Professor Gordon Parker is a Professor of Psychiatry at the University of NSW and Executive Director of the Black Dog Institute of Sydney. For nearly two decades he was Head of the School of Psychiatry at the University of NSW and was Director of the Division of Psychiatry at Prince of Wales and Prince Henry Hospitals. He has had a number of responsibilities to the College of Psychiatrists, including being the Editor of their Journal and Chair of their Quality Assurance Committee. He has been an active researcher and has held a number of positions with legal organisations, including the NSW Guardianship Board and the NSW Administrative Appeals Tribunal. In 2004 he received a Citation Laureate as the Australian scientist most highly cited in the field of psychiatry and psychology.

Tonight we are going to critique DSM-5. DSM stands for Diagnostic and Statistical Manual, and the '5' indicates that it is the fifth edition of the official promulgation from the American Psychiatric Association.

I would like to start with a few generalities, the first being why do we diagnose? In essence in medicine I would suggest it is a shorthand means of communication, generally from one clinician to another, or maybe from a clinician to a patient. It may be for hospital statistical purposes and certainly it should advance research endeavours by defining populations precisely. For lawyers, again I would suggest it is a means of communication and opportunity to define the operative domain and to reference the salient literature. Any assumption however, that DSM psychiatric diagnoses carry distinct validity or deserve gravitas will be challenged.

There is more to say about the importance of diagnosis. The economist Daniel Kahneman in a wonderful book called *Thinking Fast Thinking Slow* said:

> "To be a good diagnostician, a physician needs to acquire a large set of labels for diseases, each of which binds an idea of the illness and its symptoms, possible antecedents and causes, possible developments and consequences, and possible interventions to cure or mitigate the illness."

Medical journalist Kathryn Montgomery has also argued for the importance of physicians providing patients with a diagnosis:

> "Just having a diagnosis means the rest of your life can start. …
> To know the cause of disease is to have control. …
> Patients want to know what is wrong, if it's serious, how long it will last and whether it will alter their life plans."

Medical historian Ned Shorter noted that diagnoses can give the key to therapy and prognosis - matters of vital importance to practitioners and patients.

Such arguments are enhanced by most medical illnesses having distinct pathologies, able to be identified by laboratory tests and many conditions then logically correctable. Psychiatry, of course, is different. But I will argue that a diagnosis is still essential to psychiatric practice. Regrettably, many psychiatrists reject making a diagnosis, often for concerns about utility or narrowness in comparison to a formulation which is essentially trying to say why is this person suffering this particular condition at this point of time? A formulation tends to be prioritised by many psychiatrists above and beyond a diagnosis. I do not believe they are mutually contradictory but they should complement each other. Further many psychiatrists focus far more on the patient's narrative or life story rather than on the diagnosis. Again, I do not see this as a mutually exclusive type scenario. Each of the components is important in and of themself and in their interdependencies. Some psychiatrists are in favour of some diagnoses (say schizophrenia or manic depression) that they view as central or comprising a small pristine set. They are dispirited by psychiatrists' and psychiatry's longstanding difficulties in firstly resolving the

boundaries between clinical and non-clinical conditions and secondly, the uncertain validity of many currently defined psychiatric conditions. Others reject making diagnoses at all and if invited offer quite nihilistic arguments. They say there is no laboratory test, or there is no condition that meets necessary and sufficient criteria or there is no clear cut link between clinical picture and pathology.

I view such caveats as excessive as such concerns are not unique to psychiatry. There are many medical conditions (such as Parkinson's Disease) where there is no laboratory test but that does not mean that neurologists reject making a diagnosis. Again, there are other conditions that are dimensional in medicine like hypertension. Physicians do not view the difficulties in attempting to define hypertension as negating the need to diagnose its presence. So I would argue that making a diagnosis in psychiatry is just as important as in medicine in logically shaping the management paradigm. The diagnosis should at some level inform about whether the underlying cause is principally biological, psychological or social. To not weight a diagnosis or a diagnostic model strikes me as wishy washy at best and one inviting challenges about clinical competence. I often say to patients, how long have you been seeing your health practitioner? They might say five or 10 years. I may then ask what is the game plan? Many say that their practitioner has not got around to that yet. This drift phenomenon of not making a diagnosis can frequently lead to therapy also drifting without logic or improvement.

