Classic Text 27 - Philosophy of Mind: Psychiatry

for Anna

The Banyan (Ficus benghalensis), *the national tree of India*, *which develops accessory trunks from adjacent prop roots*, *allowing the tree to spread outwards indefinitely – a species rich in symbolism*

Psychiatry is the specialised branch of medicine[1] that deals with the diagnosis, treatment and prevention of mental disorders. First coined by the German physician Johann Christian Reil in 1808, the word psychiatry derives from the Greek ψυχή (psykhē) for soul and ἰατρός (iātros) for physician.

Although the literature on the philosophy of mind is vast, until recently that concerning the philosophy of psychiatry in particular was sparse and often fragmented. Of course psychiatrists are confronted with philosophical issues every day. Typical philosophical questions for psychiatrists include:

- Am I conducting my practice ethically?
- Is my patient engaged in reality testing? By who's or what lights?
- Am I imposing my clinical worldview on a patient with a culturally very different outlook?
- Are there underlying existential issues that I might be missing?

Notwithstanding, the subject of psychiatry and the research informing it are founded upon just a handful of philosophical assumptions, which are seldom acknowledged or questioned. Patil & Giordano's (2010) article *On the ontological assumptions of the medical model of psychiatry: philosophical considerations and pragmatic tasks* is useful departure point for further discussion.

[1] By "medicine" here we mean **allopathic medicine** which uses evidence-based remedies that produce effects different from those caused by the disease or disorder – this in contrast to **homeopathic**, Ayurvedic or other traditional health care systems.

Their opensource article may be downloaded here for free. Since then two highly accessible publications: *The Bloomsbury Companion to Philosophy of Psychiatry* edited by Şerife Tekin & Robyn Bluhm (2019) and *Philosophy of Psychiatry* by Jonathan Tsou (2021) have brought the subject up to date. Unfortunately, for copyright reasons they cannot be reproduced here but are available elsewhere online.

Four Models of Medicine and Psychology

Until comparatively recently, Psychiatry (in the West, at least) was taught, and to some extent still operates under the **biomedical model of disease**, that uses biological factors in order to understand illness. The **biomedical model of health** by contrast goes back at least to Hippocrates (c. 400 BC) and is defined purely by the absence of illness to the exclusion of psychological, environmental, and social influences. (Wikipedia: Biomedical model)

We have already discussed dualism extensively (see Classic Texts 02 & 06) without refence to medicine. However, since Descartes argued for the complete separation of mind and body in his *Meditations*, the bodies of animals, including humans, have been regarded as biological machines in which the rational mind dwells, interacts and controls. Since then, targeted therapies have been based on the same mechanistic conceptualisation of the human body, with disorders in its mechanism being treated through biomedical intervention. (Butler, 2019 p. 47) However, the traditional acts of medicine (*i.e.* diagnosis, therapeutics, and prognosis) have taken for granted the ability to distinguish between what is "normal" or "neurotypical" and what is "abnormal" or "pathological".[2] (Patil & Giordano, 2010 p. 1)

Psychological Behaviourism, as we know it today (not to be confused with Logical Behaviourism of Gilbert Ryle – See Classic Text 06), began in the 1890's with Ivan Pavlov's discovery of classical conditioning and culminated in the works of John Watson and B. F. Skinner in the 1920's and 30' respectively. According to Skinner's philosophy of **radical behaviourism**, motivating "behavioural analysis", animal behaviour can be studied and usefully compared with human behaviour. Skinner emphasized the environment as a cause of behaviour, as well as the operations involved in the modification of behaviour. (Wikipedia: Radical behaviorism)

Perhaps as a reaction and antidote to the ever bolder and untestable claims of Depth Psychology and Psychoanalysis, Radical Behaviourism became the standard, "no nonsense" approach to "scientifically informed" and operationalizable behavioural therapy. In Classical Text 11 we introduced the analogy of the "Blackbox" to understand behaviourism. Student engineers are given sealed "black boxes" as part of their practical assignments. They have no knowledge of their contents or internal workings but have to analyse their box by correlating inputs with outputs using various instruments such as oscilloscopes, multi-meters *etc.* Any talk about what is "going on" within

[2] One common statistical approach is to define "normal" as surrounding the population mean of any given measure and "abnormal" as any deviation of 2 or more standard deviations from the mean. Another common physiological approach is to simply *define* a **standard person** or **reference person** as being a theoretical model of a human individual which has perfectly "normal" characteristics – historically "a man between 20-30 years of age, weighing 70 kg, 170 cm in height, living in a climate with an average temperature of from 10°C to 20°C… *etc*." (Wikipedia: Standard person) Obviously, this won't do for psychiatry, although we will have more to say about the statistical approach further on.

the box or peeping inside of the box is strictly forbidden. For behaviourism, the philosophical question of the mind or its contents is similarly forbidden. The psychologist's role is solely to analyse environmental inputs and correlate them behavioural outputs. What ever mental, cognitive or emotional events might be going on "under the hood", is strictly irrelevant. The aim of the behaviouralist clinical psychologist then, is not to address thought processes but to *modify behaviour* using classical conditioning, reinforcement and operant conditioning. Psychopathology, to the extent that it exists for the radical behaviourist, is simply disordered behaviour.

In 1977 George Engel published *The Need for a New Medical Model: A Challenge for Biomedicine* in the influential journal *Science*. The **biopsychosocial (BPS)** model of medicine as it came to be known "is a pluralistic approach to disease and health that integrates multiple modes of explanation, diagnosis, and treatment, rather than solely privileging any one perspective over others". As Butler points out, the BPS is not a relativistic model where "anything goes". Instead, metal states and their various properties are recognized as complex, interdependent, and should be approached from various perspectives, with each still being held to the same standards of accuracy and demonstrable success. Unlike Descartes' *res cogitans*, mental states exist within an "overlapping matrix" of underlying mechanisms, cognitive functions, and social behaviours, which must be integrated together to effectively understand and address mental disorders in psychiatry. (Butler, 2019 p. 42-3)

Finally the systems or **systemic model of psychology** involves viewing people in relations with others especially, but not only, families, rather than individuals. People are seen within the context of their interactional patterns and dynamics, in which every member plays a role[3]. (Skorunka, 2009) Beginning in the 1980's early forms of systemic therapy were based on **cybernetics** (from the Greek κυβερνήτης (*kybernḗtēs*) for "a ship's pilot or helmsman", a theory that studies circular causal systems whose outputs are also inputs, as feedback systems. Although the theory of cybernetics and its application to systemics is complex, it is not beyond the comprehension of the competent undergraduate student of psychology. Dorothy and Raphael Becvar's (2012) *Family Therapy: A Systemic Integration*, currently in its 8th edition, was, or is still prescribed by UNISA.

