

What is the DSM? Diagnostic manual, cultural icon, political battleground: an overview with suggestions for a critical research agenda.

Dr. Monica Greco

Department of Sociology
Goldsmiths, University of London
New Cross, London SE14 6NW

m.greco@gold.ac.uk

Dr. Monica Greco is a Reader in the Department of Sociology at Goldsmiths, University of London and a Fellow of the Humboldt Foundation. She is the author of *Illness As a Work of Thought: A Foucauldian Perspective on Psychosomatics* (Routledge, 1998) and of articles on psychosomatics, vitalism, medical humanities, and the sociology of unexplained symptoms.

What is the DSM? Diagnostic manual, cultural icon, political battleground: an overview with suggestions for a critical research agenda.

It may seem superfluous to begin an introduction to ‘the DSM’ by unpacking the acronym, as if the *Diagnostic and Statistical Manual of Mental Disorders* of the American Psychiatric Association did, indeed, need such introduction. As others have noted, well before its publication in May 2013 the fifth edition of the manual had already attracted enough analysis and commentary ‘to fill several journals several times over’ (Davies, 2013). It had also received unprecedented attention within mainstream media as well as a variety of patient- and consumer-led online platforms, leading commentators to describe the manual today as having the status of a ‘cultural icon’ (Frances, 2013, p. xii; Sadler, 2013, p. 21). A reference to ‘the DSM’ will be readily understood by readers and does not require spelling out – or does it?

One reason to dwell on what ‘DSM’ stands for is precisely to note an incongruity between the fact of it being a diagnostic and statistical manual and its status as a cultural icon. That a medical classification system, a taxonomy, should feature at the centre of the discursive storm that has gathered around it in recent years is most unusual to say the least – a point noted by Davies among others. Although taxonomies are ubiquitous as part of the ‘information infrastructure’ that facilitates and orders social life, they are rarely conspicuous and almost never become an object of public debate.¹ This is not accidental. As Bowker and Star have remarked, good infrastructures tend to become taken for granted, naturalised, and thus invisible: ‘the easier they are to use, the harder they are to see’ (1999, p. 33). And, although the creation and maintenance of all classification systems involves considerable work, including the negotiation of conflict and compromise among multiple constituencies, such work itself tends to become invisible as the categories come to function as if they were simply given in nature. The cultural and political conspicuousness of the DSM – and of the conflicts surrounding it – is therefore part of what makes the manual remarkable if not unique among objects of its kind: indeed it is part of what needs to be addressed in any attempt to understand what the DSM ‘is’.

Today the DSM is routinely described as the ‘Bible’ of American psychiatry, and as a text with global influence across the world. The biblical analogy is usually intended to convey the authoritativeness of the manual as a point of reference and orientation, but for the purposes of this introduction the analogy is perhaps more accurate in a different sense. Like the Bible, the DSM is not a single text: it exists in several versions (or editions), and some differences between these are conspicuous even to the untrained eye. DSM-I (1952) and DSM-II (1968) were flimsy ring-bound volumes of 130 and 134 pages respectively, while DSM-III (1980) was already a thick tome at 494 pages, and DSM-5 is nearly double that size at 947. The words ‘paradigmatic’ and ‘paradigm shift’ are also often used in connection with the DSM. As a term whose connotations often sit ambiguously between the philosophical and the colloquial, this reference is worth examining in a little more detail.

In a piece written for the *Canadian Journal of Psychiatry* in 2010 Professor Michael First, one of the architects of DSM-5 and editor of DSM-IV-TR, claims that revisions

of the DSM have ‘alternated between paradigm shifts ... and incremental improvements’ (2010, p. 693). He identifies two distinct paradigm shifts associated with the DSM: one based on psychodynamic theories, coinciding with the first edition in 1952, and a different, symptom-based model coinciding with the third edition in 1980. First then goes on to discuss the aspiration that the fifth edition of the manual would effect a further paradigm shift, towards a pathophysiologically-based classification system that would index mental disorders to specific genetic and/or neurological syndromes. This ambition for DSM-5 to produce a new paradigm shift has repeatedly been acknowledged in the course of the revision process leading up to the new edition (e.g. Kupfer, First & Regier, 2002; Regier, Narrow, Kuhl & Kupfer, 2009), and as such is a matter of historical record. Eventually, however, it was revised to more modest goals and then altogether abandoned (Whooley & Horwitz, 2013). In the history of the DSM, DSM-5 must therefore be counted alongside DSM-III-R, DSM-IV and DSM-IV-TR among the editions that effected incremental changes based on the model laid out by DSM-III, rather than a diagnostic revolution. The two main general changes introduced with this latest edition are the removal of the multi-axial system of diagnosis designed to capture pathological factors along five different axes, in a move intended to facilitate compatibility with the International Classification of Diseases (ICD); and the rearrangement of disorders into a different chapter order. Aside from these, changes have been introduced in the criteria and nomenclature for several disorders or classes of disorders, and the trend towards an increase in the number of diagnostic categories has continued – prompting renewed critiques of ‘psychiatric expansion’, to which I shall return below.

If it is appropriate to describe DSM-5 in terms of a (failed) ambition towards paradigm shift, describing the first edition of the DSM as setting anything like a paradigm for psychiatry in 1952 is, however, presentist history: history written very much from the vantage point of today’s assumptions about the status and influence of the DSM. For contrast we may look at a piece written in 1959 for the Bulletin of the World Health Organisation, by the Vienna-born British psychiatrist Erwin Stengel. In this piece Stengel presented the results of a survey of psychiatric classification systems that were in use at the time in different parts of the world. The survey had been commissioned by WHO in response to ‘dissatisfaction about the chaotic state of psychiatric classification’ – dissatisfaction, Stengel later wrote, that had ‘become quite general recently and ha[d] been voiced by all schools of thought’ (Stengel, 1960, p. 123). The survey, which was not comprehensive, identified and described 58 incommensurable classification systems, which Stengel divided into two broad categories: the ‘official, semi-official or national classifications’ and those used ‘only regionally or locally’ (Stengel, 1959). The systems were radically heterogeneous in terms of their organising assumptions, as Stengel’s description and analysis underlined: some classified psychopathology phenomenologically, others according to aetiology, or prognosis, or yet other criteria. What Stengel’s piece highlighted, and what the WHO sought to start to remedy by commissioning a survey, was precisely the *absence* of a paradigm for psychiatric classification and for psychiatric thought. This was in 1959 – that is, 7 years after the first edition of the DSM had appeared in print. Not only did the DSM at this point not constitute a paradigmatic text in any sense of the term ‘paradigm’. As the survey found, and again in Stengel’s words, the manual had ‘so far failed to be adopted by the State of New York which, from the point of view of psychiatric statistics, is the most important state of the Union’ (1960, p. 123).