As noted I suggest that psychiatry and medicine are not alone in lacking pristine definitional boundaries for some conditions. For instance, anthropologists operate to 'fuzzy sets' and they use the term 'thick description'. So they accept that they are dealing with sometimes ineffable constructs but they do not see them as necessarily indefinable and do seek to provide some definition. I would argue for a similar model weighted to the concept of prototypes as of key relevance to psychiatry. What do I mean by prototype? It is a condition's broad pattern and those broad characteristics that distinguish it from other disorders. It is in the same way that you might say how do a car and a lorry differ? Obviously there are some similarities. They may or may not both have four wheels but there may be other differences that allow one to say that is more like a lorry and that is more like a car. Prototype description, to my mind, is probably the best diagnostic model in psychiatry and it weighted the diagnostic paradigm until the 1980s.

The risk of course to any prototypic diagnostic model is it can be idiosyncratic and certainly psychiatry has had some very strange diagnoses over time. Masturbatory madness was a favoured one for a while and so the risk of idiosyncratic diagnoses has to be conceded. But we should respect, I think, something said by the neuroscientist Kurzweil:

> "Human beings have only a weak ability to process logic, but a very deep core capability of recognising patterns."

The next point to make is that psychiatry, in comparison to medicine, operates across multiple fields and domains and not just diseases. That allows me to really emphasise an issue that has been overridden by the DSM system: that there should be no search for any single explanatory categorical or dimensional model. If we are dealing across multiple differing constructs, then we actually need multiple models. There are many that have been argued for and two attract me. One was put by David Taylor, who wrote about the importance of distinguishing between diseases and illnesses and predicaments. The other is a more recent causal model proposed by the Boston psychiatrist Paul McHugh. He argued there are four comprehensible clusters in psychiatry. Firstly, brain diseases and by that he really argued for diseases or disorders such as schizophrenia and bipolar disorder. Secondly a cluster comprising "patients vulnerable to mental unrest because of their psychological makeup." Basically he is arguing here for a whole set of psychologically based motivations. Thirdly, patients who have behaviours which become a fixed and warped way of their lives, such as alcoholism or anorexia nervosa; and

fourthly a cluster constituted by patients with "distressing mental conditions provoked by events thwarting or endangering their hopes, commitments, and aspirations". For the last McHugh provided examples of grief and situational anxiety - so dealing with life stresses. These models capture the broad terrain and domains and constructs of psychiatry and differentiate it from medicine. Therefore I make the point that we require multiple diagnostic classification models and not just a simple categorical or single dimensional one.

As I indicated, prior to 1980 diagnostic symptoms essentially sought to capture diseases, neuroses, adjustment disorders and personality disorders by prototypic description and commonly by dimensional models, depending which one was the more salient for the underlying condition and the salience to it. They also included comments and statements about aetiology or cause.

Then in 1980 came the DSM-III revolution. It is important to explain why it was a revolution. At that time the barons of American psychiatry were highly concerned that psychiatrists were seen as figures of derision and fun, because American psychiatry was dominated by analysts with many viewed as buffoons. The rest of medicine saw psychiatry as abounding with foolishness. The barons judged they needed a new model. They favoured a diagnostic revisionist model that respected science. Which component did they go for? They went for reliability and avoided any reference to cause as they sought to avoid problems with the analysts. Basically the American Psychiatric Association was dominated by the analysts, so DSM-III would not have got through without their support – and the analysts had quaint ideas about causality. So cause and aetiology went out and basically DSM-III assembled lists of conditions which were defined by a number of criteria. If you had X or more of the particular symptom sets, then you had the particular condition. Immediately by having those sorts of dimensional models they created a problem in distinguishing between true clinical states and normative states.

The claims of DSM-III were really quite amazing. It was said to be a revolution in bringing science back into psychiatry. All it brought back in was a potential reliability weighting. But the great paradox is when they did the DSM-III field trials they found that the reliability for these pristine criteria-based diagnoses was actually less than for its predecessor DSM-II that used prototypic description. In fact, the field trial data were not published for 30 years because they were such an embarrassment. DSM-III was claimed a success but it was successful only on the basis of its excessive claims. Its underlying science was limited. Its only scientific component was reliability and that was intrinsically flawed.