Systems therapy itself, however does not attempt to solve underlying problems analytically, but instead tries to identify stuck and maladaptive patterns of behaviour within a group. Neither is it concerned with past causes, such as subconscious impulses or childhood trauma; nor is it concerned with psychiatric diagnosis. According to Arist von Schlippe and Jochen Schweitzer (1998),

> Systemic therapy neither attempts a 'treatment of causes' nor of symptoms; rather it gives living systems nudges that help them to develop new patterns together, taking on a new organizational structure that allows growth. (p. 93)

A survey of 2 598 therapists in the US in 2006 revealed that of the ten most influential in the previous quarter centaury, three were family therapists and that the marital and family systems model was the second most utilised after only cognitive behavioural therapy. (PsychotherapyNetworker.com, 2007)

[3]Bizarrely, sometimes one member is fulfilling the functional role of the "sick" or "crazy" person within the family.

The Antipsychiatry Movement

During the 1960's a number professionals, including practicing psychiatrists, became associated with an "anti-psychiatry" movement. They argued that problems and experiences usually typified by such conditions as depression and schizophrenia were not actual signs of illness. Rater they were reactions to personal problems and/or intolerable circumstances. Thomas Szasz (1960) described mental illness as a "myth" and argued that we should instead understand people's experiences and behaviours as reactions to "problems in living". Szasz's second critique was that mental illnesses are not genuine disorders, like bodily diseases, because they are not associated with pathophysiological lesions. Instead they represent deviations from social and moral norms. Szasz did not deny that neuroanatomical lesions could result in dysfunctional behaviours by that such abnormalities are, strictly speaking, "diseases of the brain, not of the mind". (*sic.* p. 133)

Another later prominent "anti-psychiatrist", Ronald Laing, although he eschewed the label, emphasized that the aberrant behaviour of psychotic patients was actually an attempt to communicate. (Laing, 1985) This was completely at variance to the dominant view of the day, which claimed that psychotic behaviour, including psychotic speech, was meaningless. According to Laing, instead of looking to biology to understand the causes of mental illness, we should look to society, especially the family. (Tekin & Bluhm, 2019 p. 10)

The anti-psychiatry movement no longer has the force that it once had. Tekin and Bluhm (op. cit.) propose several reasons, including that it was "partially a product of its times, reflecting the counter-culture movement of the 1960's and 70's and partially the beginning of a continued resistance to a solely medicalized approach to mental disorders with the conviction that the social and cultural systems have a deep impact in the way people experience and respond to disorders of the mind". (p. 10 - 11)

We agree with the authors' assessment, but add that by the 1990's there were no longer the same charismatic counter-culture leaders or texts around which to unify and organize. By the same time, and into the early 00's, with the availability of at least two new classes of psychotropic medicine (third generation antidepressants and atypical anti-psychotics) as well as new evidence based psychotherapies, especially cognitive behaviour therapy, dialectical behaviour therapy and the systems based approaches, the *bona fides* of contemporary mental health carers could no longer be consistently called in doubt. People with formerly intractable psychotic conditions were getting better, and staying functional for longer. People who had hitherto only just gotten by were able to begin leading meaningful and productive lives.

Two Recent Evidence Based Therapies

Cognitive Behavioural Therapy (CBT) challenges and attempts to change cognitive distortions (*e.g.* thoughts, belief and attitudes) and their associated behaviour to improve emotional regulation and personal coping strategies.

Dialectical Behavioural Therapy (DBT) initially designed to treat borderline personality disorder, but now successfully used for mood disorders, self-harm and substance abuse, DBT uses a dialectical process similar to Socratic dialect to achieve "a synthesis or integration of opposites" to help avoid harmful or undesired reactions.

Today, at least in South Africa, most of those professing to be "anti-psychiatry" are those who have been previously failed by psychiatry, or fallen through the institutional "cracks", either state or private. The various Mental Health Review Boards do offer redress against abuse, neglect, exploitation, or degrading treatment by mental health care users; however not all cases are reported and many are simply dropped because they are not resolved timeously, because they have to be heard in the High Court.

Philosophical Background to the Mind-Body Problem

We have already spent an inordinate amount of time discussing the mind-body problem from Platonic to Cartesian and modern forms of Dualism to both Type and Token Physicalism. We have also discussed questions concerning Life and Reductionism, Determinism and Fee Will, as well as subjective mental states or Qualia. Two additional study units follow on Personal Identity (Classic Text 32) and Experimental Philosophy (Critical Reasoning 27). Without prejudicing the following discussion, the majority of analytic philosophers would agree that classical forms of Dualism are simply wrong and that, until it is proven otherwise, the mind is either identical with some arrangements of matter or a function of some forms of matter *e.g.* nervous systems. The phenomenon of Life, most would agree, reduces to the activity of molecules, but manifests properties at the level of the organism, that cannot simply be "explained away". The same is true of conscious thought. An afterimage to a conscious mind may have the subjective quality of redness, but this not due to the redness of any of the molecules or neuronal firing that brings about the sensation. This is not mysterious. There are descriptions and explanations that are appropriate at one level of being, say the molecular level that not appropriate at the level of the organism and *vice versa*. Similarly, there are descriptions and explanations that are appropriate at the ecosystemic level that are not appropriate or applicable at the level of the individual organism. This epistemic fact does not mean that the ontological fact of reductionism is wrong.

The centuries old debate between freedom *vs.* determinism meanwhile, we believe, is based on a false dichotomy. All of our actions, both free and automatic[4] are determined by the unconscious activity of neural circuits, which in turn are caused to fire or are inhibited by other neurons and/or glia, the movement of ions, the release of neurotransmitters *etc.* Most of our actions, most of the time, are automatic, even if they require conscious input. Think about driving to work and back, eating take aways, watching television, engaging in mechanical sex. Occasionally we are required to deliberate, plan and make decisions, especially in socially salient situations. This involves recruiting circuits in the prefrontal cortex, some divisions of which are present only in primates. Therefore when we exercise truly free choice, we recruit more, not less neural determinism. We literally possess a bilateral "free choice making apparatus" which operates according to the same deterministic neural mechanisms as the rest of our brain. Freedom of choice does not operate by being fee of determinism, but by being determined in the right way. This is why we value education, training, mentorship and practice especially. Practice is one way of encoding determining cognitive or body-kinaesthetic information in the present so that our future performance will be free, or at least much less effortful.

[4]adjective of **automaticity** (see Critical Reasoning 06); this in contrast to **automatism** in medicine which is a set of brief unconscious behaviours during which a subject is unaware of their actions, as in complex partial seizures or sleepwalking.

By saying "being determined in the right way" we leave it up to the relevant psychological model to substitute the appropriate conditionals, be they biopsychosocial, cognitive-behavioural or systems theoretical. Psychological or radical behaviourism cannot supply the appropriate conditions here because internal states or events, such as choices or cognitions, are strictly irrelevant – they belong inside the black box. Besides, there are three further conditions which must obtain for an action to be free:

- The person or creature must not be constrained (or restrained) in one way or another *e.g.* by force or by disease, which can seriously undermine the ability to choose freely. A man with a gun to his head has no choices. A dangerously underweight girl with anorexia is no longer choosing not to eat. **Learned helplessness** (see right) is another form of internalised restraint.