Why linger on the non-paradigmatic status of the first edition of the DSM? Why is it important to remember that ‘the DSM’ has not always been a text with the authority, the iconic status, and the paradigmatic pretensions that it has today? The concept of paradigm evokes the existence of a research consensus and the image of a ‘normal science’ (Kuhn, 1962), neither of which straightforwardly apply to psychiatry today, any more than they did in 1952 (Decker, 2013; Laugharne & Laugharne, 2002). But my purpose here is not to problematise the use of this concept in relation to psychiatry; while epistemologically questionable, such use is not uncommon. If I have lingered on the non-paradigmatic status of DSM-I, it is in order to bring into sharper focus the specific character of the discontinuity between the first two editions of the manual and those that followed. This discontinuity does not lie simply in the fact that DSM-I and DSM-III reflect different models or ways of thinking about mental illness, which they undoubtedly do. More importantly, the discontinuity lies in the different performativity of these ways of thinking: the kinds of effects they make possible into the world; and the very different ecology of practices in which they partake and which they help to construct. Unlike the first two editions of the manual, DSM-III (1980) and successive editions did indeed come to function in a paradigmatic way, primarily but not only in the United States – they did become a ‘Bible’, an obligatory point of reference for a variety of constituencies, the centre of gravity of a network of relations, and as a consequence also a ‘perennial best seller’ (Frances, 2013, p. xii). It was a certain way of constructing mental illness, and what this construction made possible, that allowed for the spectacular success of DSM-III and the editions that followed.

There are now a number of conceptually sophisticated historical and sociological analyses of the making of DSM-III and of the features that account for its pervasive organisational influence in the US as well as its global scientific and cultural prominence (see e.g. Decker, 2013; Sadler, 2013; Mayes & Horwitz, 2005; Horwitz, 2002; Kirk & Hutchins, 1992). In what follows I will not attempt to summarise the detail of these narratives and arguments nor analyse their specific differences, but will rather develop a broad discussion informed by them. The discussion will build up to three keywords that I offer in the last section of the article, each with the aim of helping the reader recall a noteworthy aspect of the manual. The first keyword - polyvalence - captures the reasons for the DSM’s success and continuing prominence since the publication of its third edition in 1980, including reasons for the global reach of its influence even in regions where it is not adopted as a clinical diagnostic tool. The second keyword - ambivalence - is intended to convey that, while acknowledging the importance of the DSM, we should neither overestimate it nor take it at face value. The last keyword - participation - points to some features that mark the distinctiveness of the DSM-5 revision process and its reception with respect to its predecessors, and to the relevance and urgency of a social-scientific research agenda on participatory processes in the construction of psychiatric diagnosis.

DSM-III and beyond: a triumph of science over ideology?

There is a mainstream narrative, one that has been part of the rhetorical strategies employed to market and promote DSM-III from the very beginning, according to which that edition of the manual represents the triumph of ‘science over ideology’ (Sabshin, 1990, p. 1272, cited in Mayes & Horwitz, 2005, p. 250; Kirk & Hutchins,

1992). The first two editions of the DSM had been based on a psychodynamic approach, reflecting both the general dominance of psychoanalysis within US psychiatry at the time, and the views of leading representatives of the profession – particularly Adolf Meyer and Karl Menninger. We have noted previously that DSM-I and DSM-II were flimsy ring-bound volumes, described by Decker (2013, p. 321) as ‘somewhere between thick pamphlets and dwarf-sized books’. Their comparative size relative to later editions reflects the comparatively small importance placed on diagnosis within a psychodynamic orientation to psychopathology. Indeed, *The Vital Balance* (1963) – an influential book that Menninger, a man whose name had ‘come to symbolize the psychiatric profession in its most vital, enlightened sense’ (Shabsin, 1964, p. 475), considered to be his most important – included an entire chapter against ‘the urge to classify’. Drawing a very explicit contrast between ‘dynamic’ psychiatry and ‘diagnostic’ psychiatry, Horwitz (2002) reminds us that within dynamic psychiatry symptoms are regarded as the surface manifestation of underlying psychodynamic processes forming unique patterns in the life of each individual. Symptoms are thus not interesting or meaningful in themselves, but must rather be interpreted in the context of an individual history before their psychopathological significance, as the expression of hidden conflicts that are biographically specific, can be established. It is these unresolved or poorly managed conflicts, rather than the symptoms as such, that constitute the ‘true’ disorder and thus the object of explanation and treatment. In so far as such unconscious processes can be accessed, this cannot be done through direct empirical observation, but by engaging in a complex, intersubjective hermeneutic process. This process will not only displace the importance attributed by the patient or their family to the overtly disturbing symptom; it might also reveal the (hitherto hidden or implicit) psychopathological significance of seemingly normal behaviours. Dynamic psychiatry tends to blur the line between the normal and the pathological, and the character of the illness only emerges gradually, through a process that is simultaneously also its treatment: it is small wonder therefore that such a psychiatry would have little use for a diagnostic manual, and that its diagnostic manual should therefore be correspondingly small.

DSM-III embodied a very different approach not only to the classification of mental disorders but also to the understanding of their nature as pathological entities. The approach is known as ‘neo-Kraepelinian’ with reference to its progenitor, the German psychiatrist Emil Kraepelin (1856-1926). Following Kraepelin, the architects of DSM-III half a century later advocated a descriptive approach to mental illness that emphasised the importance of observation and deliberately eschewed aetiological speculation, leading to the often repeated claim that the manual, unlike its psychoanalytically informed predecessors, was ‘a-theoretical’.ⁱⁱ Within this approach, symptoms or rather patterns of symptoms became central to the task of classification and diagnosis. Unlike unconscious dynamics, symptom patterns could be observed, or at least elicited straightforwardly from self-reports; the categories defined on their basis could be tested in field trials for their reliability – or the extent to which they remain consistent when used by different professionals and over time – and tested against external criteria (or ‘external validators’) for their validity, or the extent to which they accurately and usefully describe a given pathology.ⁱⁱⁱ In this sense the new DSM could claim indeed to be fact-based rather than theory-based. In other ways, however, this claim is very misleading. In its architecture and guiding principles the manual fosters what neo-Kraepelinians Compton & Guze (1995) refer to as ‘medical-model psychiatry’, a psychiatry that implicitly privileges biological explanations,

without recognising that doing so constitutes a form of theoretical commitment. In Compton & Guze's own candid words, '[t]he medical model is without a priory theory, but does consider brain mechanisms to be a priority' (1995, p. 200). Porter (2013) rightly notes that this seemingly contradictory statement makes sense in the context of an implicit and unreflective commitment to a certain (materialist) ontology.

