

Why We Essentialize Mental Disorders

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Essentialism is one of the most pervasive problems in mental health research. Many psychiatrists still hold the view that their nosologies will enable them, sooner or later, to carve nature at its joints and to identify and chart the essence of mental disorders. Moreover, according to recent research in social psychology, some laypeople tend to think along similar essentialist lines. The main aim of this article is to highlight a number of processes that possibly explain the persistent presence and popularity of essentialist conceptions of mental disorders. One such process is the general tendency of laypeople to essentialize conceptual structures, including biological, social, and psychiatric categories. Another process involves the allure of biological psychiatry. Advocating a categorical and biological approach, this strand of psychiatry probably reinforced the already existing lay essentialism about mental disorders. As such, the question regarding why we essentialize mental disorders is a salient example of how cultural trends zero in on natural tendencies, and vice versa, and how both can boost each other.

Keywords: *DSM-III, essentialism, folk biology, folk psychiatry, psychological essentialism*

I. INTRODUCTION

In his *Observationes Medicae*, published in 1676, Thomas Sydenham sets out his views about how medicine should be studied. He claims, for example, that a sound and scientific medicine should be based on a classification system that “carves nature at its joints.” His own medical taxonomy is extracted

from the then biological sciences—a choice he thought was completely legitimate: are not diseases species, too, just like plants and animals? Thus, he writes about a disease called “quartain fever”: “we find reasons for believing that this disease is a species equally cogent with those that we have for believing a plant to be a species” (quoted in [Meynell, 2006](#), 107). One cannot overestimate Sydenham’s role in the history of medicine. In drawing up their own systematics, many medical subdisciplines, including psychiatry, have somehow been inspired by *Observationes Medicae* ([Koutouvidis and Marketos, 1995](#)). The outcome of this is that many contemporary classification systems in psychiatry at least suggest that the differences between psychiatric taxa are as objective and fundamental as the differences between biological species.

Some philosophers take animal and plant species to be prototypical examples of natural kinds. Definitions of “natural kind” vary widely, but basically the term refers to bounded natural entities with fixed internal properties (see, e.g., [Quine, 1969](#)). These properties enable us, with perfect reliability, to identify the relevant entity and to distinguish it from other, related entities. Other prototypes of natural kinds include the elements in Mendeleev’s Periodic Table and also human groupings, such as blood types ([Stein, 1998](#)). In a Sydenhamian vein, some psychiatrists have argued that the set of natural kinds should be expanded to contain mental disorders too (see, e.g., [Maxmen, 1985](#); [Guze, 1992](#); [Andreasen, 2001](#)). In this view, which we refer to as the *natural kind view of mental disorders*, people suffering from a particular mental disorder would share some kind of natural essence, much like, for example, all gold atoms contain 79 protons and all tigers have a common genome. As such, thinking of mental disorders as natural kinds is one way of essentializing such disorders.¹

In recent years, many philosophers of psychiatry have argued against this view by showing that at least some mental disorder categories do not meet the criteria needed to qualify as natural kinds. For one thing, and unlike gold atoms and tigers, patients suffering from mental disorders do seem to interact with the concepts and categories with which they are grasped. According to [Hacking \(1999\)](#), for example, the history of psychiatry teaches us that the many successive concepts of schizophrenia have differentially affected the disorder’s symptomatology, and vice versa. Others have argued that even if mental disorder categories would resemble biological species, it would not follow that they are natural kinds. According to [Zachar \(2000\)](#), for example, modern evolutionary biology has shown that biological species are not natural kinds, to the extent that they are not bounded entities that differ categorically from each other.

Elsewhere, we have joined the philosophical protest against the natural kind view of mental disorders ([Adriaens, 2007](#)). In this article, however, we will not reopen the debate about the validity of this view. Rather, we would like to address a number of other questions concerning natural kind

essentialism in psychiatry. First of all, we will argue that the natural kind view of mental disorders is held by both laypeople and biological psychiatrists. Then, we will discuss the complex network of origins of this essentialist view by drawing on a number of disciplines, including evolutionary genetics, cognitive psychology, and the sociology of psychiatry.

II. DO WE ESSENTIALIZE MENTAL DISORDERS (AND WHO DOES)?

The topic of how laypeople (i.e., nonpatients) and mental health professionals conceptualize mental disorders is fascinating, but unfortunately it is also understudied. Of course, there are scores of sociological and social-psychological studies dealing with the public perception of various mental health issues; yet to our knowledge, none of these explicitly addresses the philosophical question of what kind of reality people ascribe to mental disorders. Social psychologists tend to focus on the persistent stigmatization of mental health patients, whereas sociologists are interested, for example, in how the media influence (and, in their turn, are influenced by) the information and attitudes held by the general public regarding mental illness (see, e.g., Nunnally, 1961; Rogers and Pilgrim, 2005). Although such studies are interesting in their own right, they are rarely concerned with laypeople's ontological beliefs about mental disorders.

The work of Haslam, a social psychologist, is a unique exception that proves the rule, and so it fully deserves our critical attention. In a series of successive studies, Haslam has attempted to chart the nature and organization of laypeople's intuitive *ontological* beliefs about mental disorders (Haslam, 2000, 2003; Haslam and Giosan, 2000; Haslam, Rothschild, and Ernst, 2000; Haslam and Ernst, 2002). Alluding to so-called *folk biology*, that is, the cognitive study of how laypeople organize and conceptualize the living world (Atran, 1999), Haslam has christened his research topic *folk psychiatry*.