- My choices, obviously, must be mine, not imposed from without. If a doting mother is reliving her youth vicariously though her daughter, then most of her life-choices are not hers.

Learned Helplessness

I.e. behaviour exhibited by a subject after enduring repeated aversive stimuli beyond their control. Laboratory animals who learned that they were unable to escape from an electric shock simply stopped trying to do so.

Similarly, humans in abusive relationships may simply stop trying to escape their abuser, if they know that they will beaten either way. Individuals, and sometimes whole villages, who have experienced prolonged famine or grinding poverty may simply "give up" on extricating themselves from their situation, even when an opportunity presents itself.

- For my choices to be mine, the causal chain of events leading up to my choices and issuing from them, must pass through my free choice making apparatus in a causally efficacious way. Causal chains that run though other people's free choice making apparatus are not mine, unless I make them mine by choosing them for myself.

Problems in Psychiatric Diagnosis

Nosology (from the Greek νόσος (*nosos*) for 'disease', and -λογία (*-logia*) for 'study of') is that branch of medicine dealing with the classification of diseases. Infectious diseased are simply classified according to the pathogen causing them *e.g.* malaria. Alternatively, diseases may be classified by the organ or system involved *e.g.* dermatitis. With the advent of molecular biology, the causes of many diseases have been traced to a molecular or genetic abnormalities *e.g.* a misfolded protein (prion diseases) or single nucleotide polymorphism[5] (SNP) such as sickle cell anaemia. Currently, the cause of most psychiatric disorders is either unknown or only partially understood. Both bipolar mood disorder and schizophrenia however are known to involve many SNP's but no single one of them is diagnostic of either disorder. (Kelsoe & Greenwood, 2007 Ch 13.3)

[5] A **single nucleotide polymorphism (SNP)** is a genomic variant at a single base position in the DNA. An SNP cab be thought of as a misspelling of a single "letter" (A,T,G or C) of the genetic "alphabet".

Until further developments, the nosology of mental "illness" will continue to be based on observable behaviour and/or self reports.

According to Patil & Giordano (2010) the basic challenge for psychiatry should be to formulate a viable system for meaningfully characterising mental normality and abnormality, and to question how such a formulation might affect the scope and nature of psychiatric practice. This project is not simply academic or esoteric, given the ongoing progress in genetics and neuroscience. Notwithstanding, healthcare policies, both public and private, are based to a large extent on just two current diagnostic schema: *The International Statistical Classification of Diseases and Related Health Problems* (ICD-11) in South Africa and worldwide and the *Diagnostic and the Statistical Manual of Mental Disorders* (DSM-5-TR) the US.

Before we proceed, there are several myths surrounding the DSM which should be dispelled. Firstly, it is not the "Bible of Psychiatry", as it is referred to in popular media. Psychiatrists do not sit with it in their lap when diagnosing patients. It is what it says: a "Diagnostic and Statistical Manual of Mental Disorders". Its purpose is to standardise diagnoses across a vast array of research institutions, in such a way that when researchers in different counties collaborate on a project, an individual in one country is diagnosed the same way and according to the same criteria, as in another county, so that statistically meaningful comparisons can be drawn.

Contrary to popular opinion the DSM-5-TR is not the final or even the initial word concerning the cause of mental disorders. According to Jonathan Tsou (2021) "Most DSM categories are invalid... To have construct validity, a diagnostic category should accurately represent a construct as defined by theory". Since DSM-III, it has been "presented" as **atheoretical**, making no assumptions about the causes of mental disorders, even though its architects advocated a biological approach to psychiatry which assumed that mental disorders are discrete disease entities. (p. 47) While Tsou regards this as a defect, other regard it as a virtue. "It's a feature not a bug", as some programmers say: being atheoretical allows experts with diverse theoretical backgrounds to talk about the same diagnostic category without becoming mired in debate about their cause or theoretical significance. Tsou however, recommends that the DSM should classify biological kinds, not diseases – a recommendation we endorse and justify in the concluding discussion.

Finally, the DSM-5-TR makes no distinction between bad *vs.* pathological conditions, some of which may be criminal. Paedophilia, for example, is classified as a disorder (F65.4), not a crime, even though many paedophiles end up in the criminal justice system. It then becomes an easy defence for paedophiles to claim: "But I am sick, not a criminal" or "I belong in hospital, not in prison". According to one large study concerning the use of different classification systems for paedophilia, the DSM classification was only rarely used. (Feelgood & Hoyer, 2008) In South Africa, the courts may ask a forensic psychiatrist for a report, but again these sub-specialists rely on observation and self report, rather that DSM checklists.

The ICD-11, which classifies all diseases, not just mental disorders, by contrast has attracted very little popular media attention, which is perhaps a good thing in that is it is not perceived though the lens of social media memes and trending posts.

Ontological Assumptions underlying Psychiatry

Patil & Giordano introduce their discussion of the topic by quoting from two articles highly critical of psychiatry: According Allan Horwitz, (2002) "because [diagnostic psychiatry] uses symptoms to classify disorders, it also categorizes an enormous diversity of human emotions, conduct, and relationships as distinct pathological entities". That it does, because precise diagnostic classifications can be used to distinguish between non-pathological and various pathological states without pathologising the symptoms, conduct or relations *per se*.

In *The Myth of Mental Illness*, Szasz (1960) disputed psychiatry's claims of medical legitimacy by questioning its evaluative disposition. According to Szasz, psychiatry utilises terms such as 'delusions', 'compulsions' and 'obsessions', which lack the descriptive objectivity of other domains of medicine. Compare the terms 'blood pressure', 'body mass index' or 'temperature', for which there are objective measures that require no operationalisation. Recall that Szasz did not deny that neuroanatomical lesions could result in dysfunctional behaviour, but claimed that these were, strictly speaking, instances of brain disease. However, according to Szasz (2007), classifying various forms of behaviour as pathological, "…rests on a serious, albeit simple, error: ... mistaking or confusing what is real with what is imitation; literal meaning with metaphorical meaning; medicine with morals". Thus, if psychiatry lacks the terms that corral out pathology from normality, how could psychiatrists claim to make objective diagnoses based on a predominantly subjective (and flexible) epistemology?

One immediate rebuttal is to point out that, firstly, such terms are not subjective but are *defined* in diagnostic manuals based on a process of "compromise and consensus" by members of expert committees and *operationalised* by various instruments such as the Beck Depression Inventory. Secondly, their application to pathology rests on two criteria, to wit that any putative disorder must cause "significant distress or disability in social, occupational, or other important activities" to the person so diagnosed. (DSM-5-TR p. 14) For example, if Bob believes that he receives communications from alien intelligences via a microchip that was implanted in one of his fillings by his dentist while he was sedated, then he is clearly delusional by all reasonable standards. However if Bob displays no significant distress and is able to continue to discharge his duties at work and as a family man and friend, he cannot be diagnosed as suffering from a delusional disorder.

