis, is synonymous with the subject) is conceived and the way a company works; and the coinciding qualities of the ideal subject of corporate thinking and the way a subject ought to control their brain (i.e. themselves).

All these inquiries, with their focus on affinities between cerebral subjectivity and neoliberalism, build on traditional critical studies of therapeutic discourse, chief amongst which is the work of Foucault, who postulates that psychoanalysis and its putative emancipation of the self is nothing more than a form of disciplining and subjection to institutional power (Foucault, 1978; Castel, 1980).<sup>3</sup> These are important perspectives, but, as Eva Illouz (2010, p.16) points out, they run the risk of failing to rid us of the idea of neoliberalism as a totalizing project, thereby preventing us from observing the multiplicity of subjective, contradictory, fragmented experiences that do not fit into this totalizing view. Furthermore, as they take a macrosocial perspective based on core values, they make it hard to document the impact of the notions and discourses of neuroscience in concrete social spaces and practices without making any prior judgments.

Considering the heterogeneity of the approaches and interpretations of cerebral plasticity, it is worth probing its implications in interactions between psychoanalysis and neuroscience. Conceiving of the brain as an organ that can be influenced by life experiences paves the way for working towards subjective change. I would suggest that it is in this space that a (possible)

intersection between the two fields could be found. Subjective change – the primary focus of psychoanalysis – becomes an object of interest to science, thereby enabling the establishment of some common ground and partially doing away with the oppositions. The neuromolecular perspective is permeable to psychoanalytic therapy as it regards talking therapies as vehicles for the transformation of the brain. In this space, the work of probing individual life histories proposed by psychoanalysis takes on new meaning in view of its power to influence brain connections and thus generate a “different” brain. And this is even more significant if the brain is understood as the basis for subjectivity. Personal identity becomes brain identity but could still imply a kind of organic essentialism, which is avoided with the notion of plasticity, which seems to break down the body/spirit dichotomy thanks to the malleability arising from the impact of life experiences on biological constitution.

Nevertheless, the process of cerebralizing subjectivity still reproduces a core tension – “I am my brain” or “I have a brain” – which is incorporated into the a process of reducing or increasing the distance between the brain and subjectivity. This tension is addressed by Dumit (2004), who investigates how brain images produce a process of identification between the person and different types of brain. In particular, he refers to the depressive type and the schizophrenic type and shows how brain typing has subjectivizing and objectivizing effects at one and the same time. In other words, subjectivization and objectivization are both aspects of the cerebralization of subjectivity, helping put the brain in an ambiguous space open to multiple interpretations, depending on the context. It is precisely this space where “being” and “having” a brain come into play that provides the possibility for an effective therapeutic process. As the philosopher Malabou (2008) puts it, the idea that one’s brain becomes what one is opens the way for the subject him/herself to initiate their own brain transformation, distancing them from the brain while at the same time recognizing it as a founding element of subjectivity.

As a result, perspectives that offset mind against body become completely ineffective. For example, the anthropologist Tanya Lührman (2000, p.8) states that “if something is in the body, an individual cannot be blamed; the body is always morally innocent. If something is in the mind, however, it can be controlled and mastered, and a person who fails to do so is morally at fault ... Biology is the great moral loophole of our age.” This vision is based on the belief that the biologization of mental disease leads to a subjective distancing from the disease, which is treated essentially like any chronic physical illness (diabetes is often cited as a comparison). From this perspective, the consequence of cerebralizing subjectivity has the effect of invalidating moral questionings about the person. However, the potential to intervene in the brain, in view of its plasticity, and the need to do so, insofar as subjective experiences are generated from this organ, alter the belief in the subjective distance from disease: the potential to modify the brain implies the subjective responsibility to do so, to pick up on Parsons’s (1951) classic definition of the role of the patient. Clearly, subjectivity is conceived differently in the two perspectives, and neuroscience has a greater affinity to other models of psychotherapy, like cognitive behavioral therapy. Even so, there is some common ground.

The notion of the subject defended by psychoanalysis does not imply a “self” with control over his/her own volition, but a decentered subject divided into different psychic parts and



determined by the unconscious. The neuroscientific model, for its part, states that most processes that lead to human decision-making are also unconscious. Even if the notions of unconscious are different, they make sense in a common space of signification in the context of a therapeutic culture that, familiarized with the Freudian idea of the unconscious, takes on board the neuroscientific meanings. I call this kind of situation the “semantic resonance of concepts” – ideas that, despite being different, still resonate in a space of common signification.

The work of psychoanalysts and neuroscientists keen to set up interdisciplinary dialogue is based on a theoretical articulation that has given rise to “neuropsychanalysis,” a line of research inspired by Freud’s project for a “psychology for neurologists” (1895), which proposes a conceptual link between both disciplines grounded in the latest findings of brain research that support Freud’s theories. Neuropsychanalysis emerged and developed in the late 1990s, based on the work of the Nobel laureate Eric Kandel and the development of a scholarly movement geared towards promoting an area of research and disciplinary intervention that orchestrated the contributions of neuroscience, neurobiology, and psychoanalysis. The interface between psychoanalysis and the neurosciences comes about because the theories of psychoanalysis offer a theoretical framework for neuroscientific findings, while neuroscience can supply neurobiological bases for the concepts of psychoanalysis (Lyra, 2005; Salone et al., 2016).

