

Magritte's Mystery and the *DSM*'s Disorders

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The fields of psychology and psychiatry are now truly international. Thus, ideas emerging in English-speaking countries often have a large effect on psychological work in non-English-speaking countries. The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM–5) is the 2013 update to the American Psychiatric Association's classification system; it is commonly used by psychologists as well as psychiatrists for the diagnosis of psychological disorders, especially in the United States. Although there has been intense discussion among some psychologists about the strengths and weaknesses of the DSM in its various versions, the views of our colleagues in other countries who are also influenced by the DSM tend to receive less attention.

Thus, I asked Jürgen Margraf, Alexander von Humboldt Professor of Clinical Psychology and Psychotherapy at Ruhr University Bochum, Germany, to share some of his thoughts about the DSM–5. Margraf was the first psychologist to be awarded an Alexander von Humboldt Professorship, Germany's most highly endowed scientific award. He is a Fellow of APS and has been president of the European Association for Behavioural and Cognitive Therapies, the German National Scientific Council on Psychotherapy, and the German Society of Psychology. He grew up in Brussels, René Magritte's hometown.

-Nancy Eisenberg



A Tale of Two Narratives

Narrative 1: People sometimes have problems thinking and interacting with the outside world. Some even hear voices or see things that are not there. Although these problems are distressing, they typically go away after a while. It may help to rest, drink tea, or go to the temple. Just as a sore throat or sad mood can go away and come back, hearing voices can do the same. When the voices do come back, they represent a new occurrence, not the persistence of some underlying stable disease.

Narrative 2: About 1 in 100 adults suffer from a mental disorder that leads to symptoms such as delusions or hallucinations. In the past, clinicians often disagreed about the diagnosis of schizophrenia. With the diagnostic revolution of the *DSM-III* (and subsequent editions of the manual), schizophrenia can now be diagnosed reliably. The disorder tends to be chronic with recurrent episodes, although patients may experience long symptom-free intervals. The disorder arises from neurodevelopmental disturbances and imbalances in brain chemistry that require intense, multimodal treatment centered on psychotropic drugs.

In Narrative 1, delusions are seen as psychosocial problems, not as symptoms of an underlying disorder (paraphrasing Hans Eysenck, 1985, “the symptom is the disease”). In Narrative 2 (*DSM-5*), mental disorders are defined as syndromes (groups of symptoms) assumed to be “pathological” — that is, qualitatively different from normality. But why should heterogeneous subsets of very different problems represent the same diagnostic category if we have no marker of underlying pathology, just operational definitions based on symptoms? Without objective markers, mental disorders have to be seen as constructs rather than as diseases akin to myocardial infarction or malignant tumors. Remarkably, the course of psychotic problems is dramatically better in developing countries, where few sufferers are treated with medication, than in developed countries, where most patients undergo increasingly long drug treatments (Whitaker, 2011). Could it be that modern diagnostics have led us astray?

Ire Over the *DSM-5*

The *DSM-5* generated a surprising amount of attention among Europe’s general public. The unusually intense press coverage was largely negative, culminating in calls for a boycott and highly critical statements by professional organizations (e.g., Boycott *DSM-5* Committee, n. d.; British Psychological

Society, 2013; Germany's National Chamber of Psychotherapy on DSM-5, 2013; German Psychiatric Association on DSM-5, 2013; Global Summit on Diagnostic Alternatives, n. d.; International DSM-5 Response Committee, n. d.). At the same time, some European psychologists made prominent contributions to the *DSM-5* (Rief, Frances, & Wittchen, 2013). Why was there so much criticism, and why should the *DSM-5* bother Europeans, who are bound by law to the World Health Organization's International Classification of Diseases? Europeans paid attention to the *DSM-5* because many leading scientific journals are American, the United States accounts for roughly 40% of the global health care expenditure, and the "Big Pharma"—psychiatry coalition has enjoyed remarkable economic success, with a more than five-fold increase in US sales of psychotropic drugs since the 1980s. (The *DSM-5* sells at \$199, and the previous edition of the manual sold more than 1 million copies.) It is thus perfectly rational for Europeans to take the *DSM* seriously. But are the criticisms justified?



Just as an image of something is not the thing itself and can therefore be “treacherous,” diagnostic constructs may be misleading (Alpers, 2014). Image credit: *The Treachery of Images*, René Magritte, Brussels, 1928–1929. Location: Los Angeles County Museum, Los Angeles, California.