In the mainstream narrative that describes the success of DSM-III as a triumph of science over ideology – a classic modernist narrative of progress – the marginalisation of psychodynamic approaches within psychiatry needs no further explanation since it follows logically from the fact that psychoanalysis is not a science, and science (as bearer of truth and progress) is deemed ultimately destined to triumph. The vigorous espousal and promotion of this narrative already in the phase of production of DSM-III (see Kirk & Hutchins, 1992) can be read as a rhetorical strategy of active organisational 'forgetting' through which a new organisational or professional identity may be forged (Bowker & Star, 1999). In particular it can be read as a strategy of *clearance*, which Bowker and Star define as 'the erection of a barrier in the past at a certain point, so that no information or knowledge can leak through to the present' (p. 257) or also as 'a complete wiping away of the past of [psychiatric] theory in order to start with a clean slate' (p. 258): the barrier in this case was rhetorically erected in the name of science, to authorise the wiping away of psychoanalytic theory from psychiatric classification. In this process, historical continuities were disavowed and as a consequence important analytical continuities have also become more difficult to discern. An example of this relates to the question of the progressive expansion of the remit of psychiatry. Today this is one of the main points of criticism of DSM diagnoses, whose proliferation with each new edition has been equated to a progressive 'medicalisation of the human condition' (e.g. Chodoff, 2002; Rapley, Moncrieff and Dillon, 2011).^{iv} While it is true that expansion in terms of sheer numbers of diagnostic categories and subcategories became conspicuous only from DSM-III onwards, Horwitz (2002, p. 41) argues that this expansion has its roots in dynamic rather than diagnostic psychiatry:

Dynamic psychiatry laid the foundations for the sprawling mass of troubling behaviors that diagnostic psychiatry would later formulate as distinct disease entities. ... Mental health professionals became recognized cultural arbiters not only of serious mental disorders but also of personal problems, unhappiness, and deviant behavior. Diagnostic psychiatry did not invent therapeutic culture – it inherited that culture from its dynamic predecessor.

Horwitz's observation points therefore to a significant element of historical continuity between two otherwise heterogeneous psychiatric models. At the same time, however, it invites us to consider that the expansion of the remit of psychiatry has not been a linear process, always informed by the same underlying assumptions and with similar consequences. While diagnostic psychiatry may have inherited therapeutic culture from its predecessor, it also interpreted the nature and purpose of 'therapy' in a very different way. In the context of DSM-III and subsequent editions of the manual, diagnostic expansion literally constitutes a form of 'medicalisation' in so far as more and more aspects of everyday life (e.g. caffeine use or internet gaming, to name two recent additions to the DSM repertoire, in DSM-5) become susceptible to description as disease entities, and thus amenable at least in principle to pharmaceutical treatment. The critique of diagnostic expansion in this sense is closely coupled with a critique of

the influence of the pharmaceutical industry on the production and maintenance of the manual (Cosgrove & Krinsky, 2009; Cosgrove, Bursztajn, Krinsky, Anaya & Walker, 2009). In the context of dynamic psychiatry, by contrast, the expansion of the remit of psychiatry followed from a blurring of the boundary between the normal and the pathological that was implicit in psychodynamic theory. In that context what was at stake was not so much a form of medicalisation as a form of secular morality centred on the value of the rational, individual self – a phenomenon equally susceptible to criticism but on very different grounds (Rieff, 1959; 1987 [1966]).

To recognise the rhetoric of science in the making and promotion of DSM-III as a strategy of *clearance* – one successfully employed to trump and forget a prior order of psychiatric knowledge, relegating it firmly to the past of the discipline – does not imply a judgment on the quality of the science embodied in the manual. Proponents of alternative accounts of the success of DSM-III, however, have strongly argued against the notion that the manual was based on any new scientific knowledge (Mayes & Horwitz, 2005; see also Sadler, 2013; Whooley and Horwitz, 2013). As we shall see below, they offer explanations based on what the manual made possible at a variety of practical levels, for the profession of psychiatry and beyond. Before we come to consider these accounts it is worth dwelling just a moment longer on the status of the knowledge embodied in DSM-III and subsequent editions of the manual. Despite its claims to being a-theoretical, it is accurate to say that the new manual was borne out of a feat of theoretical and value re-orientation supported by the invention of a new process for the construction of diagnostic categories, one primarily designed to substantiate claims of reliability (Sadler, 2002a; Kirk and Hutchins, 1992; cf. Spitzer, 2001). By contrast, the validation of diagnostic constructs that was part of the promise of DSM-III has to this day not occurred. This fact is not disputed; indeed it underlies the initial ambition of the DSM-5 Task Force to effect a new paradigm shift towards dimensionality (Kupfer, First & Regier, 2002), as well as the internal controversies and conflicts that proliferated around this ambition and ultimately ‘derailed’ it (Whooley & Horwitz, 2013).^v The repeated failure to deliver on the promise of validation – whether through the paradigm inaugurated with DSM-III or a new one – has not been without consequence. At the very least, it has contributed towards creating a discursive environment where alternative approaches to mental illness cannot be so readily dismissed. While the DSM has never been without its critics, the latest edition has prompted at least two very high-profile organisations – the US National Institute for Mental Health (NIMH) and the British Psychological Society (BPS) – to distance themselves from the manual, albeit for opposite reasons. While reservations expressed by the BPS centre, predictably, on the relative neglect of ‘relationship and social factors’ in the genesis of mental distress (British Psychological Society, 2012), NIHM has launched a project for the development of an alternative set of research diagnostic criteria, unconstrained by DSM categories, to facilitate the creation of a new psychiatric nosology based on biomarkers and cognitive performance, reflecting an assumption that diagnostic validity should rest on properly scientific, ‘objective laboratory measure[s]’ (Insel, 2013). These are among many early signs that the dominance of the DSM over the classification of mental disorders may be on the wane. There are important reasons, however, why the curve of its demise as a ‘Bible’ may be very slow indeed. These reasons stem directly from those of the manual’s original success, and it is to these that I now turn.

The DSM solution

Whatever the strictly scientific merits of DSM-III, the key to understanding its ascendancy to hegemonic status in the US lies in what the publication of the manual in 1980 achieved for a variety of constituencies with a stake in psychiatric diagnosis, and in particular for a profession that had experienced a profound crisis of legitimacy in the previous two decades. Others have richly described the multifaceted character of this crisis, and I will draw here particularly on Mayes and Horwitz' account (2005) in giving a summary indication of the multiple challenges that US psychiatry faced during that period.^{vi} These included a sustained intellectual critique of the very concept of mental illness from what has come to be known as the anti-psychiatry movement.^{vii} The critique may be summarised by Thomas Szasz's famous proposition that mental illness is a 'myth' and psychiatry an agency of social control for behaviour that is simply deviant or non-conformist (Szasz, 1961). The fierce controversy and debate over the status of 'homosexuality' as a pathological category – leading to its partial removal from DSM-II in 1973^{viii} – lent support to the notion that psychiatric diagnosis more generally was an arbitrary form of social and moral policing. Despite its intellectual character, the critique became very influential as part of a wider counter-cultural movement that saw anti-psychiatry side with other forms of political radicalism, deeply affecting the public image of psychiatry as a profession. At the same time, if psychiatry as an agent of moral and social control appeared politically questionable, in other ways the profession in its psychodynamic incarnation appeared desperately ineffective at dealing with the most serious cases of mental illness, particularly in the context of deinstitutionalisation.^{ix}