The authors suggest that the "conceptual tension in psychiatry [that they see,] mirrors larger debates about objectivity and normativity in the philosophy of science". In *The Structure of Scientific Revolutions*, Thomas Kuhn (1962) argued that in order to compare theories from older and more recent periods or indeed any era, science requires a perspective that is external to each - what he calls an "Archimedean platform" form **Archimedean Point** (L. *Punctum Archimedis*) a hypothetical viewpoint from which certain objective truths can perfectly be perceived. However we cannot escape our current perspective which is sensitive to the normative practices of social communities; therefore such a platform is not available to us. (Stanford Encyclopedia of Philosophy: Thomas Kuhn) Instead, "scientists (and clinicians) undergo training and develop expertise within localized academic institutions. As a consequence, intellectual traditions tend to bind scientists and clinicians within a coherent community of practitioners". As Kuhn pointed out, members of a particular academic community tend to favour similar constructs and values about what constitutes a good theory (or

best practice). Such values are seldom made explicit; rather they are tacitly assumed and maintained collectively within the academic community. Therefore, for Kuhn, the collective nature of scientific theory-building implies that the values of academic communities are relevant in the context of scientific discourse and theorisation (and, the authors add, clinical practice).

If science (like other ideologies) evolves within a cultural framework then, the authors ask, "… in what sense is it immune from the normative practices of society?" Science (and by extension, clinical medicine) is indeed a cultural phenomenon with hegemonic assumptions about the nature of reality and being; however it is neither subjective nor relativistic and therefore does not lay itself open to the same postmodern criticisms about other ideologies. Instead, science favours a self-correcting epistemology that is increasingly adjusted and refined over time. When newer, reliable observations become impossible to accommodate within existing hegemonic beliefs, then those initial assumptions are overturned in what Kuhn called a **paradigm shift**.

According to the authors, "[i]n applying this framework to the medical model of psychiatry, we see a reliance upon four main ontological assumptions." These are:

- **Realism**: The claim that mental events such as beliefs, desires and thoughts are *real* phenomena and not merely artefacts of socio-cultural norms;

- **Naturalism**: The belief that adverse changes in the neural substrate or functioning are causally implicated in the development and persistence of mental disorders;

- **Reductionism**: The belief that at some level, adverse changes in the neural substrate or functioning are *necessary* to account for mental disorders;

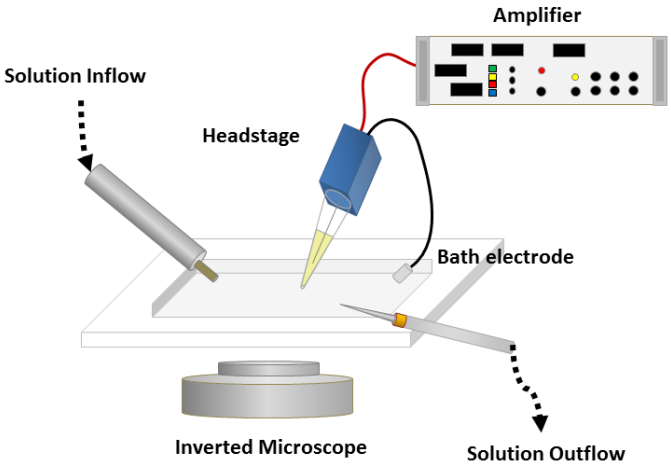
- **Essentialism**: The belief that mental disorders have underlying "essences" that distinguish one type of mental disorder from another.

Below we follow the authors in examining these assumptions in turn and attempt to decide whether each is warranted and necessary in order to arrive at a "valid" concept of a mental disorder.

Realism

The realist position holds that the terms employed in scientific theories correspond to actual properties or structures in the external world, even if they are not directly observable. Thus, voltage-gated ion channels or serotonin receptors do, in fact, exist independently of our ability to perceive them via our senses. That we know about them is due to technological innovations such as the **patch clamp technique** (see diagram over page). Changes in the voltage across a membrane containing such a channel are amplified and displayed by an instrument such an oscilloscope that we *can* perceive. Furthermore, the properties referred to by scientific theories are independent of our cultural or linguistic practices. Even if, for example, there were no words or even any humans to theorise about such matters, water molecules would still have two hydrogen atoms chemically bonded to an oxygen atom.

Realism is a species of physical monism which, *inter alia*, implies that minds and bodies (and souls, if they exist) are not separate substances but depend for their existence on the same physical matter of the universe. Realism is therefore not compatible with mind-body dualism which postulates two ontologically separate substances. Dualism is manifestly untrue when we examine brain lesions and their sequelae. In general, a **lesion** is any damage or abnormal change in the tissue of an organism, usually caused by disease or trauma. Lesions to various regions of the brain may result in the loss or deleterious alteration of associated function or changes in subjective experience.



Schematic Diagram of Typical Equipment Used During a Patch Clamp Recording (Wikipedia) – Oscilloscope not Shown

For example, individuals with lesions to parts of the left temporal lobe, specifically Wernicke's, area may suffer from what is called **fluent aphasia** in which they speak in long, grammatically correct sentences that have no meaning. Others with lesions to anterior regions of the brain, such as the left posterior inferior frontal gyrus or inferior frontal operculum also known as Broca's area may suffer from **non-fluent aphasia** in which they have great difficulty expressing themselves verbally, while retaining comprehension. (Wikipedia: Aphasia)

Cotard's syndrome, which is extremely rare, involves the belief that one is dead, non-existent, putrefying or missing parts of one's body. The syndrome is thought to result from neural misfiring in the fusiform face area of the brain and amygdalae. (Pearn & Gardner-Thorpe, 2002) Clearly, cognitive and behavioural functioning depend on the integrity of the nervous system's functioning as a physical (biological) entity. Similarly, we might ask, how *else* are we to account for the gradual loss of cognitive ability seen among patients with neurodegenerative disease such as Alzheimer's?

In Classic Text 06 we assessed several arguments in favour and against dualism and found the former wanting. However the one that psychiatrists implicitly endorse every time they reach for the prescription pad is the **argument from psychopharmacology**. The point of prescribing psychoactive medication is to bring about biochemical changes in the nervous system of the patient presenting with a mental disorder. If dualism were true and mental disorders were somehow immaterial in origin, then psychiatrists wouldn't need chemicals to treat them and any chemical agents that they might employ would be ineffective.

As the authors note, "nothing has been claimed about how neural structures causally produce mental states (*naturalism*), or whether mental states are best understood through their more basic, physical components (*reductionism*)". We do not believe that drawing out the debate over realism or physicalism will add anything to the present discussion. Besides which, we have devoted several Classic Texts (11, 16, 19 & 23) to the subject; therefore we shall gloss over Cash's (2008) objection

that that there is no reason to suppose that mental properties such as beliefs, doubts, desires and fears actually exist in the natural world. We recommend Dennett (1989) as an antidote.