Let me focus a little on depression because here is an exemplar where some of the logic in DSM-III went wrong. Since biblical times, as in St Paul's Corinthians, you can read about depressions that “came from God” because they were inexplicable – and we call that melancholic depression these days. Such a type was in contrast with other depressions that were “of the world” because they were more due to adjustment to situational stress. This distinction – which allowed melancholia (a biological condition with certain symptoms and which responds preferentially to physical treatments) was then crunched in the DSM model by dimensionalising the depressive disorders into major and minor - a single dimensional model morphing melancholic and non-melancholic depressive conditions. Major depression became the new game in town. As soon as you have a dimensional model and you take the boundary down, you also have an immediate problem as to where you establish a cut-off between what is normative and what is pathologic.

Prior to DSM-III the lifetime risk of a depressive condition was thought to be about five per cent but when major depression and the minor depressions came in, we were up to about 40 per cent. Then they moved the boundary lower to include sub-clinical and sub-syndromal depression and now depression is actually a ubiquitous lifetime experience. That alone should be a cause of concern. When we talk about whether the incidence of

depression has increased, the biggest contribution is the change in definition. The other problem was that while many of the criteria for major depressions were quite pathological, the descriptors were quite concatenated and could range down to capture the trivial. Something like guilt could range from delusional guilt that you had committed a terrible sin and you should therefore kill yourself, through to feeling mild guilt because you had not done the washing up because you were depressed. But DSM-III said that every criterion had to be judged at "the lowest order of inference", again risking overdiagnosis of 'major depression' Now I know that when somebody says the patient has major depression, many judges and others in the legal profession view such a diagnosis with gravitas. But in fact, I would suggest it is no more than a psychological sneeze at times through to a very, very profound state. In fact if you felt somewhat sad and depressed, or if you have some change in your sleep, or change in appetite and you are feeling fatigued, you will 'get up' as having major depression for something pretty trivial. Minor depression needed fewer symptoms but basically again DSM-III was a political document. The optics for DSM-III were that 'major depression' was melancholia-like and needed medication, while the minor depressions might benefit from psychoanalysis, making both the biological and the analytical psychiatrists happy. This political strategy was known as the Neurotic Peace Treaty in trying to get the system through. In essence, a political agenda was more evident than a science-weighted approach.

The big problem with the term major depression in my view was it sounds like an entity but, in reality, it is simply a domain diagnosis. For example imagine your doctor tells you that you have 'major breathlessness'. You would not find that particularly informative. You would want to know whether in fact you had asthma or pneumonia or a pulmonary embolus because you would expect the treatment to then be rational. That is respectively you might be given an anti-asthma drug or an antibiotic or an anticoagulant. Hence a diagnosis of major depression sounds profound but has no meaning to it at all.

All the studies looking into the efficacy of antidepressants are tested against major depression and
what do we find? In essence all treatments available for major depression are equally effective. The meta-analyses which involve hundreds and thousands of subjects show that tricyclics are as effective as SSRIs, as dual action drugs, as St John's Wort, as cognitive behaviour therapy, as psychotherapy and as is bibliotherapy (that is reading books about depression). Nothing separates any one treatment from anything else in relation to treating 'major depression' as it is simply a domain diagnosis that homogenises multiple constituent sub-set disorders. Even more worrying, the studies of major depression show that in trials the effectiveness rate of an antidepressant is about 55 per cent and of a placebo is about 50 per cent. This causes many people to conclude this just proves that antidepressants are ineffective or act as placebos. To put the last in context consider the "diagnosis" of major breathlessness. If you were doing a study with a super-dooper new anti-asthma drug and you gave it to 100 asthmatics compared to a placebo, you would expect a differential result. If you gave the same drug to a hundred people with major breathlessness, of whom only a small percentage had asthma, it would be unlikely to perform any better than the placebo. The problem with major depression is it contains incredible heterogeneity. Accordingly within major depression there are people with psychotic or melancholic depression that need physical treatments, people there that have personality problems that would benefit from psychotherapy and so on and so forth.

