

Fernando Vidal y Francisco Ortega. Being brains: Making the cerebral subject. New York: Fordham University Press, 2017. 318 p. ISBN: 978-0-8232-7607-3. US\$60.

In the last decade, *neurocentrism* has spread beyond the laboratories, extending its reach into the human sciences and popular culture. Several highly publicized breakthroughs, as well as a major flow of resources onto brain-based research and policy (take, for instance, Thomas Insel's role as head of the NIMH in the U.S.), have helped crystallize the view that human nature ultimately rests on, and is fundamentally accessible through, the brain. Several critical reactions to this widespread enthusiasm for the *neuro* have been produced from a wide variety of fields. From moderate positions that call for a «critical friendship» between the social and the life sciences, to dissident voices calling for a «critical neuroscience» within the field of neuroscience, many efforts have tried to debate the reach, expansion and truth-value of contemporary neurocentrism.

In *Being brains: Making the cerebral subject*, Fernando Vidal and Francisco Ortega challenge the idea «that humans are essentially their brains» (p. 1) and that «*The mind is what the brain does*» (pp. 2-3). The book uncovers the «implicit assumptions and the internal logic of the neuro and its applications» by studying «different forms of brain-based subjectivation critically» (p. 4). *Being Brains* is the latest and most thorough piece of joint collaboration between the authors, who co-edited *Neurocultures: Glimpses into an expanding universe* in 2011. Furthermore, the book condenses and expands research and ideas that the authors have been developing in previous years. For instance, Fernando Vidal's inquiries on «brainhood» and his explorations on the early modern origins of psychology, as well as Francisco Ortega's previous research on «neuroascesis» and somatic culture, get integrated and connected in a more systematic fashion.

The authors adopt Michel Foucault's history of the present, as «a mode of analysis and narrative that begins with a diagnosis and questions about a current situation» (pp. 3-4). Along its four chapters, they «reconstruct the genealogy of the late twentieth-century neural turn» in order to «delineate the topography of the neuro» (p. 3) and uncover «implicit assumptions and the internal logic of the neuro and its applications [...] as a social, cultural, and psychological reality» (p. 4). In chapter 1, «Genealogy of the cerebral subject», Vidal and Ortega destabilize the traditional approach that views cerebral subjectivation as the product of the progressive knowledge about the brain. Through a *longue durée* perspective, they show how the anthropological figure of the cerebral subject is a consequence

of Western metaphysical and political stances on personal identity that began taking shape in early modernity. The Western notion of the person equated the self with memory, consciousness, and self-awareness, and associated them with processes that were localized inside the head. While other cultures may also link cognition, emotion, and memory to the head/brain, it was only within Western metaphysics that the self and personhood came to be equated with cognition, emotion, and memory. In other words, the idea that «we are our brains» only began to be possible when personhood was reduced to psychological features, which in turn were localized in the brain.

Since the Decade of the Brain in the 1990s, the academic world has witnessed the proliferation of fields that have added the suffix *neuro* onto well-established disciplines of the human and social sciences. Chapter 2, «Disciplines of the neuro», analyzes the general foundations and logic of those fields, with a more focused analysis on neuroaesthetics and the «neurodisciplines» of culture. The neurodisciplines apply neurobiological concepts and methods to problems coming from the human and social sciences, because they assume that the mind and behavior are ultimately products of the brain. They hold a «desire for causality» (p. 69) that overlooks the disparity between their methods (neural correlates through neuroimaging) and the interpretation of their results (causal mechanisms).

Chapter 3, «Cerebralizing distress», addresses how the *neuro* has been put at the center of the beliefs about the causes and foundations of mental distress. The cerebralization of psychological suffering usually begins with the declaration of a crisis in psychiatry, followed by a statement of hope on breakthroughs in neurobiology, pharmacology and genetics. The reframing of psychological distress into neurological terms is rooted in the belief that mental disorders are ultimately brain disorders, and that behaviors otherwise seen as having major social components, such as alcoholism or eating disorders, are in fact neurological conditions. To illustrate that, the chapter offers a detailed account of the dead-locks of the search for biomarkers of depression. Furthermore, by looking at the neurodiversity movement, the chapter also analyzes how new «forms of living» emerge out of this process of cerebralization, often in antithetic and contested ways.