Research about folk biology has shown that people the world over have a tendency to attribute a unique and natural essence to each and every animal and plant species—a phenomenon known as “psychological essentialism” (Medin and Ortony, 1989). The main role of this essence is to cause the development of species-typical traits. However, biological taxa are not the only entities that are being essentialized by laypeople. Social categories, such as race, are also considered homogeneous entities with an underlying essence—a “true nature”—yielding a wealth of inductive information about the category in question (see, e.g., Hirschfeld, 1996). Finally, and in a highly analogical fashion, laypeople also seem to assume, at least according to Haslam, that psychiatric patients share some deep and causal microstructure. It should be noted, however, that the tendency to essentialize mental disorders is slightly weaker than the tendency to essentialize social and biological categories (Haslam, Rothschild, and Ernst, 2000). Nevertheless,

the propensity to essentialize mental disorders clearly emerges from a number of Haslam's research experiments. In one of these experiments, Haslam confronts his participants with a concise description of a number of different mental disorders (Haslam and Ernst, 2002). Then they all get to read a fictitious newspaper report about an alleged breakthrough in scientific research about (one of) the relevant disorders. Each of these reports manipulates one specific belief from a series of eight essentialist beliefs about mental disorders, including the beliefs (1) that the disorder teaches us something about the individuals afflicted with it (*informativeness*); (2) that it has barely changed in the course of time (*historical invariance*); (3) that it differs substantially and importantly from other disorders as well as normality (*discreteness*); (4) that it is monomorphic (*uniformity*); (5) that it is unchanging and incurable; (6) that it comprises a natural category (*naturalness*); (7) that it has an underlying reality (*inherence*); and (8) that it is possible to define the disorder by means of a number of necessary criteria (*necessary features*). In the final phase of the experiment, the test subjects are cautiously sounded out on the effect of the manipulation of one (essentialist) belief on the seven other (essentialist) beliefs.

Interestingly, the results indicate that essentializing mental disorders is a very coherent way of thinking that is activated quite easily. Haslam found indeed that the manipulation of a single essentialist belief has important repercussions for the other beliefs in the series, even though there is no logical connection whatsoever between the relevant beliefs. For example, when participants were told that researchers recently found a "gene for disorder X" (manipulation of *naturalness* belief), they were more inclined to consider the disorder to be incurable (effect on *immutability* belief) and to be qualitatively different from other disorders (effect on *discreteness* belief). As Haslam points out himself:

Instead of passively assimilating information about the biological basis of mental disorders as an accretion of facts and opinions, the layperson's mind is equipped to fit it into an implicit ontology that resonates deeply with the disease model [i.e., the natural kind view]. The mind is readied, that is, to construe mental disorders as natural kinds if this essentialist ontology is suitably triggered. (Haslam, 2000, 1045)

In brief, laypeople are easily apt to essentialize mental disorders—a mode of thought that fits in very nicely with the above-mentioned claim that mental disorders are natural kinds. Haslam himself often interrelates both frameworks, for example, by nicknaming the above-mentioned essentialist beliefs "natural kind beliefs" (Haslam and Ernst, 2002, 640). In this context, essentializing mental disorders amounts to assuming that mental disorders are natural kinds—that groups of patients suffering from a particular mental disorder share a set of intrinsic (natural) properties that sets them apart from other groups, whether healthy or ill.

However, there are a number of limitations to Haslam's work, the most important of which is that it is pioneering and therefore difficult to generalize

from it. Furthermore, and generally, we should mention that the tendency to essentialize mental disorders is highly variable across a number of spectra, including time, population, and the wide range of psychiatric illnesses. First and foremost, there are actually numerous ways to conceptualize mental disorders, including moralizing and psychologizing (Haslam, 2003). At present, there is quite some uncertainty about the relative importance of “the essentializing mode,” even though it is clear that this mode exists and that it is readily available (N. Haslam, personal communication, January 21, 2008). Second, some people essentialize more than others. Recent research shows that bachelor students (of which a minority was acquainted with mental health care) tend to essentialize mental disorders much more than most practicing psychiatrists, probably because the latter’s initial essentialism is dampened by frequent contacts with their patients:

Novices endorsed the idea that mental disorders have causal essences, perhaps assuming that there must be etiologic bases behind the current taxonomies, thereby trusting experts’ judgments. Ironically, mental health experts did not endorse this belief. (Ahn et al., 2006, 764)

Finally, there seem to be different degrees of psychiatric essentialism: not all mental disorders are being essentialized to the same extent. For example, laypeople often consider depression as a *homogeneous* and *bounded* category, even though they do not see it as a *natural* entity (Haslam, Rothschild, and Ernst, 2000, 120). In other words, people believe that depressive patients largely suffer from the same symptoms, and they see these symptoms as being categorically different from the symptoms of other mental disorders. Yet, they do not believe that depression has a univocal natural cause, such as a genetic defect. Awaiting further research about folk concepts of mental disorders, we may infer from Haslam’s work the minimal but important claim that some laypeople essentialize some disorders at some point in their life. Time will tell us how important such essentialist beliefs are in folk psychiatry.

Interestingly, however, it is not only (some) laypeople who essentialize (some) mental disorders. There is, in fact, a large group of psychiatrists, too, who endorse a natural kind view of mental disorders. This is particularly true for so-called “biological” or “neo-Kraepelinian” psychiatrists (Decker, 2007). Following the famed German psychiatrist Emil Kraepelin, biological psychiatrists devote themselves to transforming psychiatry into a scientific subdiscipline of medicine. They do so by fixing their attention mainly on the biological aspects of mental disorders. “Biological psychiatry” is also characterized by its belief in a staunchly categorical approach of mental disorders—an approach based on two basic claims: (1) there are discrete mental illnesses; (2) there is a boundary between the normal and the sick (Klerman, 1978).

