

TOWARDS A PHILOSOPHICAL APPROACH TO PSYCHIATRY

Kenneth Kendler and Peter Zachar

Reviewed by Dominic Murphy and Alexander Pereira

for

*BJPS Review of Books*¹

The history of psychiatry does not inspire confidence, even among psychiatrists, and there has always been a cottage industry in medicine and psychology that wrestles with various conceptual problems around mental illness. It's arguable that philosophers of science have not paid enough attention to this literature. Even if you aren't interested in psychiatry, you might profit from the debates in psychometrics on the measurement of mental constructs, or look at the arguments over causation, reduction, and explanation that psychiatrists fight out among themselves, increasingly with some philosophical input. Kenneth Kendler is a major contributor to this literature as theorist, experimentalist, and (via his role in the DSM) institution-builder and gatekeeper. He stands out too for his willingness to engage and learn from philosophy; and also to teach, for many of us can vouch to learning a lot about psychiatry from Kendler's willingness to collaborate with philosophers and integrate the two communities. So it is a great pleasure to have a selection of Kendler's papers assembled in one place. The essays in this volume cover a variety of conceptual issues in psychiatry, together with some historical material looking at the recent development of biomedical psychiatry. The most notable historical piece is the chapter on the origins of the Fechner criteria for validation of diagnoses, which had an enormous impact on the development of biological psychiatry in the 1970s. This collection covers many issues, and we won't try to discuss everything, instead opting for one or two main issues that we think philosophers of science will be especially interested in. But there is something here for almost everyone in philosophy of science, and we urge them to look at this volume even if psychiatry is not on their normal reading list.

¹ <https://www.thebsps.org/reviewofbooks/murphy-pereira-on-kendler-zachar/>

One reason for the lack of confidence we mentioned earlier is the state of psychiatric diagnosis. Our current classification of mental disorders into diagnostic categories or kinds is considered so controversial that psychiatry is often said to be in crisis. The issue has attracted significant attention from both the psychiatric sciences and the philosophy of psychiatry. But the two fields tend to discuss issues around classification quite differently. The clinical sciences have focused on technical issues like construct validity, measurement, and inter-rater reliability; while philosophy has focused on the metaphysics of mental illness and theories of diagnostic reference. As a consequence—and despite their shared target—work in psychiatric science and philosophy is often done independently, without interdisciplinary interaction; the fields proceed in parallel.

In contrast to this picture, Kendler has a track record of successfully bridging these two areas. His contribution to debates on classification can thus be considered one of consilience. All his papers in Section 2, ‘The Classification and Nature of Psychiatric Disorders’, for example, were published in mainstream psychiatry journals such as *Psychiatric Medicine*, and they all find ways to connect relevant historical and philosophical perspectives to the technical worries familiar to the clinical sciences.

In ‘DSM Disorders and Their Criteria: How Should They Interrelate?’, Kendler links philosophical worries about reference to scientific worries about measurement and operationalism. He argues that the criteria that comprise a diagnosis can relate to a disorder in two ways. The first relationship is constitutive: a ‘disorder’ is nothing more than something that satisfies the criteria—the diagnosis defines the illness. This picture is steeped in operationalism, which is dangerous if we confuse a practical operationalism (having clear guidelines for disorder construction) with a philosophical operationalism (which confuses measurement with metaphysics). The second relationship, which Kendler endorses, is indexical: the disorder is a hypothesized construct for which the criteria are fallible indicators.

What is this hypothetical construct? In (Kendler *et al.* [[2011](#)]), Kendler and his co-authors survey several popular theories about how cases of a mental illness might form a kind. The authors detail and then discard three accounts (essentialism, social constructivism, and practical kinds) in favour of a fourth that

they call the ‘mechanistic property cluster’ (MPC) model. The MPC model is a close intellectual descendent of Richard Boyd’s ([1991]) account of kinds in biology. It holds that instances of the same mental illness share an underlying causal mechanism that reliably (but often imperfectly) creates the cluster of signs and symptoms recorded by a DSM diagnosis.

