

ARTICLE

A Commentary On Kendler 2014. Toward A Limited Realism For Psychiatric Nosology Based On The Coherence Theory Of Truth

Paul Bebbington, Emeritus Professor Of Social And Community Psychiatry, UCL Division Of Psychiatry

Abstract

Kendler argues for the reality of psychiatric diagnostic classes in terms of two realist theories of truth, coherence and correspondence. I would advocate an alternative interpretation of the truth status of diagnostic classifications that leads to different conclusions. This is based firstly on Karl Popper's ideas on the growth of knowledge, whereby hypotheses developed from theoretical conjectures are deliberately subjected to attempts at refutation (we refine our always provisional views of what is true by increasing our knowledge of what is false). My second source of argument is John Wing's view that diseases are theoretical constructs on which disease theories may be based and tested. Such theories relate variously to aetiology, pathology, treatment, course and outcome. Rejecting a disease theory does not force rejection of the disease construct it seeks to qualify. We adhere to disease constructs more strongly than to the disease theories based on them. However, if it becomes apparent that the information obtained by testing disease theories is incoherent, we may eventually jettison particular disease constructs, as has happened regularly in the history of medicine. The disease constructs used in psychiatry may be approaching this point.

I thank the editors for inviting me to comment on Dr Kendler's interesting paper on the standing of psychiatric diagnostic classes. He starts by setting out three philosophical positions: instrumentalism, and two realist theories of truth (the coherence and correspondence theories). Kendler prefers realism to instrumentalism, as I do. There are philosophical differences between coherence and correspondence. Coherence is concerned with the relationship between *statements* about the world (ie, it is good if the statements describing related aspects of reality are consistent with each other). Correspondence goes further, in that it implies there can be links between statements and the state of affairs in the real world. The two theories appear to be of interest to Kendler partly because they are distinguished by stringency: the coherence theory of reality is less demanding than that of correspondence, and if we cannot have the latter, we might still make a case for the former.

He then argues that the quality of reality can be taken to attach to psychiatric diagnostic classes, particularly if we accept a coherence view of truth. Kendler thinks that human mental suffering as a whole may meet the criteria for correspondence, but that individual psychiatric categories can only meet the requirements of coherence theory (the example he gives is schizophrenia). At the very least he would like the truth standing of the categories to be persistent, if not eternal. For this reason he dislikes arguments based on "pessimistic induction", the idea that we have always been wrong before, and so in all probability we will be wrong again.

The correspondence and coherence theories of reality are both based on consensus. Consensus is cosy, but cannot certify truth. Moreover the frailty of these two theories of

reality is not historical (as posited by pessimistic induction: “we always have been wrong”) but logical (“we always can be wrong”). I will interpret the matters raised by Kendler by using the ideas of Karl Popper (1963) and John Wing (Bebbington, 2011)¹ to make sense of the procedures and purposes of diagnostic classification in psychiatry.

Popper used Tarski's exposition of the correspondence theory of truth to develop his ideas of the role of deduction in science (Popper 1963, pp 223-227). A deductive inference is valid if no counter-example exists, and, Popper argues, we therefore have a method of objective critical testing at our disposal, the deliberate and active seeking of counter-examples. This argument forms the basis for the role of refutation in scientific theory testing. Popper also points out that there is no equivalent rule of inductive inference: however much it may assist consensus, the accretion of positive evidence can never substantiate the validity of the premises. For this reason we can never be sure that the future will be like the past.

However, Popper argued that the growth of scientific knowledge can be logically secured if we subject theoretical *conjectures* to rigorous attempts to refute them. A hypothesis is *corroborated* when the application of crucial tests fails to refute it. However, corroboration is not confirmation: the acceptance of the theory is always provisional (this is the Popperian refinement of the idea of pessimistic induction). Popper's position is actually quite conservative. Thus he argues that a theory should not be jettisoned just because it is refuted. This should occur only when it can be replaced by the exposition of a theory more precise or more comprehensive, a Darwinian selection of ideas. Finally, he acknowledges that a theory that has been superseded may still be useful as an everyday approximation (vide Newtonian mechanics).

Wing adapted these ideas to the problems of psychiatric classification. He noted theories in medicine are unusual, in that they are based on the concept of the syndrome. Syndromes are leaps of imagination (conjectures), but they are then accepted and maintained by consensus, these days in the Byzantine ecumenical councils of DSM and ICD. Wing saw medical (and hence psychiatric) disorders as theoretical constructs that are accepted provisionally by consensus about the content of the syndromes that identify them. Once such theoretical constructs gain acceptance, they can be used as the basis of individual disease theories. These generate specific hypotheses about putative consistencies, relating to aetiology, pathology, treatment, course and outcome. This separation of theoretical disease constructs from the expository theories based on them allows two levels of potential rejection. In particular, rejecting a disease theory does not force rejection of the disease construct it seeks to qualify. We are more ready to reject disease theories than we are to abandon the formulation of individual disorders, quite properly so. Some syndromes are more successful than others. Where they prove useful in having a consistent aetiology, course, treatment, and when they can be linked to consistently differentiating pathological mechanisms, they will be adhered to, although not necessarily forever. The erstwhile disorders listed by Kendler were usually relinquished over many years, as it gradually became apparent they were not useful in such terms.

Given this formulation, what light does it cast on the current status of psychiatric classification? It is always possible to create discriminating algorithms after the manner of DSM and ICD. This enables us to identify cases reliably, but does not ensure validity. Do our diagnostic categories effectively discriminate symptomatically between healthy and unhealthy individuals (the threshold problem)? Are they symptomatically mutually exclusive (the boundary problem)? Do they predict aetiology, pathology, appropriate treatment and prognosis with any degree of specificity? If they are unable to do these things, it strongly

suggests the intellectual foundations of the syndromal categories are insecure. Does that mean they have no heuristic value at all?

If we consider Kendler's specific example of schizophrenia, the answers to the questions above are generally negative. Psychotic phenomena appear to exist on a continuum, and the environmental and genetic aetiology of schizophrenia is common to other psychiatric categories. The course of psychotic phenomena is quite variable, and they can be treated, usually imperfectly, with a number of different agents, both pharmacological and psychological. Kendler is clearly in the camp of optimistic induction. However, in my view, the syndrome of schizophrenia may be slowly losing its scientific persuasiveness. At best, it may retain a degree of heuristic value. It enables us to identify people whom we may investigate in order to determine psychological and biological mechanisms with relevance both inside and outside the group investigated, and this is, I think, valuable. It has certainly generated extremely interesting findings in recent years. However, this residual value does not really allow claims of reality beyond the instrumentalist position.

Finally, it should be acknowledged that psychiatric diagnoses have social functions, linked to, but separate from, their scientific function. These are not always benign (they may be the basis of stigma), but they include access to resources in both disorder-driven and problem-driven health systems, and they impact on issues of criminal and social responsibility.

¹ My attempt at an intellectual obituary for Wing.

References

Bebbington PE (2011). John Wing and the perils of nosology. *Social Psychiatry and Psychiatric Epidemiology*, 46, 443-6.

Popper KR. (1963) Truth, rationality, and the growth of scientific knowledge; in: KR Popper *Conjectures and Refutations: The Growth of Scientific Knowledge*. pp 215-250 London, Routledge and Kegan Paul.