Another characteristic of biological psychiatry is its interest in diagnostic criteria, that is, criteria that stipulate what symptoms (and how many of

them) are required to determine whether a patient is “eligible” for a particular diagnosis. Contemporary psychiatry makes full use of such criteria, particularly in the well-known *Diagnostic and Statistical Manual of Mental Disorders* (DSM; American Psychiatric Association [APA], 1994). Diagnostic criteria somehow assume that mental disorders are separate and separable entities and that these entities can be identified by means of a so-called “decision tree,” a step-by-step method that eventually, by following a series of consecutive yes/no decisions, yields a single diagnostic syndrome. Unsurprisingly, perhaps, psychiatry’s decision trees strongly resemble the single-access dichotomous identification keys used in ecology and biological taxonomy, thus echoing psychiatry’s admiration for the biological sciences. Indeed, the introduction of diagnostic criteria in psychiatry ultimately serves the purpose of “cutting nature at the joints.” By carefully delineating mental disorder categories, biological psychiatrists hope at the same time to mark the contours of the (hypothetical) underlying natural entities.

In brief, many biological psychiatrists believe that mental disorders are in fact medical diseases, to the extent that they possess a natural essence which is in no way related to the vicissitudes of mental health care or research, the public opinion, or any other formative influence and which can only be uncovered by empirical-biological research (for prototypical examples, see Klerman, 1978; Guze, 1992; Andreasen, 2001). In other words, many biological psychiatrists believe that mental disorders are natural kinds. That said, we also want to make it clear that there is no necessary connection between a biological psychiatric and an essentialist point of view. It is possible to maintain, for example, that mental disorders are in fact medical diseases, as all biological psychiatrists do, without claiming that all medical diseases are natural kinds. In the next section, we will examine why (some) laypeople and (some) biological psychiatrists think about mental disorders along essentialist lines.

III. WHY DO WE ESSENTIALIZE MENTAL DISORDERS?

The tendency of laypeople and biological psychiatrists to essentialize mental disorders seems to be at odds with the finding that there is a huge variation in the population of psychiatric patients, even within disorder categories. This variation is in fact two-fold. First, there are clear-cut indications that the phenotypic variation between patients is much bigger than what psychiatrists, whether biological or not, tend to think. Thus it is that many patients fulfill the relevant diagnostic criteria of two or more disorders—a phenomenon known as “comorbidity” (Jacobi et al., 2004). Second, mental disorders are probably characterized by a vast genotypic variation too. The major advantage of this assumption is that it enables us to understand why

psychiatric geneticists have made so depressingly little progress in their hunt for mental disorder genes. As Keller notes:

Despite 20 years of gene hunting, scientists have not found clear links between specific alleles and severe mental disorders, which might suggest that many different risk alleles exist, no one of which accounts for much population risk. (Keller, 2008, 397)

Both kinds of variations are obviously correlated, but for our present purposes, it is important to separate them. In what follows, the question regarding why we essentialize mental disorders *despite their underlying genotypic variation* will be dealt with by discussing a recent theory in evolutionary genetics. The question why we do so *despite their phenotypic variation* will be answered by using insights from both the evolutionary branches of cognitive psychology and the history of psychiatry.

Genotypes, Phenotypes, and Filters

The question regarding why we essentialize mental disorders plays an important supporting part in recent studies about psychiatry and evolutionary genetics (Keller and Miller, 2006; Keller, 2008). The main aim of these studies is to solve the riddle surrounding the evolution of mental disorder susceptibility genes. Why have the genes affecting our susceptibility for mental disorders not been eliminated yet by natural selection, even though they are obviously harmful for reproductive success?

Keller and Miller's explanatory model is based on the observation that the human genome is particularly vulnerable to genetic mutations, that is, tiny errors in our DNA's duplication. These errors are the main sources of genotypic variation. Most harmful mutations quickly disappear from the gene pool, but most of the genetic mutations have so little effect on reproductive success that they easily hold out during a number of successive generations. Thus, the average human being is provided by his/her parents with 500–2,000 slightly harmful mutations, half of which affect the construction and maintenance of the brain. Like many other traits, mutation load is continuously distributed across the population, so that some individuals probably carry a few thousand brain-related genetic mutations, whereas others only carry a dozen. And the general principle seems to be that the more mutations one carries, the higher is the chance of deviant behavior: "individuals with an especially high load in mutations that disrupt a particular configuration of brain systems will tend to act in aberrant, harmful ways that provoke social comment and psychiatric categorization" (Keller and Miller, 2006, 404). According to this view, mental disorders are not veiled adaptations. Rather, they are genuinely harmful dysfunctions, stemming from the immense mutational target size of the human brain.

