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Scientific progress and the prospects for culture-bound syndromes

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ABSTRACT

This paper aims to show that the classification by the American Psychiatric Association (APA) in the Diagnostic and Statistical Manual of Mental Disorders (DSM) of a distinct listing of disorders known as Culture-Bound Syndromes (CBS) is misguided. I argue that the list of CBS (in Appendix I of the manual) comprises either (a) genuine disorders that should be included within the main body of the DSM; or (b) ersatz-disorders that serve a practical role for psychiatrists dealing with patients from certain cultures but will one day be eliminated or assimilated by bona fide DSM classifications. In support of these views I draw on claims from two key themes in the philosophy of science: (1) the claim that all folk (that is, non-scientific) explanations for phenomena are thoroughly theoretical and therefore fallible; and (2) the occurrence of theoretical elimination in the history of science. I contend that any ersatz-disorders located in the DSM that are judged to be radically false do not differ in kind from eliminated theories in the history of pre-science.

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1. Introduction

The American Psychiatric Association (APA) includes a distinct appendix of 'Culture-Bound Syndromes' (CBS) in the Diagnostic and Statistical Manual of Mental Disorders (DSM), while also including some disorders that are plausibly 'culture-bound' but occur frequently in North America (such as anorexia) within its main corpus. Despite the complexities of identifying exactly what is meant by the term 'culture', there is an intuitive sense in which we can grasp the concept: CBS uniquely arise within certain cultural groups or ethnicities. This paper questions the legitimacy of this category of disorders, while also acknowledging the extent to which qua a practicable psychiatric manual there is a place for them within the DSM. I argue that it is likely that some of the disorders categorised as CBS ought to be included within the corpus of the rest of the DSM. Others should be regarded in a more pragmatic, nuanced fashion, as likely to be eliminated in favour of what we might term 'legitimate' disorders.

The paper is divided into four main sections: Section 2 examines the DSM conception of CBS and shows it to be ambiguous and unstable. Sometimes the DSM takes CBS to be culture-bound in the sense of 'culturally caused', and sometimes it takes CBS to be 'folk disorders' (that is, unscientific classifications of abnormal

behaviour). Section 3 considers the prospects for folk posits in general. It focuses on two key themes in the philosophy of science: (1) the claim that all folk (that is, non-scientific) explanations for phenomena are thoroughly theoretical and therefore fallible; and (2) the occurrence of theoretical elimination in the history of science. Section 4 returns to the DSM and makes some revisionary suggestions about the status of current CBS in the DSM. Finally, Section 5 draws some broader conclusions about the prospects for CBS within future editions of the DSM and comments on some potential interim concerns.

2. The classification of CBS

2.1. The ambivalence of the DSM

The DSM includes CBS in Appendix I, which is subdivided (APA, 1994, pp. 897–903). The first part outlines a 'cultural formulation' for their diagnosis (that is, a set of criteria which define CBS) (*ibid.*, pp. 897–898). The second part sets out, in further detail, what is understood by the term 'CBS' and provides a glossary of the most commonly encountered CBS in clinical practice in North America (*ibid.*, pp. 898–903). In this section I appraise the criteria given

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for CBS, as described in the DSM, highlighting some tensions in this formulation.

How does the DSM define CBS? The criteria of the first section of the appendix are entitled (*ibid.*, pp. 897–898): (1) 'Cultural identity of the individual'; (2) 'Cultural explanations of the individual's illness'; (3) 'Cultural factors related to psychosocial environment and levels of functioning'; (4) 'Cultural elements of the relationship between the individual and the clinician'; and lastly, (5) 'Overall cultural assessment for diagnosis and care'. These categories merit detailed examination.

Prima facie, the first criterion appears particularly important given the nature of these disorders as peculiarly cultural but, as I argue in Subsection 3.2, it is a fairly indistinctive stipulation, since 'culture' (even a narrow, 'ethnic' understanding of the term) also plays a role in the aetiology and diagnosis of other CBS mental disorders listed within the main DSM-IV classification, as the DSM acknowledges (*ibid.*, pp. xxxiv, 898). This leads us to ask: why do we require further criteria for defining CBS, if they are easily contained in the rest of the manual? As we will see, this hints at the conceptual flaws of the classification.