Another range of pressures stemmed from a different set of developments, namely the inclusion of mental health treatment – then chiefly psychotherapy – within medical insurance plans from the 1960s and from the following decade into the federal Medicaid programme. The diagnostic slackness of the psychodynamic model of mental illness did not marry well with these developments. Insurers and policymakers wanted to be able to quantify the expense associated with each type of illness and wanted to be able to justify that expense on the basis of demonstrated effectiveness. The psychodynamic model – by its very character – could offer neither. But insurers and policymakers were not alone in bemoaning this diagnostic slackness: research oriented psychiatrists keen to develop standards to measure the effectiveness of treatment were similarly frustrated by it. Last but not least, Mayes and Horwitz (2005) point the emergence of competing 'psy' professions during the same period as posing a significant threat to the psychiatric profession. Psychiatrists were expensively trained physicians – but in their practice, they offered nothing more or different than what non-medical professionals trained in psychotherapy (psychologists, social workers, counsellors, clergy) could offer. Their monopoly over the treatment of mental illness became difficult to justify. This broad background contributed to a situation in the mid 1970s where US psychiatry, in the view of the then president of the APA, was on 'the edge of extinction' as a profession (Wilson, cited in Mayes and Horwitz, 2005, p. 256). The unreliability of diagnosis became, in this context, 'symbolic of the profession's self-doubts and of its vulnerability to public and scientific criticism' (Kirk & Hutchings, 1992, p. 13).

When the revision of DSM-II was commissioned in 1974, the expectation was not that this would produce a revolutionary change for the discipline. But the process of revision was used by those appointed to coordinate it to deliberately address many of

the challenges described above, by focusing specifically on the question of reliability. DSM-III and its symptom-based, categorical approach redefined mental illnesses as discrete entities with clearly defined criteria and boundaries. These criteria and boundaries made mental disorders quantifiable in terms of population statistics, and therefore costable; they also made psychiatrists accountable in diagnosing them. As discrete entities, these were disorders in relation to which pharmaceutical drugs could be specifically developed, tested, and marketed. The capacity to prescribe pharmaceuticals restored a measure of specific authority – a unique added value – to the medically trained, psychiatric profession in relation to other competing professions. As Mayes and Horwitz (2005, p. 258) eloquently put it, DSM-III ‘realigned the incentives of a great many stakeholders’ – clinicians, insurers, the government, pharmaceutical companies and researchers. It did this by providing standardised definitions of psychiatric conditions, ones that would be recognisable, meaningful and usable across all these domains. In this sense, DSM-III can be described as a quintessential ‘boundary object’, one that has ‘different meanings in different social worlds but [whose] structure is common enough to more than one world to make [it] recognizable, a means of translation’ (Star & Griesemer, 1989, p. 393). As a boundary object, the DSM functions at the centre of what has been described – with deliberate reference to Eisenhower’s cautionary trope of a ‘military industrial complex’ – as a Mental Health-Medical-Industrial-Complex or MHMIC (Sadler, 2013).

Three keywords

Polyvalence

According to Sadler (2013), MHMIC comprises ten elements or ‘vectors’ interacting to contribute to the continuing dominance of the DSM, despite the extensive criticism and widely acknowledged shortcomings of the manual. These elements include (1) the existence of millions of mentally ill people as a captive market; (2) a powerful and competitive pharmaceutical industry; (3) a for-profit service industry of insurers and other funding sources of health care, linked to (4) the character of the US healthcare system as a for-profit business enterprise; (5) the character of US politics as dominated by the power and interests of corporate wealth; (6) the mass media promotion of medical products and particularly direct-to-consumer advertising, and a corresponding (7) popular demand for ‘passive, product-based therapies’ (p. 30); (8) the emphasis on neuroscience and psychopharmacology as research and funding priorities by the National Institute of Mental Health (NIMH); (9) the increasing reliance of clinical investigators within academic medical centres on ‘soft’ sources of funding, namely grants and contracts; and (10) the financial interest of the APA in the continuing dominance of its manual.

If analyses in terms of the sociology of the professions are most helpful in understanding the conditions of possibility for a diagnostic ‘revolution’ in 1980 (Mayes & Horwitz, 2103), an analysis in terms of the existence of a Mental Health-Medical-Industrial-Complex is helpful in understanding the wider conditions of possibility for the hegemonic status of the DSM in the US and more widely. The DSM is a powerful object because it is a *polyvalent* object: it serves multiple functions in relation to multiple, but related, interests. In fact, as a boundary object,

the key to its success lies precisely in its ability to relate those interests, by mediating communication and interaction between them.

Sadler's MHMIC analysis is limited to the United States, although he explicitly invites studies that might extend it to other Western industrialised societies. Crucial to understanding the wider influence of the DSM outside the US, however, is that several of the vectors involved in the MHMIC operate transnationally on a global scale, the pharmaceutical industry being a prime example of this. The wider significance of the DSM is not adequately captured, therefore, by the extent to which the manual is formally adopted as a clinical tool by the health systems of other nation-states, which may differ in important ways from the American one. In the context of modern globalisation, Drori and Meyer (2006) argue, scientific rationalisation or 'scientisation' has come to function as the equivalent of a 'natural "sovereign"' in the absence of strong legal or organizational ones' (p. 31), creating both incentives and requirements for the expansion of rationalised organisational systems. Following this argument, to the extent that the DSM is internationally credited with having put psychiatric diagnosis on a scientific footing, it has by the same token become an important factor in implicitly shaping regulatory practices and organisational systems in the wider global environment.

What I have called the *polyvalence* of the DSM is also crucial for understanding the reasons for its 'conservative pragmatism' (Sadler, 2013, p. 25), or its inherent resistance to significant change. If the multiple versions of the DSM since DSM-III are but 'cogs in a much bigger economic machine' (p. 33), then any prospects of change to the manual tend to be constrained by the phenomenal inertia of the machine taken as a whole. This background is what gives rise to the seeming paradox whereby the Task Force of DSM-5 were simultaneously able to explicitly acknowledge the inadequacy of the categorical model of DSM-III (Kupfer et al., 2002), and yet unable to revise this model in any significant ways – also (but not only) through fierce opposition from within the psychiatric profession itself, whose modes of work have come to rely on the institutional frameworks that previous editions of the manual have facilitated (Whooley & Horwitz, 2013).