In a way, Keller and Miller would probably agree with one of the most important creeds in biological psychiatry, to wit, that psychiatric researchers

should focus on the biological aspects of mental disorders. Yet, their theory is also flatly opposed to the categorical credo of biological psychiatry (there are discrete mental illnesses, and there is a boundary between the normal and the sick), even to the extent that one can wonder how it is that there are psychiatric patients who display any similar symptoms at all. Thus, they note:

The end result will be continuous distributions with respect to almost all psychological dimensions. (. . .) Everyone alive, according to our model, has minor brain abnormalities that cause them to be a little bit mentally retarded, a little bit emotionally unstable, and a little bit schizophrenic. (Keller and Miller, 2006, 399, 404)

Mutations come and go, and basically any of the more than 10,000 “brain genes” in our genome can mutate, at any time. So, how is it possible that people have ever believed in the possibility of mental disorders being discrete categories, let alone natural kinds? How have psychiatrists ever been able to organize the vast field of deviance in a neatly limited number of disorder categories? And from where does the sacred belief in the dichotomy between mental health and mental illness arise?

The authors are aware of these problems, which stem directly from their theory, and they offer a number of solutions themselves. Their main solution derives from conceptualizing the brain’s biological network as a giant watershed, where brooklets in various upstream areas (i.e., microbiological processes, such as mutations) inevitably affect the flow of bigger downstream rivers (i.e., macrobiological processes, such as working memory and reasoning ability; Keller and Miller, 2006, 398). The watershed analogy explains indeed why scores of different mutations can still produce highly similar effects. That is, the total number of (combinations of) mutations playing a role in the etiology of mental disorders may well be enormous, but the number of brain systems to be disturbed by these mutations is rather limited. Consequently, mental disorder categories appear to be much more homogeneous than their etiology would predict: “[A]n apparently unitary mental disorder may be a heterogeneous group of dysfunctions in different mechanisms whose final common pathways lead to similar symptoms” (Keller and Miller, 2006, 400). According to Keller and Miller, the genotypic variation underlying psychiatric illnesses is translated phenotypically to a rather limited series of possible aberrations. Therefore, mental disorders may appear to be natural kinds, but they are not. Rather, they are umbrella concepts, each of them covering up a highly heterogeneous group of afflictions: “Most mental disorders show too much heterogeneity within categories, comorbidity across categories, and continuity with normality, to qualify as discrete, unitary diseases” (Keller and Miller, 2006, 400). An important implication of this view is that psychiatry can only make headway when it succeeds in charting that motley of underlying dysfunctions, for example, by defining endophenotypes (see, e.g., Gottesman and Gould, 2003).

So one partial answer to the question why we essentialize mental disorders (despite their genotypic variation) is that this variation is being “filtered,” to some extent, by particular neurobiological processes. Yet, this processing cannot preclude that most mental disorders are also highly heterogeneous on the phenotypic level. And if they are, then how is it that psychiatrists have often lumped patients together as “schizophrenics,” “depressives,” or whatever supposedly homogeneous and bounded categories were at hand? Keller and Miller seem to be aware of this problem, too, yet this time their solutions are rather sketchy. Thus, they suggest that “it was *natural* that these mental disorder categories became reified” (Keller and Miller, 2006, 404, emphasis ours) and that the “perceived similarity of symptoms and prognoses (. . .) is potentially influenced not only by actual etiological similarity, but also by (. . .) *innate* categorization biases in person-perception” (Keller and Miller, 2006, 400, emphasis ours). In the next subsection, we will analyze and explicate what it means to say that our tendency to essentialize mental disorders (despite their phenotypic variation) would somehow be natural or innate.

Naturalizing Folk Psychiatry

Indeed, the question why we essentialize mental disorders can also be raised within the framework of cognitive psychology. The ascription of natural essences to mental disorders discords with their phenotypic and genotypic heterogeneity, so one could say that such essentialism is an ontological error. Yet, sometimes a useless ontology can be a valuable epistemology. Put differently, could it be that the above-mentioned lay essentialism about mental disorders is in fact a useful cognitive strategy, at least to the extent that it helps us to make evolutionarily relevant decisions? Keller and Miller certainly seem to think so, even though they do not pursue the question:

[A] mental disorder may be perceived as a coherent category not because it is a “natural kind” with a common etiology at any level, but because it was evolutionarily or culturally adaptive for people to categorize others in particular ways in order to make certain social decisions about them. Thus, insanity may be like ugliness, dishonesty, or aggressiveness—things to avoid and stigmatize in social and sexual interactions—not because they have a unitary etiology, but because they have a common set of fitness costs for observers. (Keller and Miller, 2006, 400)

Here, the authors obviously allude to the controversial discipline called “evolutionary psychology,” which claims that natural selection has fitted our mind with a great number of mental processors or so-called “modules.” These modules have been designed by natural selection because they enable us to process information coming from domains that have been crucial to the survival and reproduction of our ancestors (Carruthers, 2005). Modules are domain specific insofar as they are only triggered by information generated within one domain. Thus, evolutionary psychologists assume that there are modules processing our mating behavior, modules regulating our

eating habits, and modules determining how we think about and deal with other people and animals. In the quotation above, Keller and Miller seem to suggest that there may even exist a module processing information about the mental health of people we meet, thus enabling us to draw inferences (about those people) that may be crucial to our reproductive success.

If such a module would exist indeed (which we deem highly unlikely, as we will argue later on), we would at once know one of its most salient features, that is, its markedly essentialist logic. As such, it urges us to assume that the person represented or, more precisely, the illness from which the person is suffering, possesses a causal essence responsible for all characteristic features of the illness. This means that the confrontation with one particular psychiatric symptom suffices to assume (1) that all other patients with similar mental health issues will display the very same symptom and (2) that the individual in question will also have a series of other traits that are perhaps not visible during the encounter, but which may have important consequences for future contacts. A most obvious example of such reasoning is the stubborn association between schizophrenia and violence. The occasional newspaper headlines about one patient's aggressive behavior somehow incite people to ascribe that very same behavior to all patients with schizophrenia, even though recent research has shown that the link between schizophrenia and violence is mainly due to a small subgroup of patients with an additional diagnosis of substance abuse (Fazel et al., 2009).