Naturalism

In philosophy in general, naturalism is the belief that only natural (as opposed to supernatural or spiritual) laws and forces operate in the world. (See Classic Text 06) As far as naturalistic theories of mind are concerned, mental properties, such as thoughts or beliefs, are derived from neurobiological structures in a causally relevant way. In order to characterise a mental disorder as naturalistic, the clinically observed behavioural manifestation of the disorder must be shown to have causal roots in biology, including the biology of possible infectious agents, toxins or a history of trauma. That is not to say that all pathological behaviour should only be understood only through biology, but rather that biological explanations must feature alongside complex environmental and socio-cultural explanations.

Throughout much of the history of psychiatry, practitioners were unable to link mental disorders to identifiable causal events at the level of biology, relying instead on sufficiently frequently reported regularities between events such that they were justified in accepting such observations as evidence of causation. Starting in the early 20th Century, first with psychology and only later with psychiatry, researchers pursued an increasingly statistical approach to the study of psychopathology. While statistics cannot single out potential causes, it can however provide a quantifiable measure of the probability of an event occurring solely by chance. The development of the DSM over the years, has, as the name implies, provided standard diagnostic criteria for the classification of mental disorders, which since DSM-III have been grounded in empirical evidence. As we have seen, such standardisation has allowed for the coordination and statistically meaningful comparison of research programs from disparate communities and cultures across the world, without imposing a theory-bound nosology.

Humans however are not instinctively statistically intuitive, as is evinced by the number of statistical fallacies to which we are prone. But as the authors point out,

> the act of intuiting causal relationships in the world long predates the development of statistics, or even mathematics. Such reasoning is possible because human beings have the capacity to reason inductively and infer logical relationships from data in, and obtained from the environment. Children as young as three years old can make appropriate judgments about novel stimuli and causally link processes they have only observed in operation. (Gopnik & Schulz, 2004)

As we saw in Classic Text 04, Hume was sceptical of the about the existence of causes, at least in the external world. Recall that he observed that we are never able to discover “any quality, which binds the effect to the cause, and renders the one an infallible consequence of the other. We only find that the one does actually, in fact, follow the other”. However, without being stymied by Hume’s metaphysical skepticism, we can proceed on the assumption that what we call causality can be understood as event regularities. As Ross & Spurrett (2007) observe, “...to the extent that we have culturally universal intuitions about causation, this is a fact about our ethology and cognitive

dispositions, rather than a fact about the general structure of the world." In other words, as the authors note, "naturalistic intuitions are not evidence of their content".

In Classic Text 04 we discussed a counter-example to Hume's thoroughgoing causal skepticism by describing the parasite *Plasmodium spp*. (visible in the blood of the infected host under the light microscope) as the indisputable *cause* of malaria. In the last half century or so imaging technology has opened up the hitherto impervious carapace of the skull to scientific and clinical scrutiny. Without any philosophical scruples we can now for example say, "The infarct visible on the CT scan is the *cause* of Smith's aphasia" or "the spontaneous firing of a cluster of neurons in the temporal lobe, as revealed by this EEG, is the *cause* of Jones' seizures".

Reductionism

As neuroscience has elucidated the biological basis for several mental disorders, be they biochemical, genetic or developmental, so this has bolstered the philosophical belief that all mental properties will ultimately be explicable in terms of interactions between their putative substrates. Given that such interactions are causally implicated in psychopathology, a logical paradigm would confer underlying genetic and biochemical processes explanatory primacy. That is not to say that subjective experience or cultural influences do not play a role in psychopathology. However, since both of the former are necessarily instantiated *in vivo*, their "true" explanatory locus must reside in pathological structures and functions.

Many people balk at reductive explanations, believing, rightly so, that it is too easy to lose sight of the person among the underlying neurobiological and biochemical phenomena. Dennett's *The Intentional Stance* (1989) however addresses this anxiety by clarifying the relations and predictions of mentalistic behaviour through the use of different levels of explanatory abstraction. According to the **Physical Stance**, behaviour could, in principle, be explained by the physical laws governing the interactions of constituent matter. Next, according to the **Design Stance**, behaviour is predictable based on the mind's purpose, function and design. For Dennett and most evolutionary biologists, the teleological terms "purpose", "function", and "design" do not point to supernatural "designer" but to the "design" outcome of natural selection. The purpose of eyes is to detect electromagnetic radiation of a wavelength on the order of 380 - 740 nm in the case of humans. That is their function. From as early as 550 million years ago, eyes evolved multiple times in the animal kingdom and can therefore be said to have been *designed* by natural selection. Creatures with eyes that function according to their purpose have a distinct reproductive advantage over those without eyes or with eyes that do not function so as to detect potentially dangerous conditions including the presence of predators and to locate sustenance and potential mates.[6]

The final level of abstraction according to Dennett is the **Intentional Stance**, which predicts behaviour by considering what motivates a rational agent to choose in a given situation. The intentional stance requires no understanding of the physical or biochemical underpinnings of the

[6] Of course in the case of creatures that live in perpetual darkness such as cave crickets and moles, eyes are superfluous, even maladaptive, and so have been selected against. The important point is that what is adaptive in one environment may be maladaptive in another. Similarly, what may have been adaptive to a species at one time in its evolutionary history may be maladaptive at another time.

mind, nor does it rely on principles of mental design or function. Instead it relies on metacognitive abilities such as a **theory of mind**, (see Classic Text 20) which is the ability to attribute mental states to oneself and others and to understand that others have different intentions and perspectives from one's own. Children as young as 2 to 3 evince a theory of mind.[7]

Neuroscience, which focuses on the brain and its representations, informs both an evolving philosophy of mind[8] and the clinical practice of psychiatry. However, science itself is a work in progress, therefore as neuroscientists work on the project of explanation, so those *explananda* stand in need of interpretation. Normativity is an ineluctable part of science, however it is *we* who make sense of the world and explain it with our theories; therefore practical considerations will inevitably play an important role in choice of such theories. This means that reductionism is not the *raison d'être* of the naturalistic project, nor should it imply that reductionism is not possible, in principle. Defining mental content thus becomes a practical consideration. Accordingly, behaviour can be interpreted using a level of abstraction appropriate to the researcher or clinician.

Essentialism

Essentialism on the medical model of psychiatry is the ontological assumption that psychiatric disorders, as defined by clinical nosology, map onto reality in a discrete way, carving "nature at its joints" as it were. Thus mental disorders possess essential properties, without which they would not be what they are. The authors claim that this assumption is "highly questionable, and that as *currently conceived*, [it] is anachronistic at best, and remains inconsistent with scientific thinking (at worst), and therefore is in need of re-examination and revision."

