Why psychiatry is a mess

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Psychiatry is a mess. Nobody seems to know how to distinguish normal behavior from mental disorders, or how to treat most mental disorders. Nobody seems to know how to integrate cutting-edge science (experimental psychopathology, community comorbidity studies, brain imaging, genome-wide association studies, multivariate behavior genetics) into a profession whose basic terms, concepts, empirical standards, professional institutions, funding sources, and intervention methods are decades old.

There are strong, angry, and unresolved debates over how to revise the 5th edition of psychiatry's core reference work, the *Diagnostic and Statistic Manual of Mental Disorders* (DSM-5), to be published in 2013. There are continual tensions between research psychiatrists and clinical psychiatrists, between psychiatrists and clinical psychologists, and between mental health professionals and health insurers.

Evolutionary psychiatry promised to bring order to this chaos. In its two-decade history, it has made good progress in clarifying some terms, such as "disorder", "normal", "defence", and "emotion". It has yielded new insights into some mental disorders, notably depression, autism, phobias, anorexia, and psychopathy. It has promoted a bit more cross-fertilization among psychiatry, evolutionary psychology, behavior genetics, and biological anthropology. Yet it has left the bulk of psychiatry untouched.

Why has evolutionary psychiatry's impact been so limited, despite the impeccable Darwinian logic of basing the study of mental disorders on the study of evolved mental adaptations? There are the usual suspects – individual and institutional conservatism, the pre-Darwinian state of most medical school curricula, the vested interests of Big Pharma, the peculiarities of the American health insurance system, the vicious cycle between DSM categorizations and funding categories for research grants, the disappointments of psychiatric genetics, and the mindless but well-funded stampede towards neuroscience. No doubt these account for much of evolutionary psychiatry's limited impact.

Yet there may be deeper conceptual problems in evolutionary psychiatry. This is where philosophy might promote evolutionary psychiatry's progress and impact as a science.

Modern philosophy, I think, aims to analyze and clarify the terms, concepts, findings, and standards of evidence relevant to some domain of human discourse. Psychiatry is one domain of human discourse with especially high stakes, such as trying to prevent suicide, rape, murder, despair, psychosis, and other forms of avoidable suffering. Following Nietzsche's demolition of grand philosophical systems – whether metaphysical, moral, or epistemological – much philosophy has become applied philosophy of some sort – philosophy of subject X, rather than Philosophy as an autonomous subject.

So, at its best, philosophy of science is pretty humble in its aspirations and methods. It largely means reviewing and critiquing scientific literatures with an eye towards unexamined assumptions, unclear concepts, slippery terms, internal contradictions, cultural prejudices, and historical amnesia.

All of these problems are endemic to mainstream psychiatry, and remain fairly common in evolutionary psychiatry. Philosophy strives to do this concept-clarification work in a mindful, ruminative, deliberate, historically informed way, in contrast to the slap-dash theorizing of many working scientists, who see literature reviews as onerous burdens to be finished quickly before the fun work of reporting methods and results in scientific papers. Insofar as philosophers gain specialist training in thinking clearly, debating sharply, knowing history, identifying counter-examples, and chasing implications imaginatively, they bring something useful and distinctive to science.

This book [*Philosophy, Psychiatry, and Evolutionary Theory*] is a good example. Although half of the chapters are written by non-philosophers, most authors adopt the philosophical stance in relation to their particular issues. Of the eleven chapters after the introduction, some address general issues such as the nature of harmful dysfunctions, mechanistic versus evolutionary views of dysfunction, defenses versus disorders, generality versus modularity, and the role of human ethology in psychiatry. Other chapters focus on particular disorders: four on depression, and one each on phobias, sexual fetishes, autism, and schizophrenia. Yet even these disorder-specific chapters strive to gain insights that can be applied to other disorders, such as the difference between normally and abnormally regulated emotions, the interplay of evolved preferences and individual experience, and the differences between ancestral and modern environments. Philosophers often look for such cross-domain generalizations where concept-clarifications in one domain can be exported to other domains, whereas working scientists are usually more concerned with getting the theory right in just one domain.

Also, throughout all chapters, it is clear that the philosophy of evolutionary psychiatry has one huge advantage over the philosophy of non-evolutionary psychiatry: it can draw upon all the hard work that philosophers of biology have done since the 1970s to clarify concepts such as gene, trait, species, function, adaptation, selection, fitness, instinct, learning, and ancestral environment. It can also draw upon the hard work that evolutionary psychologists have done since around 1990 in refining such evolutionary concepts as they apply to human behavior, with all its distinctive complexity, flexibility, emotionality, sociability, culture-dependence, and consciousness.

So far, so good – good authors, good insights, good book. Yet future progress is uncertain. In the rest of this short foreword, I want to highlight a few ideas that I think might strengthen the next generation of evolutionary psychiatry theories.