Yet, how plausible is the hypothesis that there exists a module specifically designed to regulate our interactions with psychiatric patients? To answer that question, we must return to the field where the phenomenon of psychological essentialism was first charted: *folk biology*. As we have mentioned before, mental disorders are far from the only entities that are being essentialized by laypeople. Psychological essentialism was first found to be typical of our way of thinking about biological categories, particularly about living kinds. For example, Gelman discovered that even young children distinguish between living kinds and artifacts, insofar as only living kinds are assumed to possess some kind of natural essence. Such essence would then explain why living kinds are able to retain their identity throughout numerous transformations, which is not necessarily the case for artifacts (Gelman, Coley, and Gottfried, 1994).

But *why* do we essentialize living kinds? Scott Atran found that Mayas from Guatemala and students at the University of Michigan make remarkably similar inductive inferences across various levels of biological categories (Atran, 1999), even though these inferences are often at odds with both scientific reasoning and scientific findings. Many professional biologists and philosophers of biology are tempted to discard these folk biological inferences as clearly inferior to scientifically warranted knowledge. And although this might be true from an ontological point of view, it is far from settled that folk biology is absolutely useless. As a matter of fact, numerous researchers have proposed that psychological essentialism is a highly useful cognitive

strategy because it enables us to make *valuable* inferences, even when we have no direct access to the (hypothetical) essence of a particular entity (Barrett, 2001; Gil-White, 2001). The assumption that each and every living kind has a hidden causal essence entails that every new feature it exhibits can automatically be assumed to typify all other members of its species too. An essentializing mentality thus spares us a costly and laborious learning process. Moreover, psychological essentialism allows us not only to make predictions about an organism's features but also to discount their relevant effects. An example is as follows: most people prefer not to leave their children unguarded in the presence of a dog. Even if it is our own dog, and even if it is widely known to be well-behaved, we are still worried. After all, do not we all "know" that a dog has a "natural" tendency to bite when it feels cornered? Gil-White phrases the adaptive value of psychological essentialism as follows:

Any animal that relies heavily on learning will benefit by reducing the costs of the learning process. If we can reliably learn about whole suites of objects merely by examining one of them, then evolution would have failed us if it had not provided mechanisms for doing so. (Gil-White, 2001, 530)

There are indeed plenty of examples proving that it does make sense to essentialize living kinds, even though philosophically (and biologically) this way of thinking is perhaps difficult to justify.

In brief, there are good reasons to assume that there is such a thing as an evolved and adaptive "folk biology module" (see, e.g., Gil-White, 2001, 531) coordinating our thinking about living kinds. However, a much more surprising finding is that social categories, such as ethnic groups and personality types, are being essentialized too. Indeed, research has shown that ethnic groups, for example, are considered to be natural kinds, involving a natural ground and a wealthy inductive potential (Haslam, Rothschild, and Ernst, 2000). This finding does not fit the fact that any division of humanity in a number of clear-cut "races" is completely senseless, at least according to geneticists. Indeed, there seems to be no biological ground for such classification (Jorde and Wooding, 2004). Yet, then the following question arises: how has essentializing races and ethnic groups ever been favored by natural selection if such mode of thought is, in all likelihood, incorrect?

Gil-White (2001) has formulated a sophisticated answer to this question. He claims that ethnic groups display a number of crucial similarities with living kinds, such as endogamy and descent-based membership, so that information about both entities is processed by the very same module, that is, the folk biology module. In time, this ontological error resulted in important epistemological advantages, for it enabled us to draw inferences about visible and nonvisible features of other ethnic groups, thus reducing the costs of potentially dangerous interactions with these groups. However, the generalizability of these traits did and does not relate to some kind of hidden natural

essence. Rather, it is the effect of a shared framework of culturally transmitted norms and behaviors. It often happens, for that matter, that modules “erroneously” process information from domains that do not belong to their naturally selected range. For example, evolutionary psychologists claim that the (hypothetical) “face-recognition module” is also involved in identifying masks and other face-like entities. Thus, it happens that most modules have a *proper domain*, that is, the set of stimuli for which the module has been designed, as well as an *actual domain*, that is, the set of stimuli triggering the module (Sperber, 1996). In Gil-White’s example, ethnic groups may not be part of the *proper domain* of the folk biology module, but because of their salient similarities with living kinds, they do belong to its *actual domain* (Gil-White, 2001).

So how do these hypotheses relate to our tendency to essentialize mental disorders? Haslam’s research and the general popularity of biological psychiatry tell us at least tentatively that (some) people are (to some extent) “programmed” to conceptualize mental disorders as natural kinds. The question is why we do so, especially given that there are good reasons to assume that mental disorders are no more natural kinds than are ethnic groups (see, e.g., Zachar, 2000). Can evolutionary cognitive psychology help us to understand this incongruity?

The foregoing discussion suggests that there are (at least) two possible answers to this question. The first possibility is that natural selection has equipped our mind to essentialize mental disorders, and only mental disorders, to the extent that our brain includes a module designed specifically to handle information about people suffering from these disorders. The main problem with this hypothesis is that essentializing mental disorders, in all likelihood, is not a universal phenomenon, unlike, for example, essentializing biological species. Haslam himself has argued that, ultimately, psychiatric categories are less essentialized than some other social categories, such as ethnicity and gender, which in their turn are less essentialized than biological categories (Haslam, Rothschild, and Ernst, 2000). Furthermore, there is no intense research about “psychiatric essentialism” in non-Western cultures, let alone in small-scale societies. All this need not imply that essentializing mental disorders is not a natural reaction, but it does indicate that there are many other influences at work, as we will see in the next section.

