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**Anneli Jefferson, *Are Mental Disorders Brain Disorders?*, London: Routledge Focus on Philosophy, 2022**

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The idea that mental disorders are brain disorders is widely shared among the major American institutions (e.g. the American Psychiatric Association, the National Institute of Mental Health), and is also a theoretical assumption of many nosological classifications and research projects, including the recent Research Domain Criteria project (RDoC). At the same time, this claim is constantly challenged by specialists. Addiction studies are a striking example: the neuroscientific, clinical, and philosophical literature questioning the brain disease model of addiction is extensive, and the debates are heated. In the context of broader theoretical discussions about the concept of brain disorder, a vast literature in psychiatry and philosophy exists, generally focusing on the differences and relationships between mental, neurological, and organic diseases. Although substantial, these discussions have not led to a satisfactory consensus description of the links between mental disorder and brain disorder. As its title suggests, it is this complicated issue that Anneli Jefferson, currently a lecturer at Cardiff University, tackles in her first monograph, *Are Mental Disorders Brain Disorders?* Her book aims to answer two questions: first, what is a brain disorder? And second, what is the relationship between mental disorders and brain disorders? One problem is that there is no agreement on what a brain dysfunction is. Adopting a theoretical approach, her aim is therefore to identify the criteria according to which a cerebral anomaly must be called a 'brain dysfunction' in the context of mental disorders. According to Jefferson, the realization of a mental dysfunction is a sufficient condition for the ascription of a brain disorder.

From the beginning of the book, the author endorses a hybrid account of mental disorder that borrows from both Wakefield and Cummins. From Wakefield, she retains the notion that a mental disorder requires the presence of an underlying dysfunction with harmful consequences (p. 4). But when she defines dysfunction, she is closer to Cummins: a dysfunction would be the failure of a trait or mechanism to contribute in the usual way to a system-level capacity the organism has. In this regard, the author explicitly remains agnostic about the importance of the evolutionary background in the definition of functions (p. 5). All of this gives the reader the impression that Jefferson is looking for a definition of function that would make the etiological and systemic approaches compatible. It is within this integrative conceptual framework that she proposes to describe the relationship between mental disorders and brain disorders. Her thesis is that anomalies in brain processes can be identified as dysfunctional insofar as they realize psychological dysfunction. In her own words, Jefferson's aim is to mentalize the brain, rather than to use the brain disorder label to discount the level of the mental (p. 8).

The author develops her thesis over the course of six chapters. In the three chapters that make up the first part of the book, Jefferson analyzes two main approaches to the concept of brain disorder. Jefferson warns that she does not intend to describe all the positions in the current debate. Instead, she focuses her attention on two notions of brain disorder that, according to her, shape contemporary debates: the 'narrow view', and the 'over-inclusive view'. Based on a critical analysis of these two views, the author proposes her own 'inclusive view' of brain disorders. In the three last chapters, Jefferson discusses possible objections to the inclusive view and the implications for agency and responsibility of the framework she offers.

In chapter 2, Jefferson argues that most of the time, objections to the idea that mental disorders are diseases of the brain rely on a specific notion of brain disorder: ‘the narrow view’, modelled on paradigmatic brain disorders such as neurosyphilis or brain tumors. According to this view, a brain disorder is characterized by two main features. First, a clearly identified etiology: a condition is a brain disorder when there is a defect in the brain which precedes a psychological dysfunction. Second, a brain disorder can only be treated by medication or surgery, as opposed to psychological therapies. This narrow view of brain disorders is an attractive way to think about mental disorders. In addition of providing a unified account of the causes, symptoms, and treatments of disorder, it also supplies a way of validating a condition as an illness (if a mental disorder is a brain disorder, it is real). Moreover, it provides a clear-cut and well-defined concept of brain disorder. However, Jefferson points out that many specialists agree that mental disorders are not brain disorders in this sense. She highlights the primary motivation for this statement: in many cases of mental disorders, there is no clearly identified brain disorders in this strong sense (p. 16). She concludes that this narrow view does not help us clarify the relationship between mental disorders and brain disorders. It has rather the effect of shifting the question without answering to it. ‘What is a brain disorder?’ becomes ‘what counts as a clearly recognizable brain disorder?’. Based on paradigmatic cases of brain disorders, this view does not account for the heterogeneity of real cases of brain disorders, and it does not allow us to decide on the correct extension of the term brain disorder (pp. 16-18).