The second criterion is equally problematic: the DSM recommends that the cultural explanations for an individual's illness can be revealed via identification of:

[T]he predominant *idioms* of distress through which symptoms or the need for social support are communicated (e.g., "nerves", *possessing spirits, somatic complaints, inexplicable misfortune*), the *meaning* and *perceived severity* of the individual's symptoms in relation to norms of the cultural reference group, any *local illness category* used by the individual's *family and community* to identify the condition, the *perceived causes or explanatory models* that the *individual and the reference group* use to explain the illness, and current *preferences* for and past experiences with professional and popular sources of care. (*ibid.*, p. 897–898 [italics added])

The references to cultural explanations (italicised, above) are clear: the use of scare quotes to refer to theoretical posits such as 'nerves', and the reference to *idiomatic* values or norms indicate that the DSM regards these particular explanations for mental disorders as *folk theoretical*. However, there is complete neglect, on the part of the DSM, to elaborate in any further detail on whether such idiomatic descriptions and explanations are pernicious: instead, we are presented with the mere hint that this is the case, with devices such as scare quotes.

The third criterion also invokes cultural theories as a means of understanding and diagnosing these—apparently special—CBS; it advises clinicians to:

[N]ote culturally relevant interpretations of social stressors, available social supports, and levels of functioning and disability. This would include stresses in the local social environment and the role of religion and kin networks in providing emotional, instrumental, and informational support. (*ibid.*, p. 898)

The second sentence of this clause may not follow from the first. While the first sentence asks diagnosticians to consider 'interpretations' of stressors, the second sentence invokes no such interpretation: rather, diagnosticians are requested to take into account *actual* 'stressors in the local social environment'. The ambivalence is subtle: are we to consider the relevant interpretations of such stressors to be culture-bound in a pernicious (that is to say, misleading) sense—one that is at odds with how science might describe such stressors? Or are the cultural factors not folk theoretical, but rather, the aetiological posits of scientific explanations for the behaviour in question? In short, is the 'culturally relevant sense' one that employs cultural (qua folk) theories as *explanations*, or is it one that merely invokes culture-specific *stressors*? Equivocations such as

these reveal CBS as a theoretical hotchpotch. Either we concede that CBS are formulated in folk theoretical terms, or we examine the aetiology of such behaviour by employing scientific methodology and explanations. We cannot sensibly do both.

The fourth criterion is similarly steeped in references to the use of folk theories in making diagnoses; yet, this clause also underscores the uneasy alliance of such classifications with scientific accounts of behaviour:

Indicate *differences in culture* and social status between the individual and the clinician and *problems that these differences may cause in diagnosis and treatment* (e.g., difficulty in communicating in the individual's first language, in *eliciting symptoms or understanding their cultural significance*, in negotiating an appropriate relationship or level of intimacy, in *determining whether a behaviour is normative or pathological*). (Loc. cit. [italics added])

The references to 'differences in culture' and the 'problems that these differences may cause in diagnosis and treatment' are straightforward admissions of the existence of competing, theoretical explanations for such behaviours. Moreover, the competition between idiomatic, folk explanations and scientific explanations results in tension which undercuts the suggestion propounded in the third category that 'culturally relevant interpretations of social stressors' might be construed as posits of scientific theories.

Finally, the fifth criterion notes:

The formulation concludes with a discussion of how cultural considerations specifically influence comprehensive diagnosis and care. (Loc. cit.)

This criterion is heavily pragmatic in tone: the advice is, apparently, to formulate care according to a hybrid of local, ethnic (which may include 'folk') theories on the diagnoses and treatment of behaviour, while also invoking the best, relevantly similar diagnoses and treatment for non-CBS DSM-IV classifications. Once again, the DSM is noncommittal over the theoretical maturity of cultural explanations within its classification of CBS. This indicates a remarkable inattentiveness to the underlying classificatory status of *both* non-CBS and CBS within the manual.