The emergence of neuropsychanalysis has prompted positive and negative reactions (Blass, Carmeli, 2015; Yovell, Solms, Fotopoulou, 2015). On the side of psychoanalysis, criticisms have been voiced about the reductionistic, materialistic epistemological standpoint of the neuroscientific research. Likewise, there are objections about the risk of any interdisciplinary proposals being overly superficial. Finally, questions have been raised about whether the development of neuropsychanalysis presupposes a radical modification of the psychoanalytical method par excellence.

However, the notion of “semantic resonance” I have introduced refers not so much to a conceptual correspondence or articulation between approaches as a symbolic assimilation, whereby the meanings of these or those concepts are defined and circulate in a common cultural space.

Questioning, subjective implications, singularity, and accountability are all normative ideas that make up the therapeutic mindset of psychoanalysts. Creativity, optimization, comfort zone, functioning, and success are values that circulate in the neuroscientific therapy mindset.

In both cases, the notions situate psychoanalysis and the neurosciences as integrated disciplines in an individualistic configuration (Russo, Ponciano, 2002; Azize, 2010). The perception of the individual as a central value of society is rooted in a specific cultural context: modern western culture (Dumont, 1987). Psychoanalysis, together with the neurosciences, is committed to conceptualizing, describing, and explaining the characteristic phenomena of the moral inner life of the person (Duarte, 2003; Figueira, 1980, 1985; Salem, 1992). Consequently, the appeal to take on the subjective condition itself and modify it (albeit through diverse therapeutic ideas) is a mandate that rules interventions in both cases, and works as a prior assumption in each form of intervention. As Russo and Ponciano (2002, p.365) suggest:

neuroscience takes the ‘decentralization of the self’ already sketched out by psychoanalysis to the extreme ... Yet there is an important difference. Working on oneself as proposed by

this new scientific counseling does not involve a reflective process of self-examination. Rather, it is a kind of externalized 'self-culture' which is processed in the act, in the experience of life, not in inquiries about oneself.

## Final considerations

I have suggested here that the neuromolecular conception of the brain favors greater proximity between psychoanalytical and neuroscientific perspectives thanks to the notion of cerebral plasticity. The neuromolecular focus is permeable to psychoanalysis because it accepts that talking therapies can be a vehicle for brain transformation. In this space, the probing of a person's life history proposed by psychoanalysis takes on new meaning in the light of the impact it could have on the connections inside the brain and the generation of a "different" brain.

From the perspective of psychoanalysis, the psyche is the core of inner life and the sufferings associated with the "self," while from the perspective of neuroscience the brain is the new core of inner life and the psyche is an epiphenomenon. This process (from psychologization to cerebralization) is part of a bigger transformation in the life sciences, which is summed up as a molecularization of the medical perspective, making molecular biology the core metaphor for medicine. Consequently, the actual processes of individualization are expressed through the "somatic individual" and give rise to new bodily forms of subjectivization. Rather than excluding previous forms, this passage from the mind to the brain allows for the coexistence of the mind or psyche with the brain, while helping create the idea that personal identity is "anchored" in the body, specifically in the brain.

Conceiving of the brain as a plastic organ – i.e. open to influence from life experiences – broadens the scope for working with subjective change. This is where psychoanalysis and neuroscience overlap. Subjective change – the primary focus of psychoanalysis – becomes an object of interest to science, thereby enabling the establishment of some common ground and partially doing away with the oppositions. It is a space marked by a shared therapeutic culture where the concepts of psychoanalysis and neuroscience can circulate through shared ideas whose concepts can "resonate semantically." Although they are different, the normative values underpinning both therapeutic mindsets are part of the modern individual-oriented configuration, and supply explanatory metaphors for the vicissitudes of life and narrative models that can carry meanings, alleviate suffering, and envisage hope.

Finally, we could ask ourselves how far discourses about cerebral plasticity will generate new languages of the self and new references for organizing and symbolizing conduct. More than offering definitive responses, in this article I have tried to outline these questions, which certainly need future analysis, about the circulation and reception of the ideas of neuroscience and their interplay with other areas of therapeutic knowledge.

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and ethnographic research of the discourses and practices of psychiatry and psychology in a psychiatric hospital in Buenos Aires (“Prácticas y saberes psiquiátricos y psicoanalíticos en un hospital de la ciudad de Buenos Aires,” funded by Consejo Nacional de Investigaciones Científicas y Técnicas, Conicet). Translated into Portuguese by Karina Rodriguez.

## NOTES

<sup>1</sup> In this and the other citations of texts from non-English languages, a free translation has been provided.

<sup>2</sup> For a critical reading of her work, see Rees (2011) and Slaby (s.d.).

<sup>3</sup> For an analysis of the critical studies of therapies, see Illouz (2010).

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