Ambivalence

The DSM is indeed a powerful object, but social scientists and other commentators often make the mistake of taking its power at face value, overstating the importance of formal diagnosis and nomenclature at the expense of paying attention to how the manual is used in practice. Whooley (2010) is unusual in focusing on the latter dimension, and drawing attention to some unintended and unwelcome consequences of the manual's success for psychiatrists' everyday work. In particular he argues that the standardisation and codification achieved with DSM-III, while benefiting psychiatry by restoring scientific prestige to the profession, also opened the work of psychiatrists to unprecedented bureaucratisation and surveillance on the part of external actors (e.g. policymakers, insurance companies), eroding clinical autonomy and producing strong feelings of ambivalence towards the manual and towards the task of diagnosis itself. Following an agenda set by Bowker and Star (1999) for the study of classification systems and their use, Whooley then documents the multiple strategies that psychiatrists adopt in practice to work around the constraints imposed on them through the DSM, rather than using the manual as prescribed. Such

‘workarounds’ include the use of alternative taxonomies (often a drastically reduced version of the DSM itself); fudging diagnostic codes and deliberately misdiagnosing or over-diagnosing in order to ‘pass muster with the insurers’ (2010, p. 460); and negotiating diagnoses with patients. While workarounds imply a critique of the biomedical model of mental illness (Whooley invites us to consider ‘how strange it would seem if a cardiologist negotiated a diagnosis over a patient’s heart condition’, 2010, p. 463), his research suggests that in most cases they do not reflect a lack of faith on the part of psychiatrists in the promise of the model as such.

A focus on the ambivalence of psychiatrists and on their tacit ways of resisting and subverting standardisation in clinical practice is valuable in tempering assumptions about the importance of the DSM based on its formal status as a reference manual. As a keyword, *ambivalence* suggests that the appropriate answer to the question as to whether the DSM is powerful cannot be a straightforward and unqualified ‘yes’. The DSM is indeed an extremely significant object, but it is difficult to evaluate it and discuss it in the abstract – since the realities of practice work with, around, and against the manual rather than simply in accordance with it. This is obviously even truer outside the US and in countries like the UK, where DSM categories are mostly used for research purposes and the clinical relevance of the manual is minimal or non-existent.

Participation

Bowker and Star (1999, p. 319) conclude their seminal work on classification systems by saying that ‘classifications should be recognized as the significant site of political and ethical work that they are’ – which means effectively that ‘they should be reclassified’ within the Western cultural imagination, where they tend to be regarded as neutral representations of natural realities. As they acknowledge, however, the political dimension of the DSM has never been inconspicuous. Aside from political clamour over individual diagnostic categories, controversy and debate over the DSM *qua* system of classification have been part of its history since the build up to the third edition. In particular, the degree of publicity and critical commentary that has accompanied the revision process for DSM-5 and its eventual publication have been without precedent, no doubt thanks also to a mediatic landscape transformed by the emergence of digital technologies. While these facts are well known, less attention has been paid to the ways in which procedural (and political) norms of transparency, inclusiveness, collaboration, accountability and respect for diversity have been embedded in the production of the manual from DSM-III onwards, albeit in the name of ensuring scientificity and robustness rather than in the name of a democratization of the process. Virtually alone in attempting an analysis of this dimension of the DSM and its making, Sadler (2002a) and Sadler and Fulford (2004) have argued that a clear commitment to these values has been evident in efforts to make the process and its goals transparent through papers, books and meetings; to solicit input from scientists and clinicians beyond psychiatry (including, with DSM-IV, from stakeholder organisations); to form work groups designed to represent a variety of perspectives; and to circulate draft categories and criteria for feedback and comment. At the same time, Sadler (2002a) has illustrated that this commitment has always been partial and marked by profound ambivalence, with many aspects of the process remaining closed to scrutiny and input from outside.

In the years leading to the publication of DSM-5, the question of whether and how the DSM process should be made more democratically accountable has been raised explicitly (see e.g. Sadler, 2002a; Sadler & Fulford, 2004; Porter, 2013), as part of a broader discussion of the normativity of psychiatric diagnosis (Sadler, 2002b; 2004). While some dismissed the very idea of including patients and families in the revision process as ‘politically correct nonsense’ (Spitzer, 2004), one of the procedural innovations associated with DSM-5 was the provision of an online platform where progress on the revision process was regularly documented for the general public, and where members of the public were invited to acquaint themselves with the working groups responsible for revising particular categories of disorders. During three phases of open consultation staggered across three years, the APA solicited comments, questions and concerns from anyone interested in participating in the process, from professional societies to patients.

Despite these developments, the ambivalence identified by Sadler (2002a) with reference to previous revision processes seemingly persists. On the one hand, some of the ‘closed’ aspects of the process remain closed – for example, the detail of how input from public consultations has been considered or implemented remains unclear. On the other hand it appears that the APA, while inviting participation through the channels it made available for this purpose, was not equally happy with participation occurring through channels over which it had less control. During the course of the revision process, prominent patient activists ran parallel websites, typically in blog form, closely monitoring and commenting progress of the DSM working groups, while assembling news, information and resources on other relevant or related themes (for example, on forthcoming revisions of the ICD-10). At least some of the feedback to the main APA site was mobilised and organised through the work of these activists and their blogs. In 2012, the Association threatened to sue Suzy Chapman – a patient activist, blogger and owner of a site then called *dsm5watch* – arguing that her use of ‘dsm5’ as part of the blog title was an infringement of their trademark. There was no commercial motive in the Chapman’s use of the term, and such use was consistent with many legitimate precedents, but the threat was enough for Chapman to be intimidated into changing the name of the website, causing her to lose much of the visibility of her work on the web for a period of time. The APA threat against Suzy Chapman has been described as a SLAPP manoeuvre – a ‘strategic lawsuit against public participation’ – by critics who also highlight that other domains using a DSM5 URL have not been similarly challenged by the APA (Heisel, 2012; Carroll, 2012). The manoeuvre backfired by prompting a flurry of support for Chapman from professionals and patients, most notably (though not surprisingly, given his well-known stance against DSM-5) from DSM-IV editor Allen Frances. In one of several commentaries, Frances cites the event as evidence of a basic conflict between scientific and commercial interests within the APA that ‘can be cured only by creating a new institutional framework to supervise the future of DSM revisions’ (2012).