The first point concerns science versus intuition. Philosophy can go wrong when it tries to reconcile our human intuitions about some domain with the technical concepts and findings in that domain. This often proves impossible. Philosophers of physics has learned that our intuitive physics – lay concepts of time, space, gravity, and impetus – are impossible to reconcile with core ideas in relativity, quantum mechanics, and cosmology. Philosophers of biology have learned that our intuitive biology – lay concepts of species essences and teleological functions – are impossible to reconcile with evolutionary population genetics and adaptationist teleonomy. Even moral philosophers such as Peter Singer are doubting whether our intuitive morality – self-deceptive, nepotistic, clannish, anthropocentric, and punitive – can

be reconciled with any consistent set of moral values, whether deontological, consequentialist, or virtue-ethical.

Yet philosophers of psychiatry still often make the argument that if some principled new way to think about mental illness has implications that seem intuitively unacceptable, the new idea must be rejected as absurd.

For example, the view of mental disorders as typically arising from mutation load -- a view that I have defended elsewhere -- suggests that there is no principled distinction between maladaptive disorder and 'normal variation' – because most 'normal variation' reflects maladaptive deviations from optimal, species-typical design. The concept of 'normal variation' in a mental trait makes evolutionary-genetic sense only if one assumes that the trait has been selectively neutral or under balancing (e.g. frequency-dependent) selection.

The implication is that almost all living humans have many mental disorders, mostly minor but some major, and these include not just DSM disorders like depression and schizophrenia, but diverse forms of stupidity, irrationality, religiosity, vices, and personality quirks. As the new positive psychology acknowledges, we are all very far from optimal mental health, and we are all more or less insane in multiple ways. Yet traditional psychiatry, like human intuition, resists calling anything a disorder if its prevalence is higher than about 10%.

My point here is not that the mutation load view is necessarily right, but that a mature philosophy of psychiatry may lead to insights so contrary to common sense that they compel us to rethink how psychiatry is taught, practiced, and researched. In other words, a 22nd century psychiatry may fit no more comfortably with our evolved and acculturated intuitions than does 21st century M-theory in physics, with its 11 dimensions, P-branes, and supergravity. Indeed, we might hope that psychiatric theory eventually becomes so sophisticated, quantitative, and technical that it is no more comprehensible to working psychiatrists than M-theory is to engineers.

My second point concerns the mismatch of research topics between evolutionary psychiatry and evolutionary psychology. Most evolutionary psychology so far has focused on mate choice, sexual strategies, person perception, family conflict, reciprocity, aggression, decision heuristics, status, and emotions. Excepting the last two topics, very little of this work has informed evolutionary psychiatry.

For example, there is almost no research connecting mate choice research to sexual dysfunctions such as dyspareunia, anorgasmia, vaginismus, or premature ejaculation, or to disorders that might promote short-term mating success, such as bipolar disorder and psychopathy. There is a gap between evolutionary personality psychology and the study of antisocial, borderline, narcissistic, or schizotypal personality disorders. There is a gap between the evolutionary psychology of aggression, warfare, rape, and conflict, and the study of posttraumatic stress disorder. There is almost no evolutionary psychiatry work on any of the dissociative, impulse-control, somatoform, sleep, substance use, learning, neurological, or culture-specific disorders, not to mention other Axis III and IV issues.

Also, evolutionary psychology identifies many mental adaptations that may have characteristic break-down patterns and failure modes that constitute harmful dysfunctions, but that have been neglected by psychiatrists – notably the adaptations concerning food selection, habitat choice, mate choice, mate retention, sexual rivalry, ovulation, parental care, kinship, reciprocity, friendship, status-seeking, risk-taking, and decision-making. Evolutionary psychologists and

evolutionary psychiatrists are learning important things from each other, but there's not the expected overlap between research on the normal and research on the abnormal in most domains of life functioning.

More generally, the evolutionary focus on differential reproductive success leads directly to an emphasis on conflicts of interest between genes, individuals, and groups. Yet evolutionary psychiatry has neglected many key conflicts of interest that may impose a heavy burden of suffering on people. These include evolutionary conflicts between pathogens and hosts, predators and prey, nuclear and mitochondrial genes, somatic and germ-line cells, parents and offspring, males and females, young and old, and rival groups, populations, and species. For example, few evolutionary psychiatrists yet take seriously Paul Ewald's suggestion that some mental disorders might reflect viruses or other pathogens influencing human behavior in their own interests.

An evolutionary perspective could also highlight institutional conflicts of interest between psychiatrists and clients, psychiatrists and health insurers, psychiatrists and pharmaceutical companies, psychiatrists and clinical psychologists, and the mental-health versus criminal-justice systems. These conflicts shape many debates in psychiatric research, practice, and policy, yet are rarely acknowledged.

These concerns about science versus intuition, and gaps between evolutionary psychiatry and evolutionary psychology, can be viewed positively. They identify low-hanging fruit – places where evolutionary psychiatry, and the philosophy thereof, can make substantial progress quickly and easily. This book reflects the state of the art now, but each chapter is also pregnant with potential to guide future research. We can look forward in coming years to evolutionary psychiatry growing more philosophically astute, psychologically informed, evolutionarily sophisticated, empirically fruitful, and clinically applicable in promoting mental health.