The five diagnostic criteria exhibit an incongruous amalgam of support for, as well as serious misgivings about the folk theoretical descriptions and remedies that purportedly underlie CBS. The pragmatic pronouncements which advise clinicians to forge hybrid diagnoses and treatment for patients further attest to the instability of the DSM stance. These tensions are strongly upheld in the second section of the CBS Appendix, in a preamble to the CBS glossary. Consider the following:

The term *culture-bound syndrome* denotes recurrent, locality-specific patterns of aberrant behaviour and troubling experience that may or may not be linked to a particular DSM-IV category. Many of these patterns are indigenously considered to be 'illnesses', or at least afflictions, and most have local names. Although presentations conforming to the major DSM-IV categories can be found throughout the world, the particular symptoms, course, and social response are very often influenced by local cultural factors. In contrast, culture-bound syndromes are generally limited to specific societies or cultural areas and are localized, folk, diagnostic categories that frame coherent meanings for certain repetitive, patterned, and troubling sets of experiences and observations. (*ibid.*, p. 898)

The first sentence suggests the possibility of each CBS being some sort of variant of a non-CBS. This indicates that: (a) such disorders are bona fide (to the extent that they invoke scientific explanations); therefore (and problematically), (b) such CBS are not different in kind from non-CBS. However, the next sentence appears to revoke the interpretation that these CBS are in any sense a mature

category of disorders, whether otherwise different in kind from non-CBS or not. Once again, we find scare quotes in the text and the suggestion that such disorders should be regarded with scepticism pending further, scientific enquiry. Yet, the passage continues with the apparent endorsement of the notion that CBS are importantly distinct from non-CBS. Rather, CBS are a result of peculiarly local, yet seemingly superficial cultural factors, which give rise to mere variants of non-CBS. The final sentence in the passage muddies the issue further, by proposing that CBS are both “localised” and “folk” in nature. Once again, we are left pondering: are CBS distinct from non-CBS in any significant sense? Are CBS mature classifications and ‘cultural’ to the extent that they result from particular, cultural-bound causes? Or are CBS merely immature folk classifications which upon further examination will be assimilated by non-CBS classifications? As if to underscore these ambiguities further, the closing remarks on CBS in the DSM are:

There is seldom a one-to-one equivalence of any culture-bound syndrome with a DSM diagnostic entity. Aberrant behaviour that might be sorted by a diagnostician using DSM-IV into several categories may be included in a single folk category, and presentations that might be considered by a diagnostician using DSM-IV as belonging to a single category may be sorted into several by an indigenous clinician. Moreover, some conditions and disorders have been conceptualized as culture-bound syndromes specific to industrialized culture (e.g., Anorexia Nervosa, Dissociative Identity Disorder), given their apparent rarity or absence in other cultures. It should be noted that all industrialized societies include distinctive subcultures and widely diverse immigrant groups who may present with culture-bound syndromes. (Loc. cit.)

The claim that each CBS represents a ‘folk category’ combined with the assertion that there is ‘seldom a one-to-one equivalence of any culture-bound syndrome with a DSM diagnostic entity’ suggests that such CBS *may yet* be fragmented into, and assimilated by, mature, non-CBS categories. These claims are compounded by the declaration—which constitutes a curiously ‘explicit *reductio ad absurdum*’ (if such is possible)—that the CBS of Appendix I are not, in fact, different in kind from any CBS listed within the main DSM-IV classification. The elucidatory exemplifications of CBS, such as Anorexia Nervosa, which are also avowedly ‘culture-bound’, constitute an outlandish—though accurate—disclosure which appears to undermine the very need for CBS.

It seems that one cannot deploy any principle of charity with regard to how we should understand CBS, since there is no discernable consistency nor coherency within the manual in regard to their classification. Worse still, the DSM presents us with two notions of CBS, neither of which will do. The first is the claim that CBS are bona fide, culturally caused disorders: the upshot, however (conceded by the DSM), is that Appendix I CBS do not, therefore, differ in kind from CBS appearing in the main DSM-IV classification. The second notion of CBS suffers from the contrary complaint: qua ‘folk’ disorders, the DSM variously intimates that CBS have (as yet) no scientific standing; yet, somewhat incongruously, this is the only genuine sense in which such disorders might be said to differ from DSM-IV classifications.

2.2. A legitimate but trivial sense of ‘culture-bound’

In this section I elaborate my claim that in so far as CBS are bona fide, they do not constitute an especially distinctive kind.