Problems with psychiatric diagnosis have existed for a long time, as shown by the famous example of David Rosenhan's "On Being Sane in Insane Places" (1973). The “diagnostic revolution” of the *DSM-III* — after some initial skepticism — was rapidly embraced by psychologists around the world as a solution to long-standing diagnosis challenges. Yet the *DSM-III* primarily addressed reliability (i.e., how reproducible the diagnosis is), whereas Rosenhan had challenged validity (i.e., how well the diagnosis measures what it purports to measure). After all, the hospitals in his study showed near perfect reliability, admitting all false patients and giving them a diagnosis of schizophrenia in 11 out of 12 cases. Although reliability is still far from perfect (in field trials, only three of the *DSM-5*'s diagnoses obtained $\phi > .6$; Cooper, 2014), validity remains the biggest problem in psychiatric diagnosis. Reliability does not ensure validity, as the historical examples of expert agreement on topics ranging from the flat-Earth theory to bloodletting show. Likewise, the uncritical acceptance of two distinct categories of human behavior (pathological vs. normal) does not necessarily imply truth. The *DSM* lends itself easily to reification of its constructs (if you can operationalize it, it must be real, happen in the brain, involve genes, require drugs, etc.). This is where Magritte's painting comes into play: Just as an image of something is not the thing itself and can therefore be “treacherous,” diagnostic constructs may be misleading.

The core proposition of the *DSM-III* was that better diagnoses should lead to better treatments and better mental health. Reality showed exactly the opposite: Mirroring the surge in psychotropic drug sales since

the 1980s, the tally of Americans qualifying for mental-health-related disability payments has increased some 250% (Whitaker, 2011). Similar increases occurred in European countries. Other grand promises (“true causal understanding,” “biologically based diagnoses”) remain unfulfilled. Instead, we have seen massive proliferation of an unproven biological disease model and an increase in treated cases of mental illness. While drugs have become the go-to treatment for mental health problems in industrialized countries, compelling evidence for long-term stability of drugs’ modest short-term results (Gibertini, Nations, & Whitaker, 2012) is lacking, and relapse rates upon termination of drug therapy are high. In sharp contrast, some psychological treatments have shown lasting results.

On the other hand, we must be careful not to criticize the *DSM-5* for the wrong reasons. There is no reason to celebrate “clinical intuition,” merely hermeneutic understanding, or other ghosts from the past. Some critics unjustifiably rewrite history (e.g., “*DSM-5* is all bad; therefore, *DSM-IV* was all good”; Mad in America, Inc., n. d.). Psychosocial problems are real and often require professional help. They are, however, best measured by established psychometric principles.

A New Approach

Among the *DSM*’s serious problems are weak boundaries between different assumed pathologies and normality, temporal instability of diagnoses, arbitrary exclusion criteria, lack of bodily correlates of disorders, excessive cooccurrence (“comorbidity”) of disorders, within-diagnosis heterogeneity, and overreliance on nonspecific diagnoses. These concerns point to severe problems with construct validity, at least partly explainable by the categorical nature of the *DSM*. As a rule, categories diminish information; they have less predictive power than dimensional measures. Direct comparisons of psychometrically developed dimensions with mental-disorder diagnoses in predicting important outcomes have consistently shown that dimensions predictively outperform diagnoses and that diagnoses add little or no predictiveness to that of dimensions such as well-established depression or anxiety inventories.

A problem with dimensions is that scattered point clouds in multidimensional space, constructs, and construct validity seem more challenging to apply than diagnostic categories. But categories represent a sort of “diagnostic flatland” that misses relevant dimensions, to the great detriment of scientists, clinicians, and patients. Even if this shortcoming can be overcome, anyone who designs an alternative dimensional approach should be careful not to throw the baby out with the bathwater. The problems of diagnostic overconfidence, lack of standardized assessment, heuristic mistakes — in short, of human information processing — apply here as well. Reliability requires standardized assessment and diagnostic algorithms, and there is no way around thorough work on construct validity. Procedural tools based on psychometric principles and the careful choice of the relevant dimensions will be helpful. One prominent alternative approach, the US National Institute of Mental Health’s Research Domain Criteria (R-DoC), aims to develop a classification based on behavioral dimensions and neurobiological measures. Its units of analysis, however, range only from genes to self-reports, curiously omitting the social level.

Rather than uncritically embracing implicit medical models, psychological scientists around the globe will yield the best outcomes if we concentrate on our field’s strengths. These include drawing on a century of progress in psychometrics, dealing with hypothetical constructs, applying psychological principles to practical problems, and understanding that the mutual influences among biological,

psychological, and social factors in mental health are not a one-way street (Margraf, 2015). æ

Author's Note

I would like to thank Silvia Schneider and Lloyd Williams for their help with this column. My own publications include diagnostic interviews and scales based both on *DSM* categorical diagnoses and on the dimensional models of psychosocial problems.

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