As we have seen in Classic Text 20, the idea of essences as real or even "hyper-real" goes back to Plato, and possibly even earlier. The idea of species as biological essences should have come to a natural end with Darwin's (1859) publication of *On the Origin of Species*. However, according to Lisa Feldman Barrett (2022), in discussing the expression of emotions,

> Scientists have proposed a variety of essences, some of which are easily seen, such as facial movements, and others, such as complex, intertwined patterns of heart rate, breathing and body temperature, that are observed only with specialized instruments. This belief in essences, called essentialism, is compellingly intuitive. It's also pernicious because it is virtually impossible to prove that an essence doesn't exist. People who believe in essences but fail to observe them despite repeated attempts often continue to believe in them anyway. Researchers, in particular, tend to justify their belief by suggesting that tools and methods are not yet sufficient to locate the essences they seek. (p. 34 - 35)

[7] The following is a simple test to establish whether a child has reached the developmental milestone of a theory of mind. In the presence of a collaborator, let's call her 'Jill', show the child a small fluffy toy. While Jill and the child watch, place it under a hat. Jill then leaves the room for two minutes. While she is away, remove the toy and show the child that you are now going to hide it under a cushion. Then ask the child where they think that Jill will look for the toy when she returns. If the child rightly guesses that Jill will look under the hat, even though the child knows that it is under the cushion, then the child evinces a theory of mind. Guessing correctly this way demonstrates that the child can attribute a counterfactual belief to another person - a level of abstraction that requires the intentional stance.

[8] With the advent of experimental philosophy this relation has become reciprocal. (See Critical Reasoning 27)

Feldman Barrett suggests that essences, for the expression of emotion at least, derive from Darwin's failure to apply what he proposed in his *Origin of Species* (1859) to his later book of *The Expression of the Emotions in Man and Animals* (1872). In *Origins* Darwin proposed

> that that a species is a vast population of varied individuals with no essence at its core. The ideal dog doesn't exist – it is a statistical summary of many diverse dogs. Variation is not error; it is a necessary ingredient for natural selection by the environment. When it came to emotions, however, Darwin fell prey to essentialism, ignoring his most important discovery. (p. 35)

What is true for species and the expression of emotions is also true, ontologically speaking, for psychopathology and its expression.

However, both scientists and laypersons organise knowledge into categories based on the methods they value. We may classify objects for a particular reason or function. Such classifications are neither arbitrary nor random assortments. According to Sadler (2005), "...this non-arbitrariness is essential to a classification because it provides the basis for users with common purposes to talk about the same things. For us to discuss 'major depression' productively, we have to agree, in large part, about what major depression is, and in what practical context such a notion arises".

The validity of a category is a function of the degree to which it corresponds with consonant body of explanatory theories. Groupings are also very much dependent on our motivations for doing so. Thus grouping lungfish with cows makes sense to biologists concerned with macro-evolutionary processes; however to fishermen or dairy farmers there would be no motivation for doing so because the validity of such a groping would be impractical.

Wittgenstein argued against the construct of essentialism in the following passage summarised by Hallett (1991):

> Suppose I show someone various multi-coloured pictures, and say: "The colour you see in all these is called "yellow ochre"... Then he can look *at*, point *to*, the common thing." [But] compare this case: I show him samples of different shades of blue and say: "The colour that is common to all these is what I call "blue". Now what can be looked at or pointed to save the varied hues of blue? And don't say, "There *must* be something common, or they would not, be called 'blue'," but *look and see* whether there is anything in common at all.

According to the authors, "[T]he crucial argument here is that the property of "blue" is reliant, to some extent, upon practical considerations and constraints."[9] However the colour blue, of an item, can be objectively defined as that colour of visible reflected light of wavelength 440 - 490 nm which may vary in saturation and lightness according to standard scales.

Notwithstanding, modern psychiatry continues to proceed along essentialist lines. This is illustrated by Robins & Guze's (1970) claim that, "...the finding of an increased prevalence of the same disorder among the close relatives of the original patients strongly indicates that one is dealing with a valid

[9] Some of these constraints are linguistic. English, for example, has a single word for blue, while Russian has two words: *goluboy* for light blue and *siniy* for dark blue. Such differences have been shown to influence thought domains far from language, such as visual perception. (Caldwell-Harris, 2019)

entity". On this analysis, genetic and presumably other biochemical factors are treated as primary causes. The task of neuropathologists then is to discover these pathological qualities within the brain. While lived experience does play an acknowledged role in psychopathology, the above model is preoccupied with brain function. Genetic and biochemical causes are regarded as exerting their influences in a bottom up direction with any, or all, symptoms arising from the instantiation of such type aetiologies.

The medical model of psychiatry regards the current nosology as representing discrete organic disease states rather than heterogeneous symptom clusters. These symptom clusters are typically validated by *post hoc* quantitative and statistical analyses of clinical data, including hierarchical cluster analysis and pattern recognition paradigms. These reveal which combinations of symptoms tend to group together and to what extent. Creating these types of discrete definitions for many contemporary psychiatric conditions is problematic in that, "...no amount of clustering can get around the fact that several variables used in such models may have little or no biological plausibility". (Aronowitz, 2001) Without biological mechanisms to account for these variables it is unclear whether such symptom clusters represent different ways of labelling the same pathology or whether they might be better accounted for by socio-cultural influences, or other biological confounds.

According to Peter Zachar and Nick Haslam, psychiatric categories do not uniformly delineate underlying essences, but are defined largely by practical considerations. (Haslam, 1998, 2002ab, 2007; Haslam *et al.*, 2000; Zachar, 2000ab, 2002) According to the authors, "In many ways, this recalls the Szaszian argument for mental illness as "myth" - here literally used to denote a practical, explanatory narrative". However, such narratives or heuristic devices cannot be regarded as truly "explanatory" unless they answer to some demonstrable biological phenomena.

Practical considerations are important in reaching consensus over definitions that set the threshold(s) at which a particular set of signs and symptoms may be deemed clinically significant. However, if essentialism is indispensable to the medical model of psychiatry then we need to establish what criteria are essential to any construct of normality or order *vs.* abnormality or disorder. These must encompass neurobiology, mental functioning, cognitive processes, the expression of emotion and behaviour, all within the relevant socio-cultural context. To this end, the authors posit non-linear adaptive properties within and between particular brain networks as an "essential" element of normality. Progressive linearity would signify an aberrant state that "could manifest effects from the cellular to the cognitive-behavioral (and even socio-cultural) levels". Mental disorders, so conceived, can thus be seen as the outcome of a spectrum of possible effects (**spectrum aetiological concept**). Furthermore, "genetic factors predispose endo- and exophenotypes that are differentially expressed though interaction(s) with internal and external environmental influences throughout the lifespan, thereby grounding neuropsychiatric syndromes [in] underlying biological factors". (Giordano & Wurzman, 2008; Wurzman, *et al.* 2008)

Cozolino & Siegel (2017) provide a similar account of such ideas derived from Chaos Theory of which non-linearity is only one element:

> **Chaos theory** suggests that complex systems adhere to a specific set of principles. Three of these principles, nonlinearity, self-organizational processes, and movement toward complexity, are especially relevant to psychiatry. Nonlinear refers to the finding that small

changes in input (or initial conditions) can lead to large and unpredictable changes in output. Complex systems function on the rules of probability, which predict that certain combinations of activity within the system are more likely than others, and that these combinations will tend to move the system toward self-organization. This probability also predicts that the system moves itself toward increasingly complex states of functioning.