We can specify two different senses of ‘cultural’: a broader sense, which we might claim is universal to all human cultures, and a narrower sense, which pertains to specific, local or ethnic groupings. In terms of the broadest understanding of culture we

might contend that all behaviour is cultural to the extent that we depend upon inculcation into a social grouping, friendship, and so on. It seems obvious that deficits in culture (broadly understood) may give rise to any of a number of biological, physiological or psychological problems. As such, we would not wish to attribute any such resultant disorders to something peculiarly ethnic or local. Rather, we would say, the cause is attributed to the absence of some universal, ‘human’ requisite.

Construed in a narrow way, ‘cultural causes of disorder’ can be understood to refer to group-specific, causal factors that give rise to specific disorders. Consider the eating disorder Bulimia Nervosa: a disorder that is listed within the main DSM-IV classification. Bulimic individuals undergo at least twice-weekly episodes, over at least a three-month period, of bingeing on food and then purging (*ibid.*, p. 589). The process of bingeing and purging takes place during what the DSM states is a “discrete period of time . . . usually less than two hours” (loc. cit.). According to the DSM, this is a disorder that appears in industrialised countries and 90% of individuals concerned are female (loc. cit.). A cursory analysis of the occurrence of Bulimia Nervosa in industrialised societies, and its diagnostic features, immediately suggests the following, causally relevant factors in precipitating the disorder: (1) access to large amounts of food; (2) a discrete means by which to purge the food; and, in many cases, (3) access to laxatives, enemas or diuretics.

It appears that this is a disorder of industrialised cultures to the extent that features of such cultures include: (a) a level of affluence whereby individuals have access to large amounts of food; (b) private space and time to binge and purge; and (c) access to various medications. These features pertain to relatively prosperous countries, and may explain why such disorders are rare in developing countries.

We can add that such contingent, local causes do not mark CBS as a peculiar kind of phenomenon: Cooper (2007, pp. 55–56, following Hacking, 1998) asserts:

[M]ental disorders can be perfectly real and not found everywhere . . . [I]t is quite normal for members of a natural kind to be found only in certain places and at certain times, because they exist only under certain conditions: pandas are found only where there is bamboo; house martins will live only where there are suitable nesting sites . . . [Similarly] kinds of mental disorder may require particular environments . . . Where there is no heroin there are no heroin addicts . . . Posttraumatic stress disorder is caused by trauma. There is thus more of it where there are wars or natural disasters, and less of it where people's lives tend to pass peacefully. [Italics added]

Indeed, the local causes of mental disorders may be biological or they may occur on a psychological level (*ibid.*, p. 56). Disorders may be categorised as culture-bound (in the narrow sense) to the extent that they are caused by factors that largely occur only in a particular cultural grouping. ‘Cultural causes of disorders’ are not united by some specific, ‘cultural-level’ aetiology. Rather, they may be caused by one or many factors belonging to a number of ontological levels (from the biochemical to the psychological).

Are there any CBS Appendix I classifications that can be understood in this way; that is, disorders that are caused by cultural factors that are specific to certain groups? One possible example is the disorder ‘*taijin kyofusho*’, which (almost uniquely within the CBS glossary of classifications) bears no mention of ‘folk’ symptoms or diagnoses. It is described as:

A culturally distinctive phobia in Japan, in some ways resembling Social Phobia in DSM-IV. This syndrome refers to an individual's intense fear that his or her body, its parts or its functions, displease, embarrass, or are offensive to other people

in appearance, odour, facial expressions, or movements. (APA, 1994, p. 903)

We can observe that this disorder may yet be judged insufficiently distinct from Social Phobia to merit a place as a distinct classification. This highlights another important aspect of determining bona fide CBS from the much weaker case of cultural variants of particular disorders. As Littlewood (1985) and Cooper (2007, p. 56) independently assert, there is a role for cultural variants in the *content* of particular disorders, which does not thereby threaten the *form* of those disorders. Cooper explicates this notion with a comparison of variations in natural kinds (loc. cit.):

[T]he tomatoes in my greenhouse grow bigger and quicker than those outside because of the extra warmth, and animals regularly have thicker fur in colder climates. As a consequence of such effects, members of the same natural kind can look different in different conditions.