The third and final keyword – *participation* – is offered here to convey both the object and the spirit of a social-scientific research agenda in relation to DSM-5 and psychiatric classification more generally. The APA’s much-publicised efforts to render the revision process for DSM-5 transparent and inclusive, on the one hand, and its threat of legal action against Suzy Chapman on the other, are part of the same world and two sides of the same coin. Taken together, they invite us to interrogate the significance and function of different practices of participation and dissent in relation

to the DSM revision process, ranging from those facilitated by the APA and formally embedded within the process itself through dedicated infrastructural channels, to those arising spontaneously from different publics and *de facto* governed or disciplined by other means. Here I can only indicate the broad direction such an analysis might take, by suggesting that such practices should be studied in relation to a wider context of forms of transnational (self-)governance that have emerged and intensified exponentially in the years since the publication of DSM-IV (Djelic & Sahlin-Andersson, 2006; Higgins, 2006). From this perspective, institutionally facilitated participatory practices may be regarded as an element in a wider global proliferation of activities of monitoring, auditing and evaluating, that have the effect of shifting attention from the substantive quality of products and services, to quality as measured by the process through which products and services are created or delivered (Higgins, 2006; Power, 1997; Strathern, 2000). In this sense, to paraphrase Higgins (2006, p. 9) the invitation to participate and the creation of procedures for doing so might be read as a strategy of *pre-emptive capture of dissent*. The APA's treatment of Suzy Chapman would seem at least *prima facie* to corroborate this reading.

In light of the suggestions made so far, I propose that one of the key ways that social scientists might contribute to the future of psychiatric classification and of the DSM is precisely by offering a critical analysis of how participation itself has been 'done' in the context of the latest DSM revision process, and how it might be done in future. Djelic & Sahlin-Andersson (2006, p. 13) claim that there is evidence that '[r]ather than building trust ... transparency may in fact undermine it further, leading to still more requests for auditing and monitoring'.^x If this is true, an analysis of whether and how existing mechanisms designed for transparency are involved in producing a 'distrust spiral' towards experts and professionals seems especially pertinent and urgent in the field of health, and mental health in particular.

Concluding remarks

This article began by querying whether the DSM can be rightfully described as a paradigmatic object and went on to propose that it is more accurately described as a boundary object. The term *paradigm* allows for semantic slippage between a colloquial sense in which it may be used to mean 'model', and the philosophical sense in which Kuhn (1970) used it, implying scientific consensus on exemplars of good science. Consensus, as we have seen, has never been a feature of the DSM. If the model that DSM-III inaugurated has endured for over three decades and seems remarkably tolerant of critique, this has not been through an absence of controversy, dissent and resistance, but on account of the multiple, powerful forces invested or implicated in its endurance. The forms and modalities of resistance over the years have been more or less explicit, ranging from street protest and academic debate to tacit avoidance through workarounds within day-to-day clinical practice. Sexuality and its 'disorders' have been a site of maximum and explicit politicisation from the beginning of this history, and the vehicle through which fundamental questions about the status and implications of psychiatric diagnosis more generally have been brought to the forefront of both scientific and public debate.

In particular, the controversy around whether homosexuality should remain a psychiatric diagnosis – which was highly public in the early 1970s but continued less

visibly in debates around the categories of Sexual Orientation Disorder (DSM-II) and Ego-Dystonic Disorder (DSM-III) – became the occasion for acknowledging that pathological categories are social constructs based on socially- and culturally-informed value judgments as much as on scientific fact. This is clearly evident in an article where Robert Spitzer, chair of the Task Force of DSM-III, summarises the reasoning that led to the inclusion of Ego-Dystonic Homosexuality in DSM-III, anticipating arguments leading to its removal in DSM-III-R (1987). In this piece, Spitzer (1981, p. 211) argues that the ‘specification of the reasons for identifying certain conditions as pathological’ should be a requirement for a discussion of the status of homosexuality as a mental disorder and, by extension, of ‘other conditions whose status as disorders is questionable’. After discussing the concepts of distress and impairment, he concludes emphatically that

the question of whether or not heterosexual functioning should be used as the norm – so that inability to function heterosexually is impairment in a major area of functioning – is a value judgment and not a factual matter. It should be understood that there is always a value judgment in deciding that a particular area of functioning is ‘important’ (1981, p. 212).^{xi}

More recent debates in connection with expressions of gender variance and the DSM-IV category of Gender Identity Disorder, in anticipation of the category’s revision for DSM-5, have been compared to the controversy over homosexuality (Drescher, 2010). While there are many points of resemblance between the two controversies – including important parallels in arguments for diagnostic removal – the more recent debates complicate the picture, by illustrating that acceptance of gender variance and the promotion of civil rights for transgender persons is not invariably or necessarily predicated on the removal of the relevant diagnostic categories. As Drescher puts it (2010, p. 448)

efforts to straddle the contradictory implications of having a diagnosis (bad, disordered) while putting forth a narrative of normal variation (good, natural) can be seen to foster an environment in which offering medical and surgical treatment does not imply stigma or judgment.

These are questions whose relevance and implications clearly transcend the domains of gender and sexuality, but that the lens of gender and sexuality has helped to focus for more general discussion. They illustrate that the work of debating diagnosis does not end with the recognition that diagnostic categories reflect ethical and political commitments, but rather only starts in earnest at that point.

ⁱ I follow Bowker & Star (1999) in describing classification systems as ‘information infrastructure’, a designation intended to convey classifications and standards as forms of technology: their production and maintenance involves a lot of (often invisible) work; and they in turn perform a lot of work by providing frameworks that allow whole networks to function. In this sense, ‘information infrastructures’ are not dissimilar from the material infrastructure of roads, water supply, electrical grids and so on. For a more detailed definition of ‘infrastructure’ in the sense employed here see Bowker & Star (1999, p. 35).

ⁱⁱ See Decker (2013) and (2007) for a full discussion of the Kraepelinian legacy and its relationship to DSM-III. A special issue of the journal *European Archives of Psychiatry and Clinical Neuroscience* (1995/4-5) is devoted to the discussion of Kraepelin and 20th-century psychiatry.

ⁱⁱⁱ See Aboraya, France, Young, Curci & LePage (2005) for a discussion of the concept of validity and a review of types and phases of validity in psychiatric diagnosis. See Kirk & Hutchins (2002) for a detailed discussion of field trials and reliability in the context of the production and promotion of DSM-III. See Porter (2013) for a discussion of the construct of validity espoused in DSM-III and its origins in the work of Robins & Guze (1970).

^{iv} This critique has been formulated in relation to specific sentiments or conditions such as shyness/social phobia (Lane, 2008; Scott, 2006), sadness/depressive disorder (Horwitz & Wakefield, 2007) and female sexual dysfunction (e.g. Moynihan, 2003; Tiefer, 2006); but also in more general terms in relation to the concept of the 'normal', most notably by the Chair of the Task Force for DSM-IV Allan Frances (Frances, 2013). These few references do not do justice to the extent of this prominent critique and should be read as indicative.

^v A 'categorical' approach to diagnosis, such as the one that has informed the DSM since DSM-III, measures particular conditions in terms of their presence or absence, implying clearly defined boundaries. By contrast, a 'dimensional' approach assumes that 'there are dimensions of "functioning," such as information processing, psychosis, affectivity, mood, and processing speed, that must be described and that different patterns among such measures reflect different psychiatric disorders' (Harkavy-Friedman, 2009, p. 118). For critical appraisals of dimensional constructs in psychiatric diagnostic systems see the collection of articles stemming from the APA conference held on this topic in July 2006, and collected as special issue of the *International Journal of Methods in Psychiatric Research* (2007, vol. 16, issue S1).