Complexity theory may offer a foundation for proposing a useful working definition of mental health applicable to individuals, families, and larger social systems. In complex systems, self-organizational processes that move the system's states toward maximal complexity are mathematically shown to be the most flexible, adaptive, coherent, energized, and stable. The movement toward complexity lies between the extremes of sameness, with rigidity and order on the one side, and change, with randomness and chaos on the other. Complexity is achieved when the components of the system achieve a balance between the two fundamental processes of differentiation (specialization in function) and linkage (connected together as a functional whole). When a system integrates differentiated parts, it achieves a state of complexity and harmonious, adaptive functioning that is bordered on either side by chaos and rigidity.

Examination of psychiatric syndromes reveals examples of deviations from this integrated complex state in which an individual exhibits states and traits of chaos and/or rigidity. For a given individual, such a balance can be achieved when the genetically and experientially influenced growth of neural circuits combines the differentiation of specialized regions with linkage via neural fibers that connect widely distributed areas into a functional, integrated whole. According to this view from the interdisciplinary field of "interpersonal neurobiology", disorder can be seen as occurring when a system's integration is impaired and its flow toward complexity is impeded as revealed in its movement toward either rigidity or chaos. …

Psychiatric disturbances may be conceptualized as disturbances in self-organizational processes. Both inherited and experiential internal determinants, as well as ongoing external, environmental, and social influences that place constraints on the system, can directly affect the development and effective use of integrative self-regulatory mechanisms. Integration is the underlying mechanism of optimal self-regulation. And interpersonal integration likely supports the growth of integrative regions of the brain. Clinical interventions may thus function at the level of external constraints (psychotherapy with integrative communication within a relationship) or internal constraints (pharmacological treatments) that alter the ways in which the individual's mind is able to achieve integration and healthy forms of self-organization. Optimal self-organization is created with integration, the linkage of differentiated parts of a system. By seeing the mind as something beyond "brain activity" and "subjective experience" alone, a definition of one aspect of mind as "the embodied and relational, self-organizing emergent process that regulates the flow of energy and information" makes it possible to understand the interconnected nature of the broad range of disorders and interventions as related to the fundamental process of integration. Viewing psychiatric disturbances in this way also allows for a synthesis of the views of psychodynamic, biological, and social psychiatry. (p. 694)

Both the authors' and the above account acknowledge the causal determinants of psychiatric disorders at a physical level and embrace some form of token physicalism that allows for the emergence of more complex systems and the bio-psychosocial influence the environment. Furthermore, the spectrum aetiological concept is compatible with the criteria of realism, naturalism, reductionism and essentialism assumed by the medical model of psychiatry. Respectively, the spectrum aetiological concept involves:

1. neural substrates (realism),
2. a disturbance in the orderly functioning or equilibrium of the substrate(s) (naturalism),
3. a perturbation or disruption of fundamental or ancillary components of the bio-psychosocial organism (reductionism via token physicalism),
4. the manifestation of a distinct "*eidos*" that characterizes its atypical features, *i.e.* loss of non-linearity, adaptability, stasis or randomness, and the resultant effect on neural function, cognition, emotion and behaviour (essentialism).

Discussion

The authors recognize that Psychiatry has adopted a categorical approach in delineating mental disorders. When diagnostic criteria are concise and clear they facilitate the development of coordinated treatment regimens, provide standardized classifications of patient groups for statistical research across the globe, as well as a framework for documenting and retrieving information for use by public health care systems. However, the categorical approach undertaken in DSM-5-TR is not one of pigeonholing patients into mutually exclusive boxes. Rather a Dimensional Approach to Diagnosis is followed, capturing widespread shared symptoms and risk factors that are evident in comorbid conditions. There is also an explicit acknowledgment that, "… individuals sharing a diagnosis are likely to be heterogeneous even in regard to the defining features of the diagnosis and that boundary cases will be difficult to diagnose in any but a probabilistic fashion". (DSM-5-TR p. 15)

DSM-5-TR is also structured along the lines of Developmental and Lifespan Considerations, reflecting developmental processes that manifest at different stages throughout life. DSM-5-TR also takes cognoscence of cultural issues as well as social and familial norms and values under the rubrics of Cultural Syndromes, Cultural Idioms of Distress and Cultural Explanations or Perceived Causes for Mental Disorders. Information about Gender and Sex Differences as well as Reproductive Life Cycle Events are also included in the way they may influence the individual risk for a particular disorder and the effects on the experience of a disorder.

These developments postdate the authors' concerns about the categorical approach to the classification of mental disorders raised in the first paragraph of *their* conclusion. However, their philosophical concern with essentialism as part of the medical model of psychiatry is especially relevant. Essentialism assumes the existence of natural kinds, even though the existence of natural kinds do not imply essentialism. Last discussed in Classic Text 26, a natural kind is an intellectual grouping, or categorizing of things, in a manner that is reflective of the actual world, and not just human interests. (Wikipedia: Natural kind) Differently defined by Zachar (2002), a natural kind is "...an entity that is regular (nonrandom) and internally consistent from one instance to the next".

According to Harré (1986) however, the concept of a natural kind is a "fancy". We disagree. It is easy to adopt a realist position with regard to natural kinds such as elementary particles, chemical species and genes because these entities exist independently of human knowledge. Regarding discrete psychopathologies such as schizophrenia or bipolar disorder as natural kinds is problematic for some because these pathologies depend for their existence on humans with characteristically dysfunctional mental processes. This runs contrary to the idea of a natural kind as sharing "particular qualities, independently of human knowledge of the entities or their qualities," but this is a red herring. Just because human consciousness cannot be extricated from putative natural kinds that are characterised by discrete dysfunctional human mental processes does not prove that they do not or cannot exist.

Suppose we imagine a characteristically human psychopathology without a human subject. If, in the not to distant future, there are sufficiently advanced artificial intelligences, we might observe a few of them locked into analogously dysfunctional mental processes, in which case we could argue that they represent instantiations of analogous natural kinds of psychopathologies *in* silico rather than *in vivo*. Think of HAL, the unquestionably paranoid sentient computer in Arthur C. Clarke's *2001: A Space Odyssey*. The point is not whether there can be such machines, but that we can, imaginatively at least, decouple humanoid psychopathologies from human subjects and so regard them as objective natural kinds.

Harré may be right that "a 'natural kind' is a concept which can only be understood within the double framework of practice and theory"; however the *existence* of natural kinds is dependent on neither. According to the authors, "The validity of a category is determined by the extent to which it assimilates with a diverse, multidimensional system of fact(s) and explanation(s)"; but this is a *post hoc* epistemic generalization, not an ontological statement. Similarly, the practical task of distinguishing accidental from essential properties is an epistemic one, not an ontological one. If this task guides which properties will be deemed relevant to clinical action, so much the better.