Similarly, there may be differences in the content of, for example, hypochondriacal fears, psychotic delusions, or depressive thoughts from culture to culture, or even intra-culturally, from individual to individual. Yet, it is clear that none of these variations is sufficient to warrant reclassification into distinct disorders, from culture to culture, or even from individual to individual.

If we understand CBS to be disorders with specifically cultural causes, we might properly understand the demarcation between CBS and non-CBS to be grounded, respectively, along the lines of particular human niches and universal human needs. However, the layout of the DSM manifestly (and indeed, self-avowedly—see APA, 1994, pp. xxxiv, 898) does not follow this principled distinction between the categorisation of non-CBS (within the main DSM-IV classification) and a fully comprehensive CBS listing (within a separate appendix). By the most charitable interpretation of the DSM, this would seem to underscore a pragmatic basis for its particular classificatory structure; nonetheless, it is apparent that the hotchpotch formulation of CBS propounded in the DSM indicates that such a reading is 'generous to a fault'. In Section 5 I return to the issue of pragmatic concerns. But first I turn to the second sense of 'culture-bound' presented in the DSM: the notion of folk disorders; in the Section 3 I examine the notion of folk theoretical posits more generally, before examining the DSM.

3. The prospects for folk posits in general

When we consider the history of science we find that the prospects for posits of folk theories are: (1) assimilation and retention within mature scientific theories; (2) some revision and subsequent assimilation within mature scientific theories; or (3) elimination by future scientific theories.

It might seem that in so far as CBS are observable they are securely based and not candidates for elimination. However, even observable entities can be fallible. If we accept the claim that all perceptions and observations are thoroughly theory laden

(Churchland, 1979; Hanson, 1958; Kuhn, 1970; Sellars, 1956), the upshot is that qua theories, all our perceptions are fallible. Consider, for example, the perceptual overhaul that results from the effort of deploying Copernican astronomy to our observations of the night sky. When the observer learns to view the motions of the planets in Copernican terms, rather than in a 'commonsensical' manner, he notices that:

[T]he Sun is much farther away than the Moon, that Venus is about to pass 'on the inside', that the Month is April, that the North Pole is up to the right, and so forth... His brow need no longer furrow at the changing appearance of one entire hemisphere of his visual environment: the shifting configurations of the solar family are now visually recognisable by him for what they are. (Churchland, 1979, p. 34)

Churchland's example brings to bear Sellars' demarcation between two domains of frameworks, or what he calls 'images', for perceiving and understanding the world (1962, cited in 1963, p. 6). Sellars terms our common sense theories of the world our 'manifest image', in contradistinction to the 'scientific image' (loc. cit.). He views both images as crucial to how we see ourselves in the world. However, when the two images clash, Sellars contends that the scientific image must take precedence over the manifest image: in short, in such cases we must eliminate the manifest image in favour of the scientific image.¹ Similarly, Churchland contends that we should opt for superior explanatory theories when faced with any two such competitors, regardless of whether the better theory (currently) appears to be counter-intuitive.

Indeed, progress in the history of pre-science (that is, the transition from folk theories to scientific theories) appears to support the view that the wholesale elimination of an observational ontology *can* occur with the displacement and replacement of a theory by its successor. Examples of folk theoretical elimination include the ontological displacement of the passions of the gods as observed in the seas and wind; the starry spheres of the heavens; and witches. As Churchland notes (1982, cited in 1989, p. 141), any of these things were 'as "observable" as you please, and they were widely "observed" on a daily basis'. He counsels:

We are too often misled... by our causal use of "observes" as a success verb: we tend to forget that, at any stage of our history, the ontology presupposed by our observational judgments remains essentially speculative and wholly revisable, however entrenched and familiar they have become. (Ibid., p. 141)

Nonetheless, the claim that all folk theoretical posits have been (and/or, by inference, will be) successively eliminated distorts the record of science history and what we can glean from it: the posits of folk theories (and thus, the 'observables' of such theories) can also be *assimilated* by successor theories.² In the case of what has been termed 'folk psychology', for example, it is clear that the so-called 'propositional attitude' posits of 'beliefs' and 'desires' have been assimilated and upheld within current social and developmental psychology: thus, no such ontological elimination from folk to

¹ Sellars was open-minded about the risk of usurpation of the manifest image by the scientific image in any domain. Churchland is a great deal less sanguine about the future of folk theories (1981, cited in 1989, p. ???). Keeley (2006, pp. 7–10) also observes the influence of Sellars' views on Churchland's work.