A second possibility is that mental disorders, just like ethnic groups, are not part of the *proper domain* of the folk biology module, but because of their striking resemblances with living kinds, they belong to its *actual domain*. Haslam himself seems to champion this hypothesis, even though he does not dilate upon the issue:

Thinking in terms of natural kinds is a mode of human cognition that is commonly applied in thinking about a variety of human differences—whether they be ethnic, sexual, or psychiatric—and may have been specialized for thinking about biological species. (Haslam and Ernst, 2002, 640)

However, this hypothesis seems to be at odds with the fact that psychiatric patients (or, put less anachronistically, individuals displaying deviant behavior) did not comprise a structured or centralized population during the bulk of our evolutionary history. We know precious little about the symptomatology and prevalence of mental disorders in prehistoric and premodern times (but see Fabrega, 2002), yet we do know that, generally, “odd characters” have always been taken care of by their families. We also know that the first “specializing” refuges for the insane only turned up at the very end of the Middle Ages, at least in Western Europe (Porter, 2002). Therefore, it is safe to say that systematic and centralized care for psychiatric patients is barely a few hundred years old, whereas living kinds and ethnic groups have been around for millions of years already. And it is exactly *because* ethnic groups have existed for such a long time that they were able to evolve all kinds of salient ethnic markers, such as dress codes and religions, and to create the illusion that their members are joined by some kind of hidden natural essence (Gil-White, 2001). Consequently, it does not seem very plausible to claim that mental disorders would fall within the range of the folk biology module.

But then again, it may be that relatively recent historical changes have homogenized groups of people suffering from mental disorders to such a degree that they may now trigger the folk biology module and its essentializing mechanisms. For instance, historians of psychiatry have documented that the asylum system expanded enormously right after its birth. In 17th-century France, Louis XIV affirmed his absolutism by confining all kinds of beggars, idlers, and madmen. According to Michel Foucault, *le Roi-Soleil* sets the trend in Europe, where asylums shoot up like mushrooms, especially during the 19th century (Foucault, 1972). Halfway through the 20th century, American institutions accommodated as much as 500,000 patients, while their British counterparts put up at least one-third of that number (Porter, 2002, 14). How those people ended up in mental health care is largely irrelevant to our argument. Its effects, however, are really interesting. Thus, it was indeed to be expected that the *Great Confinement*, which is Foucault’s term to refer to the large-scale institutionalization of mental health care, would have a major impact on the development of treatments for and theories about patients. Yet, the most important effect of this institutionalization was that “madmen,” for the very first time, were perceived and conceptualized as a clear-cut and bounded population, separated from healthy individuals by means of the walls of the institution. Indeed, the mere act of segregating the healthy from the ill already created an illusion of homogeneity and naturalness in the population of psychiatric patients—an illusion that may help us to understand why we tend to make use of the folk biology module when we think about mental disorders.

However, the *Great Confinement* activated many more processes which, to our mind, are highly relevant for the issue at stake, that is, the question why we essentialize mental disorders. For one thing, the institutionalization

initiated a number of top–down processes. It is interesting to know, in this context, that psychiatry as a scientific discipline was actually the result of the *Great Confinement*, rather than its mainspring. As Porter pointed out repeatedly, “The rise of psychological medicine was more the consequence than the cause of the rise of the insane asylum. Psychiatry could flourish once, but not before, large numbers of inmates were crowded into asylums” (Porter, 1989, 17). As such, the institutionalization motivated psychiatrists to devise a number of stories and techniques to find “method” in their patients’s madness and to bring unity to the overwhelming muddle of mental and behavioral symptoms in their wards. As we will see in the next section, the first psychiatrists were predominantly biological psychiatrists, attempting to relate simple and observable biological abnormalities to a wide range of afflictions. The culmination of this biological trend in psychiatry was the infamous degeneration theory, whose champions proudly presented madness not just as an organic but also as a hereditary problem (Pick, 1989). In addition to these blood-based theories about mental disorders, superintendents of the first psychiatric institutions also made use of primitive psychoactive drugs, such as opium, chloral hydrate, and bromine salts. The odds are that the intended effects of these drugs, for example, drowsiness, as well as their side effects, for example, motor dysfunctions, created a certain artificial homogeneity in the patient population (just like contemporary psychotropic drugs do). Therefore, by facilitating the creation of biological theories and techniques, the institutionalization of psychiatric care has undoubtedly fueled latent lay essentialism about mental disorders, particularly by contributing to the impression that there may indeed be a common denominator in successive generations of psychiatric patients.

For another thing, the institutionalization initiated a number of relevant and homogenizing bottom–up processes, too. As it happens, the seeming homogeneity of early psychiatry’s patient population also involved the patients themselves. Indeed, by segregating the healthy from the ill, the institutionalization of mental health care radically affected the identity and self-image of psychiatric patients. Some of them were obviously opposed to their confinement, yet there are good reasons to believe that any grouping of individuals will eventually create some kind of common identity. Being minimal at first, this identity probably grew stronger as the breach with the outside world became bigger and stigmatization of patients increased. To a certain extent, identity formation seems to be an unconscious process, but there are conscious motives, too. Being part of a well-defined group of patients enables one to claim a number of rights and benefits, including disability benefits and the right to be treated. Thus it is that some patients desperately want to be labeled with a particular diagnosis and are willing to act according to the relevant diagnostic criteria. By conforming to their diagnosis, they contribute to the perception of homogeneity in the population of psychiatric patients.