«Brains on screen and paper», the fourth and final chapter, studies the presence of the *neuro* in literature and film. Neuronarratives —they assert— are works of fiction that are nonetheless «real», inasmuch as they have «real effects» that contribute «to shape ways of being and forms of living» (p. 189). Issues of cerebral subjectivation came to be depicted and imagined in movies and novels

through several recurrent tropes and themes, such as memory loss, artificial intelligence and brain transplants. It is the latter that specially touch philosophical questions about cerebral personhood: if A's brain gets transferred onto B's body, did A get a body transplant or was it B who just got a brain transplant? Most times, these fictions end up adopting a traditional Lockean position for which the brain is just a secularized metaphor and embodied location of the soul. Thus, on a general basis, it was A who got a body transplant.

Being brains is distinctive from other important books on the debate for three main reasons. First, while most accounts trace the origins of the *cerebral subject* in the birth of modern neurology, the book argues that the cerebral subject is «ultimately not dependent on scientific knowledge about the brain» (p. 4) and localizes its genealogy at early-modern shifting notions of personhood and identity. Second, unlike other more moderate contributors in the debate, they explicitly approach *neurocentrism* as an «ideology», that is, as «[n]either science nor ascertainable facts but an idea of the human being» that rests on «a set of notions, beliefs, values, interests, and ideals» (p. 14). Finally, since it looks at personhood and subjectivation, it focuses on the role of both «expert» and «lay» discourses alike, tracing important connections between them.

Despite its fluid movement between discourses with varying degrees of expertise and centrality, it was surprising to see how the book omitted the analysis of a type of literature that has played a significant role in the consolidation of neurocentrism in recent decades. I am thinking about the public impact of best-sellers such as Antonio Damasio's *Descartes' error*, Daniel Dennett's *consciousness explained*, Eric Kandel's *The age of insight* and, to a lesser extent, Steven Pinker's *The blank slate*. These works constitute a particular type of popular culture in which the idea that «we are our brains» got transmitted and validated to massive non-expert readers by figures of scientific authority. Not only do these *organic intellectuals* have played a crucial role in the promotion of the figure of brainhood but, more importantly, they did so by inviting the reader to adopt the neuroscientific gaze. This omission does not contradict Vidal and Ortega's thesis; on the contrary, it reinforces it.

In conclusion, *Being brains* is a milestone in the critical literature on the neuro- turn and of the history of the neurosciences. The book is a thorough, well-informed and consistent analysis of contemporary cerebral subjectivation, in a vast number of fields. Due to its inter- and cross-disciplinary edge, the book is likely to engage in a beneficial dialogue with a larger audience of psychiatrists, psychologists, neuroscientists, social scientists, historians, philosophers, and even

policy-makers. It is definitely a book that will keep being read and debated in the years to come. ■

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María Isabel Porras Gallo, María José Báguena Cervellera, Mariano Ayarzagüena Sanz y Noelia María Martín Espinosa, coords. La erradicación y el control de las enfermedades infecciosas. Madrid: Libros de la Catarata; 2018, 272 p. ISBN: 978-84-9097-201-4. €18.

El punto de inflexión de la evolución de las estrategias para el control de las enfermedades infecciosas lo situamos en el siglo XX, si bien el cambio en la tendencia de su mortalidad ya se observaba en la segunda mitad del siglo XIX, momento en que desde las perspectivas etiológica, clínica y epidemiológica se va construyendo el nuevo paradigma de enfermedad infecciosa. De manera convencional el énfasis se ha puesto en los logros del mundo médico, farmacológico y microbiológico. Sin embargo, desde la salud pública el conocimiento científico de la enfermedad es necesario pero no suficiente para explicar el cambio. Otros factores, como la distribución equitativa de los recursos sanitarios, el acceso de la población a los servicios sanitarios, los cambios socioeconómicos o el desarrollo urbano y la disponibilidad de alimentos han contribuido —directa o indirectamente— en la evolución de la morbilidad y mortalidad infecciosas. Las enfermedades inmunoprevenibles —concretamente viruela y poliomielitis— son un claro ejemplo de ello, tal y como se desprende de la lectura de este libro.

En él, se aborda mediante un análisis histórico el impacto de la introducción de las vacunas para el control de algunas enfermedades infecciosas —viruela y poliomielitis— en un proceso en el que se adquiere conciencia de que para su control se requieren estrategias poblacionales y universales. En este sentido es muy interesante, como se demuestra aquí, el debate abierto en la OMS, en los años 1980, posterior a la erradicación de la viruela, entre la «cultura de la sobrevivencia» (que se sustenta en programas verticales al restringirse a una sola enfermedad y de orientación técnica) y la correspondiente a la «globalización de la salud» (sustentada en estrategias horizontales, participativas, equitativas e