The authors' discussion concerning non-linearity over a wide range of spatial and temporal scales and reciprocal bottom-up and top-down effects affected by the activity of the entire system as a whole, including psychosocial factors, is standard fare today. See Cozolino & Siegel (2017) above. Bottom-up effects alone can only account for a variety of physical epiphenomenalism. (See Classic Text 26) However, an analysis of top-down effects on the neural substrate would explain how conscious mental states such as beliefs, desires and insights could have a causally efficacious reciprocal effect; though to date we have seen little progress on that front[10].

Whether we will be able to identify essential properties that characterize non-linear dynamic or chaotic processes that instantiate mental states remains an open question. Similarly, identifying what differentiates such states or processes as psychopathological is a parallel question. According to the authors, "We believe that the aforementioned refined eidetic conceptualization shows some promise, and in this way might provide a "missing link" between the medical model and psychiatry". We are reminded that psychopathologies are *processes*, like other dysfunctions, that unfold along spatial and temporal dimensions. Furthermore, we are reminded by Ghaemi (2003) that aetiology is not a binary issue, but involves elements of degree. The authors propose that their spectrum

[10] Perhaps this means that physical epiphenomenalism is the correct analysis and that all conscious mental activity is the outcome of reciprocal bottom-up processes, such as thalamo-cortical oscillations.

aetiological concept allows for the categorization of mental disorders according to the extent and type(s) of relatedness conferred by:

1. common genetic risk and predisposing factors,
2. dysfunction of shared substrates and networks, and
3. benefit from types of treatments that have identifiable effects/actions.

Of course, any understanding of mental normality and pathology must necessarily also be embedded in Life and lived experience. Despite their popularity, Complexity and Chaos theory occupy one branch of mathematics, not in themselves a science unless grounded in well-established facts, and an appreciation of the limits of such knowledge. According to Karl Jaspers (1957), "every concrete event - whether of a physical or psychic nature - is open to causal explanation in principle, and psychic processes too may be subjected to such explanation. There is no limit to the discovery of causes and with every psychic event we always look for cause and effect". (p. 305) Jaspers (1997) however adds that "…reality is seen through the spectacles of one theory or another. We have therefore to make a continual effort to discount theoretical prejudices... and to train ourselves to pure appreciation of facts... every advance in factual knowledge means an advance in method..." (p. 16-17)

The authors conclude with some speculative remarks about events that have already come to pass:

- the publishing of DSM-5-TR, incorporating many of the anticipated changes,
- the publishing of a Chapter on *Normality and Mental Health* by Vaillant (2017) reviewing seven models of mental health in Kaplan and Sadock's Comprehensive Textbook of Psychiatry, 10th ed., and
- the advent of a New Decade of the Mind Project underway internationally.

Finally, what the authors could not have anticipated was the development of an alternative classification system by the National Institute of Mental Health (NIMH): The Research Domain Criteria (RDoC). According to Tsou (2021, p. 51 - 52) "the RDoC is a classification system formulated exclusively for research purposes and informed by biological and behavioral science... The RDoC distinguishes its objects of classification ("constructs") in terms of different "domains" and "units of analysis," which is encapsulated in the RDoC matrix". See over page.

RDoC Matrix								
	Units of Analysis							
Domains	Genes	Molecules	Cells	Circuits	Physiology	Behavior	Self-Report	Paradigms
Negative Valence Systems								
Positive Valence Systems								
Cognitive Systems								
Systems for Social Processes								
Arousal/ Regulatory Systems								

The RDoC Matrix

Conclusion

We believe that some of the points raised by the ant-psychiatry movement are salient. Undoubtably, people with psychiatric disorders do experience "problems in living", but that does not mean that such disorders are a "myth". We are also inclined to agree that psychotic behaviour, including psychotic speech, is not meaningless but can be seen as an attempt to communicate. Anyone who has experienced psychosis will conform, once they are no longer psychotic, that the experience was internally consistent, but failed to gain purchase with the majority of people's social construct of reality. Furthermore, what may be described in modern Western culture as psychotic may, in fact be highly valued in other cultures. Think of the trance states of shamans who are believed to cross over to the sprit world to bring back healing, divination, or to aid humanity in some other way. (Singh, 2018)

The fact of abuse, neglect, violence, sexual assault, exploitation, or degrading treatment within psychiatric institutions is a reality. Unfortunately, psychiatric patients are among the most vulnerable and defenceless. Think of the Life Esidimeni tragedy that involved over 1 500 state patients, 144 of whom died, some from thirst, while others simply disappeared and have never been found. (Wikipedia: Life Esidimeni scandal) Psychiatrists and psychiatric nurses are almost never, never, responsible for direct harm; but the fact remains that abuses do occur on their watch.

Nevertheless, we believe that mental health professionals *do* provide an essential service in improving the quality of the lives of the patients in their care and indeed in saving lives. There has never been a time in history where psychiatric patients are more likely to get better and remain well for longer, even though there are no "magic" bullets.

We also believe that the controversy surrounding the classification of mental disorders on the atheoretic stance will not be settled until mental disorders are validated by treating them as natural kinds understood from a biological perspective; event though this need not impact on mental health care delivery, at least for the foreseeable future.

The truth about most clinical psychiatrists, as opposed to those who are employed in administrative positions or who are purely theoreticians, is that they are not much concerned with classification. Their primary task is to determine the right diagnosis and suggest a range of efficacious treatments to suite the patient. Sometimes their task is complicated by the existence of other organic features, in which case they do not hesitate to call for blood work, scans such as MRIs or EEGs, or the opinion of other specialists, such as clinical psychologists, social workers, neurologists, endocrinologists *etc*. The decision to code a diagnosis, in South Africa at least, is primarily motivated by the availability of treatment options, whether through state or private institutions, but also by what will be paid for or reimbursed by the Medical Aid or Insurer, if applicable. Thus, a young woman who is diagnosed with classic Borderline Personality Disorder and who is on a Medical Aid scheme will be coded as Bipolar because of the superficial similarity of the symptoms, and by the fact that the latter is a prescribed minimum benefit (PMB) while the former is not. The practice of psychiatry is very much one of pragmatics.

Task

Essay question: Is psychiatry is a science and what does this imply for psychiatric research and treatment? This is an important question because there are people and organisations on the one side (such as certain churches) that regard psychiatry as a sham and other organisations (such as the World Health Organisation) that regard psychiatry as an evidence based life-saving specialist practice. If you believe that psychiatry is a science, then what kind of science is it? If you believe psychiatry is not a science, then what kind of subject is it?

Feedback

Your answer to this question will be determined by:

- what you regard as qualifying as a science in the first place,
- whether the ontological assumptions of psychiatry are compatible with those of the sciences in general,
- whether and how psychiatrists and academic departments of psychiatry undertake research, and
- what you believe should inform best practice.

You will need to do some further research on the topic as this question cannot be decided on philosophical grounds alone. As always, any claims you make must be substantiated. There is no limit on the length of an essay during a typical philosophy exam, but there is a time limit. Each exam consists of three essays chosen by the student from a shortlist provided, for which there are three hours available in total.

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