In short, the institutionalization of psychiatry may be a relatively recent development, yet the past couple of centuries have witnessed a vigorous campaign to depict psychiatric patients as more than a casual collective. Psychiatrists and patients “conspired” to create the impression that mental disorders are not substantially different from medical diseases, such as syphilis or skin cancer, to the extent that (clusters of) mental disorder patients are somehow joined together by an underlying natural essence. From this point of view, it would be comprehensible that, in the past 300 years, mental disorders have evolved to become part of the *actual domain* of the folk biology module. Whether this evolution makes sense is difficult to judge. Mental disorders may be artifacts, and not living kinds, but many artifacts have an appreciable inductive potential, too. As Barrett says, “[Artifacts] may indeed be processed, and validly so, by essentializing mechanisms originally evolved to handle living kinds, [even though] they cannot be part of the evolutionarily proper domain of such mechanisms” (Barrett, 2001, 19–20). However, the important thing is that most commonalities in the population of psychiatric patients are due to social–psychological and cultural processes, rather than some hypothetical natural essence.

All this goes to show that a balanced view on man’s cognitive architecture and its interplay with all sorts of societal changes can be part of the answer to the question why we essentialize mental disorders. The answer is that we essentialize mental disorders because we are, in part, naturally inclined to do so. In the next section, we will examine a number of sociological and socioeconomic processes that reinforce (and interact with) this natural tendency, particularly those processes explaining the present popularity of biological psychiatry, as well as its intricate entanglement with psychiatric essentialism.

Sociologizing Biological Psychiatry

Research has shown that the tendency to essentialize mental disorders is inversely proportional to the overall number of years of experience in clinical psychiatry (Ahn et al., 2006). Even so, throughout the history of psychiatry, there have always been a sizeable number of experienced psychiatrists who explicitly believe in an essentialist biological–categorical approach of mental disorders and whose ambition is to uncover the “true nature” of these disorders. Therefore, the question as to the origins of essentialism in psychiatry can be (partly) rephrased as “whence the belief in, and success of, biological psychiatry?”

In order to answer this question, we have to gain insight into the history of biological psychiatry, which is a story of many ups and downs. Shorter distinguishes between a “first” and a “second” (wave of) biological psychiatry, with a short psychoanalytical interlude in between (Shorter, 1997). Illustrative of the first wave of biological psychiatry is the establishment

of the Deutsche Forschungsanstalt für Psychiatrie (German Institute for Psychiatric Research; 1917–1945), managed by Emil Kraepelin. In its heyday, this psychiatric research institute boasted as many as five different departments whose research topics nicely illustrated Kraepelin's empirical-biological course: psychiatric genetics, epidemiology, neuropathology, serology, chemistry, and clinical diagnostics (Weber, 2000). Moreover, the institute clearly focused on severe psychiatric disorders, such as schizophrenia and bipolar disorder.

After World War II, biological psychiatry quickly lost its aura and legitimacy, only because its main competitor, psychoanalysis, achieved much more success in treating the so-called “war neuroses” (Grob, 1991). The then dominance of psychoanalytic thinking in psychiatry is reflected, for example, in the first two editions of psychiatry's most famous handbook to date, the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-I and II; APA, 1952, 1968, respectively). Thus, the main emphasis of these early editions is on the neuroses, whereas earlier psychiatric handbooks, such as the *Statistical Manual for the Use of Institutions for the Insane* (1918), concentrated mostly on organic psychoses. Moreover, many descriptions of syndromes are punctuated with psychoanalytic terminology, and the majority of the members of the core committees of DSM-I and DSM-II have at least some background in psychoanalysis.

At the beginning of the 1970s, the powers of psychoanalysis were already declining. Scientists were annoyed at the gawky systematics of psychoanalytic psychiatry and its utter lack of unambiguous rules and criteria. Health services and insurance companies objected to the proliferation of psychotherapeutic treatments and the absence of reliable quality standards. At the same time, biological research about mental disorders was experiencing a new élan, mainly because of the therapeutic success of the “first” psychotropic drugs. The renewed belief in biological psychiatry, that is, Shorter's “second” biological psychiatry, is reflected in the creation of a new edition of the DSM (DSM-III; APA, 1980), whose architects prided themselves in implementing the above-mentioned system of diagnostic criteria, while at the same time ditching all traces of psychoanalytic thought. All this was done to ensure that the handbook would be absolutely theory neutral vis-à-vis a number of relevant issues, including the belief that mental disorders are discrete categories, let alone natural kinds (see, e.g., DSM-IV, xxii, published by APA [1994]).

Yet, we believe that the changeover from the second to the third edition of the DSM is an interesting case study to understand the success of biological psychiatry and, related to that, the origins of psychiatric essentialism. Why, one wonders, was there any need for yet another edition of the DSM? The architects of DSM-III spoke of a much-needed change of course, chiefly initiated by new empirical findings in psychiatric research. As Spitzer once put it, “The DSM-III committee shared the view that progress in psychiatric

nosology will come primarily from data collected in empirical research studies” (Spitzer, 2001, 354). However, this view conflicts with the handbook’s history, to the extent that the new paradigm did not derive (primarily) from new knowledge, but rather from various sociological and socioeconomic developments (see, e.g., Shorter, 1997; Mayes and Horwitz, 2005).