On the other side of the conceptual spectrum, there is the ‘over-inclusive view’ (chap. 3). In contrast to the narrow view, it claims that all mental disorders are brain disorders insofar as all mental phenomena are instantiated by the brain. This view is not adequate for Jefferson either, for the reason that it does not tell us anything about *disordered* mental processes in particular (p. 31).

Midway between these two opposing views, Jefferson proposes her own ‘inclusive view’, according to which the realization of a psychological dysfunction is sufficient to speak of brain disorders: “*It is sufficient for X to be a dysfunctional type of brain process if tokens of this type always realize a psychological dysfunction.*” (p. 39, original emphasis) The presence of systematic brain abnormalities that instantiate the corresponding mental dysfunction is a sufficient condition to posit a brain dysfunction. Therefore, a precondition for calling a mental dysfunction a brain dysfunction is what Jefferson calls an ‘explanatory reduction’ from one to the other (p. 50). According to her, this explanatory reductionism is fully compatible with causal externalism and the importance of environmental factors in the onset of mental disorders (chap. 4).

In the penultimate chapter, the author discusses the moral implications of her conception of mental disorders as brain disorders for ‘agency and responsibility’. She convincingly shows that there is no direct link between assigning a brain disorder and reducing responsibility (p. 72); and that the stigma associated with the brain disorder label are avoidable by developing and disseminating better brain disorders concepts (pp. 79-81).

Two subtleties of Jefferson's position must be pointed out. What she identifies is a *sufficient* condition to be a brain disorder: Jefferson never denies the existence of brain disorders that do not produce psychological dysfunction (p. 39). According to her, within the broad family of brain disorders, there is a particular class of disorders that are identifiable only in their relationship to, and form the basis of, mental disorders. Yet, that does not mean that for each and every mental disorders, there is a brain disorder. For her, this is a different, and entirely empirical issue.

Jefferson also considers the case of brain disorders that cause psychological dysfunctions, but which do not belong to the field of psychiatry, as in the case of brain tumors. In order to differentiate between brain disorders that do and do not fall within the scope of psychiatry, she insists on the distinction between *causing mental dysfunction* and *realizing a mental disorder*. A brain tumor is an *antecedent cause* of a psychological dysfunction: it *impedes* normal psychological functioning regardless of the background psychological analysis. Conversely, in the case of mental disorders, brain dysfunctions realize the *disruption* of mental life; they correspond to the supervenience basis of (some) mental disorders.

The question is whether this solution works in practice. Jefferson's proposal to identify a cerebral dysfunction at the origin of a mental disorder depends primarily on what is considered as a psychological dysfunction. However, one may wonder whether this proposal does not once again shift the question without providing a convincing solution. Indeed, the author neither clearly explains how to identify a psychological dysfunction, nor explains what it is about. One of the only practical ways she gives us to identify a psychological dysfunction is that it is something which "leads us to posit a mental illness" (p. 44). But at the same time, she dismisses from the beginning of her book the controversies raised by her notion of mental disorder and assumes that we can make sense of this concept (p. 3). As I have indicated, Jefferson defines mental disorder as a dysfunction plus a harm, and dysfunction as the failure of a mechanism to contribute in the usual way to a system level capacity the organism has. It is not clear whether these criteria of dysfunction can be used to identify psychological dysfunctions in clinical contexts, in particular in the many cases of diagnostic controversy. Is it always possible to agree on when a 'system level capacity' is impaired, and on what a disproportionate psychological response is? Jefferson mentions this difficulty with the example of depression and addiction, sometimes seen as non-pathological behaviors (pp. 59-63). But she does not propose criteria that would allow us to rule definitively on the pathological character of these psychological states. This difficulty is all the more important in the case of pathologies with different degrees of severity (see for example the discussions on autism and claims for non-pathological neurodiversity).

Therefore, if one accepts to define a cerebral dysfunction on the basis of a psychological dysfunction in case of mental disorders, one still needs to define the criteria of what would constitute a psychological dysfunction in a way that avoids controversy and arbitrariness. Until then, relying on psychology to identify brain dysfunctions appears to be uncertain given the lack of consensus regarding the normality or integrity of the psyche.

In short, the reader might regret that this book does not contain more elements that would allow us to consider the application of these lines of thought to experimental practice. Nevertheless, in addition to the interesting questions raised in several areas of philosophy, it also provides the reader with a synthetic and clear overview of complex contemporary debates in the philosophy of psychiatry. For this reason, I believe that Jefferson's book is well worth reading.