^{vi} See also Decker (2013) and Kirk & Hutchins (1992).

^{vii} I cannot do justice to the details and internal variety of this movement in the space of this article, but see Staub (2011) for a history and discussion.

^{viii} Homosexuality was replaced by the category of Sexual Orientation Disturbance in DSM-II and by Ego-Dystonic Homosexuality in DSM-III, both categories representing versions of 'a compromise between the view that preferential homosexuality is invariably a sexual disorder and the view that it is merely a normal sexual variant' (Spitzer, 1981, p. 210). Ego-Dystonic Homosexuality was definitively removed from DSM-III-R in 1987. For what remains the most comprehensive account of the controversy over the diagnosis of homosexuality and its deletion, see Bayer (1981).

^{ix} On deinstitutionalisation see Grob (1991).

⁹ Djelic & Sahlin-Andersson (2006) draw for this argument on the work of Power (1997; 2003), Hood et al. (1999) and Moran (2002).

¹⁰ Distress and impairment would become central to the diagnostic criterion of 'clinical significance' introduced with DSM-IV for many categories of disorder. See Spitzer (1999) for a critical discussion of the broader impact of this criterion on diagnostic validity.

References

Aboraya, A., France, C., Young, J., Curci, K. & LePage, J. (2005). The validity of psychiatric diagnosis revisited: The clinician's guide to improve the validity of psychiatric diagnosis. *Psychiatry (Edgmont)*, 2(9), 48-55.

Bayer, R. (1981). *Homosexuality and American psychiatry: The politics of diagnosis*. New York: Basic Books.

Bowker, G. C. and Star, S. L. (1999). *Sorting things out: Classification and its consequences*. Cambridge, Mass.: MIT Press.

British Psychological Society (2011). Response to the American Psychiatric Association: DSM-5 development. Retrieved from: http://apps.bps.org.uk/_publicationfiles/consultation-responses/DSM-5%202011%20-%20BPS%20response.pdf on 11/01/2014.

-
- Carroll, B. (2012). Self-inflicted damage. Retrieved from: <http://hcrenewal.blogspot.co.uk/2012/01/self-inflicted-damage.html> on 11/01/2014.
- Chodoff, P. (2002) The medicalization of the human condition. *Psychiatric Services*, 53, 627-628. doi: 10.1176/appi.ps.53.5.627.
- Compton, W. M. & Guze, S. B. (1995). The neo-Kraepelinian revolution in psychiatric diagnosis. *European Archives of Psychiatry and Clinical Neuroscience*, 245, 196-201. doi: 10.1007/BF02191797.
- Cosgrove, L. & Krimsky, S. (2009). A comparison of DSM-IV and DSM-5 panel members' financial association with industry: A pernicious problem persists. *PLOS Medicine*, 9 (3). doi: 10.1371/journal.pmed.1001190
- Cosgrove, L., Bursztajn, H. J., Krimsky, S. Anaya, M. & Walker, J. (2009). Conflicts of interest and disclosure in the American Psychiatric Association's Clinical Practice Guidelines. *Psychotherapy and Psychosomatics*, 78, 228-232. doi: 10.1159/000214444.
- Davies, E. (2013). DSM-5 and the rough ride from approval to publication. *British Medical Journal*, 346, f1918. doi: <http://dx.doi.org/10.1136/bmj.f1918>
- Decker, H. S. (2007). How Kraepelinian was Kraepelin? How Kraepelinian are the neo-Kraepelinians? From Emil Kraepelin to DSM-III. *History of Psychiatry*, 18, 337-360. doi: 10.1177/0957154X07078976.
- Decker, H. S. (2013). *The making of DSM-III: A diagnostic manual's conquest of American psychiatry*. Oxford and New York: Oxford University Press.
- Djelic, M.-L. & Sahlin-Andersson, K. (2006) A world of governance: The rise of transnational regulation. In M.-L. Djelic and K. Sahlin-Andersson (Eds.), *Transnational governance: Institutional dynamics of regulation* (pp. 1-28). Cambridge: Cambridge University Press.
- Drescher, J. (2010). Queer diagnoses: Parallels and contrasts in the history of homosexuality, gender variance, and the *Diagnostic and Statistical Manual*. *Archives of Sexual Behavior*, 39, pp. 427-460. DOI 10.1007/s10508-009-9531-5
- Drori, G. S. & Meyer, J. W. (2006). Scientization: Making the world safe for organizing. In M.-L. Djelic & K. Sahlin-Andersson (Eds.), *Transnational governance: Institutional dynamics of regulation* (pp. 31-52). Cambridge: Cambridge University Press.
- First, M. B. (2010). Paradigm shifts and the development of the Diagnostic and Statistical Manual of Mental Disorders: past experiences and future aspirations. *Canadian Journal of Psychiatry*, 55 (11), 692-700.
- Frances, A. (2012). Is DSM-5 a public trust or an APA cash cow? Commercialism and censorship trump concern for quality. *Psychology Today*. Retrieved from:

<http://www.psychologytoday.com/blog/dsm5-in-distress/201201/is-dsm-5-public-trust-or-apa-cash-cow> on 11/01/2-14.

Frances, A. (2013). *Saving normal: An insider's revolt against out-of-control diagnosis, DSM-5, big pharma, and the medicalization of ordinary life*. New York: Harper Collins.

Grob, G. N. (1991). *From asylum to community: Mental health policy in modern America*. Princeton, NJ: Princeton University Press.

Harkavy-Friedman, G. M. (2009). Dimensional approaches in psychiatric classification: Refining the agenda for DSM-V. *American Journal of Psychiatry*, 166, pp. 118-119. doi:10.1176/appi.ajp.2008.08060939

Heisel, W. (2012). *Slap: American Psychiatric Association targets one DSM-5 critic, ignores others*. Retrieved from <http://www.reportingonhealth.org/blogs/2012/02/29/slap-american-psychiatric-association-targets-one-dsm5-critic-ignores-others> on 30/05/2014.

Higgins, W. (2006). How we are governed now: Globalisation, neo-liberal governmentality and the nullification of substantive policy. *Journal of Australian Political Economy*, 57, pp. 5-29.

Hood, C., Scott, C., James, J., Jones, G. & Travers, T. (1999). *Regulation inside government: Waste watchers, quality police, and sleaze busters*. Oxford: Oxford University Press.

Horwitz, A. V. (2002). *Creating mental illness*. Chicago: University of Chicago Press.

Horwitz, A. V. & Wakefield, J. C. (2007). *The loss of sadness: How psychiatry transformed normal sorrow into depressive disorder*. Oxford/New York: Oxford University Press.