However it is the diagnosis alone that dictates treatment. This is one of the great tragedies of medical care. The treatment that you get in Sydney for your major depression will be more shaped by the background training or discipline of a practitioner than by anything to do with the characteristics of the condition. If you go to a general practitioner you are likely to be given an antidepressant drug; if you go with the same diagnosis, major depression, to a psychologist, you will receive cognitive behavioural therapy; if you go to a counsellor you will receive counselling; and if you go to a lady wearing a kaftan you will get crystal ball therapy. This is a procrustean model where the patient is fitted to

the background training or discipline of the practitioner and not to the nuance of the condition. I know of no other area of medicine that operates to such a model of foolishness. Further, and pursuing the exemplar of major depression as simply a heterogeneous category, when we examine studies into 'its' causes, sometimes hypoperfusion of the pre frontal cortex is described, sometimes it is hyperperfusion, sometimes on the right and sometimes on the left. Of course, such variable findings depend on which particular sub-set of major depression patients is examined. So 'major depression' has not advanced our understanding of aetiology and it has not advanced our understanding of treatment because it reflects "a one size fits all" model. I would argue that the management of the depressive disorders has gone backward as a consequence since DSM-III in 1980.

Let me now discuss DSM-5 in regard to mood disorders. I am going to stay microscopic for the moment. Melancholia again has not been given any specific status in DSM-5 and the reason is, as some of you might have heard in an interview on Radio National a couple of weeks ago, basically melancholia really stands out. It has the same clinical picture all around the world. We know that it is very biological. We know a lot about its cause and we know a lot about its treatment. But if DSM-5 put in a condition which had as much precision as that, the risk was they would have to argue the same for the rest of their conditions and, as such strong evidence does not exist for them, they could not mount the argument. Hence they marginalised melancholia to avoid such risks – again a political decision.

The next criticism I would offer is that DSM-5 spends a lot of time talking about sub-types and specifiers. Here is the definition of a sub-type:

> "Mutually exclusive and jointly exhaustive phenomenological subgroup within a diagnosis."

I hope you follow it, because I do not. Meanwhile a specifier weights parameters such as course and severity.

But as you read the mood disorder section many of them are just completely around the wrong way. Logic is lacking. If you count the number of depressive disorders in DSM-5 where you have major versus minor, etc, and all further defined by specifiers such as recurrence, persistence, impairment level etc, there are over 250 depressive conditions which again I would suggest is a nonsense. If we look at bipolar I and bipolar II, bipolar I is a psychotic state where people are manic and often need to be hospitalised. Bipolar II is a condition where people are never psychotic and it is a very different clinical condition. Yet the criteria in DSM-5 for mania and for hypomania are exactly the same - not one word differs. The cut off for mania and hypomania are also exactly the same in a manual supposedly designed to differentiate conditions from each other.

They have added a new specifier for mood disorders of 'anxious distress'. This is redundant because all DSM-5 conditions are supposed to be associated with "clinically significant distress". They have introduced a new disorder called 'disruptive mood dysregulation disorder' as there were concerns about bipolar disorder being over-diagnosed in children. If that is a concern, then you address it. You establish whether it is a true phenomenon or whether it is a diagnostic error. But what happened was the creation of this new condition in the mood disorder section to capture this group but with criteria that fail to capture any mood symptoms at all. It is all about irritability and temper outbursts but the sotto voce language when you make this diagnosis, (and this is going to be every child that drinks Coca Cola to excess in the United States) is an inference of bipolar disorder a Clayton's diagnosis.

A major professional community concern during the development of DSM-5 was over the issue of grief. There was a strong push to have it included as a depressive condition. The

concerns shared by many professionals, and certainly the public, was the making pathologic of a normative process and thereby leading to the risk of antidepressants being inappropriately prescribed. How it has been handled was by sleight of hand. Grief has been put into the depressive section where it is included along with other loss-induced depressions such as rape or financial disaster. However it has not resolved how you handle the reality that there are very few depressive disorders that are not preceded by some sort of loss or stressor. In doing this a Pandora's Box has been opened up.