First of all, DSM-III was also the product of extensive lobbying efforts. *Posttraumatic Stress Disorder*, *Repressed Memory Syndrome*, and *Multiple Personality Disorder* were included in (and *Homosexuality* excluded from) the new handbook, not because of conspicuous new research findings but rather by the relentless work of relevant pressure groups (Kirk and Kutchins, 1992; Kutchins and Kirk, 1997). By taking its power from all kinds of financial, legal, and existential concerns, such lobbying provided laypeople with an important vote in the creation of DSM-III.

A second actor playing a part in the categorical–essentialist course of DSM-III is the pharmaceutical industry. After all, the overwhelming popularity of the first psychotropic drugs, such as Miltown and Valium, seemed to suggest that biological psychiatrists were right. Because such agents affect the brain’s biochemistry and ease the patients’s symptoms, it is tempting to think that mental disorders must indeed be brain diseases. Put differently, the effectiveness of the first “happy pills” suggested that mental disorders are caused by abnormalities in the brain and that, therefore, they can be cured by manipulating the relevant metabolism.

Finally, third-party payers also contributed to the change of course in the third edition of the DSM. Since the 1960s, health services and insurance companies reimburse part of the treatment expenses for mental disorders. To determine the eligibility for such reimbursements, these bodies demand clarity concerning the effectiveness of particular therapies and the distinction between health and illness. The categorical classification system of biological psychiatry provided a warm welcome for such demands, with which psychoanalytic psychiatrists could not comply:

The rise of third-party payers contributed to pressures to change the dynamic model: the continua and symbolic mechanisms of dynamic [psychoanalytic] psychiatry did not fit an insurance logic that would only pay for the treatment of discrete diseases. (Mayes and Horwitz, 2005, 253)

Undoubtedly, the presence of many more actors and factors explain why biological psychiatry was a booming business at that time; what is clear is that the new nosology of DSM-III was not just derived from facts, as some of its supporters would have it. Maxmen, for example, highlighted the difference between DSM-II and DSM-III by claiming that “the old psychiatry derives from theory, the new psychiatry from fact” (Maxmen, 1985, 31). DSM-III *does* derive from theory, however, to the extent that it took up the binary logic of the health services and insurance companies, as well as the biologizing discourse of the pharmaceutical industry.

Moreover, this *folie à plusieurs* had important unintended consequences. First of all, DSM-III's reliance on research diagnostic criteria encouraged practicing psychiatrists to conceptualize mental disorders as medical diseases (which are often seen as examples of natural kinds). As Nesse notes:

A more insidious consequence of the new diagnostic system [DSM-III] is its tendency to encourage psychiatrists to think of diagnostic categories as if they were diseases. If such carefully defined, objective, and reliable categories are approved by the *American Psychiatric Association* and required by insurance companies, and if researchers use them to search for etiology and better treatments, then it is difficult for the clinician to resist the unjustified belief that each is a distinct disease with a specific cause. (Nesse, 1991, 35)

In our view, DSM-III not only encouraged psychiatrists to take a natural kind view of mental disorders; it also boosted the already existing lay essentialism in psychiatry. By ascribing historical invariance and uniformity to mental disorders, for example, and particularly by proclaiming the use of necessary features in diagnosis, as evidenced by the introduction of the Research Diagnostic Criteria, DSM-III invited laypeople to conceptualize mental disorders as natural kinds. As such, this edition of the APA handbook is a provisional peak into a series of historical processes that have homogenized the population of patients suffering from mental disorders, thus contributing to the use of an essentialist logic in understanding mental disorders. In short, in claiming that DSM-III takes an explicitly atheoretical stance in understanding mental disorders, its architects ignored the basic fact that laypeople tend not to be atheoretical and that they only need minor essentialist cues to construe a markedly essentialist view on mental disorders.

IV. CONCLUSION

Daniel Dennett (1995) once quipped that “nothing complicated enough to be really interesting could have an essence” (201). Although psychiatrists would agree that mental disorders tend to be rather complicated, many of them still conceive of such disorders as discrete entities with a distinct and primarily biological etiology. To a certain extent, such essentialism is shared by laypeople, too. In this article, we have attempted to spell out a number of factors that account for the persistent presence of the natural kind view in both scientific and popular thinking. One such factor is the general tendency of laypeople to essentialize conceptual structures, including biological, social, and psychiatric categories. Although this tendency may not have evolved to deal specifically with mental disorder categories, there are good reasons to hypothesize that the essentialist mode of thinking was transposed from its proper domain, that is, biological categories, to the domain of mental disorder categories. The use of the folk biology module in conceptualizing mental disorders may be

warranted by a series of historical processes, including the rise of biological psychiatry—another factor explaining the persistence of the natural kind view—which have homogenized mental disorders and the people suffering from such disorders. Essentializing mental disorders may be a natural tendency, but it can only be so by authority of particular cultural processes.

NOTES

1. It is important to note here that essentialism need not be restricted, as we do in this article, to ascribing *natural* essences to groups of entities or individuals. Indeed, the natural kind view of mental disorders is only one possible essentialist view on mental disorders. Other essentialist views may focus on shared psychological or cultural properties.

ACKNOWLEDGMENTS

We would like to thank Nick Haslam, Randolph Nesse, and two anonymous referees for valuable comments on an earlier version of this manuscript. At the time of writing this article, PRA was a postdoctoral fellow of the Research Foundation Flanders (FWO-Vlaanderen), Belgium.

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