The move would be persuasive to psychiatric science for two reasons. First, it comfortably tolerates the variable and multifactorial nature of mental disorders as they present in the clinic. Second, it hooks the conceptual issues around psychiatric classification to a philosophical theory that has close ties to actual scientific practice. Members of the ‘new mechanist’ school like Carl Craver emphasize that the mind and brain sciences often proceed by discovering hidden mechanisms that explain neurocognitive phenomena (see, for example, Machamer *et al.* [2000]). Furthermore, the mechanism that anchors an MPC kind is liberal and can in principle be wholly bio-psycho-social in nature. It does not require any hard-core biological reductionism. This means the MPC account can tolerate, alongside the diversity of disorder presentations in the clinic, the diversity of theoretical perspectives on mental illness that currently exist across the clinical sciences.

Another, smaller act of consilience can be seen through authorship. Peter Zachar is a well-known proponent of the practical kinds model; while Carl Craver has criticized the philosophical theory behind the MPC account in the past. By bringing these authors together, Kendler has presented a something like a unified philosophical front. Part of Kendler’s success here is that he refers to the MPC account as a model of psychiatric kinds while remaining agnostic about other parts of Boyd’s philosophy (for example, a commitment to a realism about kinds). This likely appeals to both the clinical audience (as ‘model’ is more palatable than ‘metaphysical theory’) and to Kendler’s co-authors, who would likely object to any further realist commitments.

Kendler has often worked with philosophers, and another interesting paper is that written with Kenneth Schaffner on the fate of the dopamine hypothesis of schizophrenia. They bring out well both the state

of the science and the opportunities offered by the theory to consider some famous philosophical theories of scientific progress.

The story they tell is of a theory that changed so much over time that its initial core commitments get reversed while still being treated by its adherents as the same theory. The moral to draw is that as a research programme—or what Kendler and Schaffner call a temporally extended theory—changes over time, its core commitments seem to change too, but somehow not from the point of view of the scientists who are intellectually and materially invested in it. They mention, for example, a 2004 publication advertised as a ‘new lease of life’ for the dopamine hypothesis, even though it substitutes dopamine dysregulation for the original idea of dopamine hyperactivity, and relegates even that to a supporting part, with prefrontal processing deficits as the primary difference-maker. So dopamine is relegated to a minor downstream causal role, but the dopamine hypothesis still seems to be going strong—at least in terms of appeals to longstanding belief about its centrality. The original evidence for the dopamine hypothesis, which seems to have led nowhere, is still being appealed to: it seems that any dopamine abnormality at all will end up being cited as evidence that the dopamine hypothesis was right all along; the problem is that just about everything seems to be abnormal in the brains of schizophrenics, so the theory, in this most general form, is pretty much bound to be true.

Scientists are not often intellectually conservative. Some are notorious for claiming that they have come up with some radical new idea when all they’ve really done is re-arrange the existing furniture. Yet here is a manifesto for a replacement of a core commitment of psychiatry, and it is advertised as a new boost to an old idea. Perhaps to capture what’s going on, we would do well to think of research programmes phylogenetically, as David Hull ([1988]) suggested. Hull thought of research programmes as evolving over time subject to selection pressures, so that just as in the organic world, descent with modification could produce a very different creature that still counts as part of the original lineage.

Last, we should mention the essay ‘A gene for...’. Kendler is a psychiatric geneticist of great distinction, but in this paper he debunks the whole idea that there could be a gene for a mental illness, while coming

up with some criteria to show what such a gene would need to satisfy. In ‘What Psychiatric Genetics Has Taught Us about the Nature of Psychiatric Illness and What Is Left to Learn’, we get the positive side of the topic, as Kendler looks ahead to the promises not of single genes but of gene-wide association studies. Together these papers provide a very informative overview for philosophers interested in how the sciences approach questions of genetic causation, explaining the state of play in psychiatry with great clarity. There is plenty more in the volume to enjoy, and we hope philosophers of science will study it closely.

Dominic Murphy

University of Sydney

dominic.murphy@sydney.edu.au

Alexander Pereira

Stanford University

pereirak@stanford.edu

References

Boyd, R. [1991]: ‘Realism, Anti-foundationalism, and the Enthusiasm for Natural Kinds’, *Philosophical Studies*, **61**, pp. 127–48.

Hull, D. L. [1988]: *Science as a Process*, Chicago, IL: University of Chicago Press.

Kendler, K., Zachar, P. and Craver, C. [2011]: ‘What Kinds of Things Are Psychiatric Disorders?’, *Psychological Medicine*, **41**, pp. 1143–50.

Machamer, P., Darden, L. and Craver, C. F. [2000]: ‘Thinking about Mechanisms’, *Philosophy of Science*, **67**, pp. 1–25.