Insel, T. (2013). Transforming diagnosis [Director's blog]. Retrieved from <http://www.nimh.nih.gov/about/director/2013/transforming-diagnosis.shtml> on 11/01/2014.

Kirk, S. A. & Hutchins, H. (1992). *The selling of DSM: The rhetoric of science in psychiatry*. New Brunswick and London: Aldine Transaction.

Kuhn, T. (1962). *The structure of scientific revolutions*. Chicago: University of Chicago Press.

Kupfer, D. J., First, M. B. & Regier, D. A. (Eds.) (2002). *A research agenda for DSM-V*. Washington, DC: American Psychiatric.

Lane, C. (2008). *Shyness: How normal behavior became a sickness*. New Haven: Yale University Press.

-
- Laugharne, R. & Laugharne, J. (2002). Psychiatry, postmodernism and post-normal science. *Journal of the Royal Society of Medicine*, 95, 207-210.
- Mayes, R. & Horwitz, A. V. (2005). DSM-III and the revolution in the classification of mental illness. *Journal of the History of the Behavioral Sciences*, 41, 249-267. doi: 10.1002 /jhbs.20103
- Menninger, K. (1963). *The vital balance: The life process in mental health and illness*. New York: The Viking Press.
- Moinihan, R. (2003). The making of a disease: Female sexual dysfunction. *British Medical Journal*, 326, 34. doi: <http://dx.doi.org/10.1136/bmj.326.7379.45>.
- Moran, M. (2002). Understanding the regulatory state. *British Journal of Political Science*, 32, 391-493.
- Porter, D. (2013). Establishing normative validity for scientific psychiatric nosology: The significance of integrating patient perspectives. In J. Paris & J. Phillips (Eds.), *Making the DSM-5* (pp. 63-74). New York: Springer.
- Power, M. (1997). *The audit society: Rituals of verification*. Oxford: Oxford University Press.
- Power, M. (2003). Evaluating the audit explosion. *Law & Policy*, 25 (3), pp. 115-202.
- Rapley, M., Moncrieff, J. & Dillon, J. (Eds.) (2011) *De-medicalizing misery: Psychiatry, psychology and the human condition*. Basingstoke: Palgrave Macmillan.
- Regier, D. A., Narrow, W. E., Kuhl, E. A. & Kupfer, D. J. (2009) The conceptual development of DSM-5, 166, 645-650. doi:10.1176/appi.ajp.2009.09020279.
- Rieff, P. (1959). *Freud: The mind of the moralist*. Chicago: University of Chicago Press.
- Rieff, P. (1987 [1966]). *The Triumph of the Therapeutic*. Chicago: University of Chicago Press.
- Robins, E. & Guze, S. B. (1970). Establishment of diagnostic validity in psychiatric illness: Its application to schizophrenia. *American Journal of Psychiatry*, 126, 983-987.
- Sadler, J. Z. (2002a). Values in developing psychiatric classification: A proposal for the DSM-V. In J. Z. Sadler (Ed.), *Descriptions & prescriptions: Values, mental disorders, and the DSMs*. Baltimore: Johns Hopkins Press.
- Sadler, J. Z. (Ed.) (2002b). *Descriptions & prescriptions: Values, mental disorders, and the DSMs*. Baltimore: Johns Hopkins Press.

-
- Sadler, J. Z. (2004). *Values and psychiatric diagnosis*. Oxford: Oxford University Press.
- Sadler, J. (2013). Considering the economy of DSM alternatives. In J. Paris & J. Phillips (Eds.), *Making the DSM-5* (pp. 21-38). New York: Springer.
- Sadler, J. Z. & Fulford, B. (2004). Should patients and their families contribute to the DSM-V process? *Psychiatric Services*, 55, 133-138. doi: 10.1176/appi.ps.55.2.133.
- Scott, S. (2006). The medicalisation of shyness: From social misfits to social fitness. *Sociology of Health and Illness*, 28, 133-153. doi: 10.1111/j.1467-9566.2006.00485.x.
- Shabsin, M. (1990). Turning points in twentieth-century American psychiatry. *American Journal of Psychiatry*, 147, 1267–1274.
- Shabsin, M. (1964). The vital balance: The life process in mental health and illness. *Journal of the American Medical Association*, 88, 475. doi:10.1001/jama.1964.03060310075031.
- Spitzer, R. L. (1981). The diagnostic status of homosexuality in DSM-III. A reformulation of the issues. *American Journal of Psychiatry*, 138 (2), pp. 210-215.
- Spitzer, R. L. (1999). DSM-IV diagnostic criterion for clinical significance: Does it help solve the false positives problem? *American Journal of Psychiatry*, 156 (12), pp. 1856-1864.
- Spitzer, R. L. (2001). Values and Assumptions in the Development of DSM-III and DSM-III-R: An Insider's Perspective and a Belated Response to Sadler, Hulus, and Agich's "On Values in Recent American Psychiatric Classification". *Journal of Nervous and Mental Disease*, 189 (6), 351-359.
- Spitzer, R. L. (2004). Good idea or politically correct nonsense? *Psychiatric Services*, 55, 113. doi: 10.1176/appi.ps.55.2.113.
- Star, S. L. & Griesemer, J. R. (1989). Institutional ecology, 'translations', and boundary objects: Amateurs and professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39. *Social Studies of Science*, 19, 387-420. doi: 10.1177/030631289019003001.
- Staub, M. E. (2011). *Madness is civilization: When the diagnosis was social, 1948-1980*. Chicago: University of Chicago Press.
- Stengel, E. (1959). Classification of mental disorders. *Bulletin of the World Health Organisation*, 21, 601-663.
- Stengel, E. (1960). A comparative study of psychiatric classifications. *Proceedings of the Royal Society of Medicine*, 53, 123-127.

Strathern, M. (Ed.) (2000). *Audit cultures: Anthropological studies in accountability, ethics and the academy*. Abingdon: Routledge.

Szasz, T. (1961). *The myth of mental illness: Foundations of a Theory of Personal Conduct*. New York: Harper & Row.

Tiefer, L. (2006). Female sexual dysfunction: A case of disease mongering and activist resistance. *PLOS Medicine*, 3(4), e178. doi: 10.1371/journal.pmed.0030178.

Whooley, O. (2010). Diagnostic ambivalence: Psychiatric workarounds and the Diagnostic and Statistical Manual of Mental Disorders. *Sociology of Health and Illness*, 32, 453-469. doi: 10.1111/j.1467-9566.2010.01230.x.

Whooley, O. & Horwitz, A. V. (2013). The paradox of professional success: Grand ambition, furious resistance, and the derailment of the DSM-5 revision process. In J. Paris & J. Phillips (Eds.), *Making the DSM-5* (pp. 75-92). New York: Springer.