That is the microscopic aspect of mood disorders that gives some evidence of the lack of logic. I would suggest to you if it was a primary school examination, and I have not even brought in the editorial anomalies, you would probably agree it would fail.

But now let us look at DSM-5 more macroscopically. Allen Frances, the Chairman of the DSM-5 predecessor DSM-IV said it was the saddest moment of his 45-year career when DSM-5 was launched. In his view the American Psychiatric Association had issued a sharply and deeply flawed document that contained changes that seem unsafe and scientifically unsound. He warned practitioners and the public to:

> "… not follow DSM-5 blindly down a road leading to massive over-diagnosis and harmful over-medication."

Frances nominated 10 key problems. One was the disruptive mood dysregulation disorder (the temper tantrum one has noted above) but considered some more. Anyone who is slightly old and forgets things occasionally will now have a neuro-cognitive disorder. There is a fad for adult ADHD. Gluttony has become a formalised eating disorder. First time substance abusers are now lumped in with hard core addicts. There is very little differentiation of anxiety and depression. There are numerous behavioural addictions including some that I have never heard about and the changed criteria to post traumatic stress disorder will increase the prevalence of that condition inappropriately.

DSM-5 is 947 pages long and with smaller font than its predecessor, so it is in fact three times larger than DSM-III and the increase is underpinned by quaint conditions. Some exemplars are: stuttering, vocal tics and even provisional tic disorder, enuresis, encopresis, sleep apnoea, shift work sleep disorder, nightmare disorder, restless legs disorder, female sexual interest disorder, male hypoactive sexual desire disorder, several caffeine-related, tobacco-related as well as inhalant-related disorders, numerous paraphilias and the list is so rococo that it is worth reading as it continues with voyeuristic, exhibitionistic and frotteuristic disorders. Other conditions, and I emphasise DSM-5 uses the word ‘conditions’ here, include sibling relationship problems, upbringing away from parents, relationship distress with spouse, academic problems, homelessness and inadequate housing, discord with neighbour or landlord, lack of safe drinking water, phase of life problems, religious or spiritual problems, problems relating to lifestyle and finally in this list the wonderfully precise disorder of "unspecified problems related to unspecified psychosocial circumstances."

In essence DSM-5 retains the DSM-III procrustean model and then defines numerous conditions simply by sets of criteria ignoring prototypic description and any reference to cause. Further it has expanded the boundaries of its putative territory and taken over new territories in a burst of psychiatric imperialism and expansionism. The process has initiated huge criticism from within the profession and outside. There were more than 50 petitions by mental health professional associations. Of key importance, a major organisation in America, the United States National Institute of Mental Health, said two weeks before DSM-5 was launched that it was a document that was inappropriate for clinical and research purposes. It put a sword into the DSM-5 beast.

The question to be answered is how did DSM-5 get to this stage? Firstly, experts have a tendency to expand their field and that is human nature. I do not subscribe to the view this

expansionism was underpinned by the pharmaceutical industry. However it is certain the industry will embrace the developments. Secondly, it is essentially a United States political document. If the person's state fits a DSM diagnosis, they may be covered for hospitalisation, medical benefits, and their children's schooling. However science should never be driven by a dominant political agenda. Thirdly, there is American resistance to any criticism. Fourthly, there is a process of pseudo-democracy. For example, I was the only Australian on the mood disorders Task Force for a period of eight years. Over those eight years I never received anything to comment on. Accordingly it was basically an insider process with a lot of intellectual incest.

I will conclude with two quotes. Firstly Thomas Huxley who said:

> "Science is simply common sense at best; that is, rigidly accurate in observation and merciless to fallacy in logic."

DSM-5 fails there. Secondly De Montaigne who said:

> "No one is exempt from talking nonsense; the misfortune is to do it solemnly."

DSM-III was seen as the Bible, viewed far too reverentially and solemnly. DSM-5 has tried to preserve its biblical status but has elicited so many critics over the last five years that few will, or should, take it seriously. In these circumstances should the legal profession continue to rely on DSM-5? As the alternate ICD system really is no better and some reference system is required, of necessity there will be some reliance on it but it is a house of cards. It is smoke and mirrors that must not be taken too seriously because it has too many Gilbert and Sullivan overtones.