² This paper seeks to avoid the controversial issues associated with the so-called 'pessimistic meta induction' (PMI) over history of science (advocated by Laudan (1981))—a thesis which is somewhat tangential to our concerns (but one that poses no incompatibility with the rather uncontroversial reading of science history that I am presenting). The PMI is a thesis that is usually associated with *scientific* theories; it is the claim that science history is replete with theories that were once held to be successful (given their predictive and explanatory prowess) and were therefore deemed to be true, but which were later discarded and thus deemed to be 'false'. Hence, the claim goes, inductive inference tells us that we cannot depend on the success of current scientific theories to be indicative of their truth. The thesis undercuts a particular view of truth which interprets theories as attempts to describe a world that exists independently of us—this view of truth is termed the '*correspondence theory of truth*'. Thus, the PMI (as presented by Laudan (1981)) does not claim that all theories (and their posits) will go by the board—rather, it endorses the view that we cannot draw a dependable link between theory success and truth.

scientific psychology has occurred.³ In such cases of theory development there is no radical ontological overhaul (or 'gestalt' shift). Instead, there is the more moderate, theoretical refinement of what is understood by the folk ontological posits and observables. This is what constitutes increased explanatory prowess (and thus, scientific progress).

The fallibility of our theory-laden perceptions pertains to mental disorders no less than to other observable phenomena. Consider the example of homosexuality. Homosexuality was eliminated from the DSM-III-R (1987).⁴ Yet, most Americans at that time still considered homosexuality to be a mental disorder (fifteen years after this amendment, in 2002, a poll (Pew Research Centre, 2002) indicated that 49% of Americans judged homosexuality to be a disorder). Here we have a case of differing folk intuitions about mental well-being (gay lobbyists defending homosexuality as mentally normal, with most of the American populace disputing this claim). In this case, 'folk' views about what constitutes normal behaviour are influenced by scientific explanations. We find that there is displacement of folk explanations for homosexuality (the claim that homosexuality is an 'evil sexual perversion' that can be cured by 'purging' the individual of 'evil') by superior scientific explanations (genetic grounds and evidence from developmental and evolutionary psychology).⁵ What is crucial is that the behaviour in question, in this case the putative 'evil perversion' of homosexuality, can be interpreted as just as apparently 'observable' as any posits in today's best scientific theories (genes, cells, and so on). Section 4 applies these views to the DSM classification of CBS.

4. The DSM's approach to CBS as folk posits

The DSM's references to CBS as being folk theoretical in nature suggest four possible outcomes for the future classification of such (currently) under-investigated disorders. We can expect CBS which are listed in Appendix I and contain references to 'folk' idioms to be classified or reclassified as follows, pending further scientific investigation:

1. retention of current folk CBS classification via its upgrading into a new, bona fide CBS;
2. refinement of current folk CBS classification via its upgrading into a new, bona fide CBS;
3. assimilation of current folk CBS into a current DSM disorder (as a variant of a current disorder);
4. elimination of the current folk CBS.

The first prospect is clearly the most desirable result, since this would vindicate current classifications and necessitate minimal revision to the DSM. Nonetheless, given what we know about the history of pre-science (see Subsection 2.2) it is unlikely that as folk methodologists we always hit on the correct explanations for behaviour. Nonetheless, it is apparent that certain folk theories—such as folk psychology (with its posits of beliefs and desires)—

may be largely upheld as mature scientific theories, even if they are subject to refinement and modification.⁶ We can note that if such disorders are largely upheld they will then be legitimately regarded as 'CBS'. In that sense, they will have the same classificatory status and standing as such CBS (listed, as we have seen, within the main classification corpus of the DSM) as Anorexia Nervosa, Bulimia Nervosa and Dissociative Identity Disorder.

Are there any plausible candidates for 'sanctioned CBS status' within the CBS Appendix? I have already mentioned *taijin kyofusho* (APA, 1994, p. 903), a CBS with no folk references. Another possible candidate is the disorder '*koro*' (a South and East Asian syndrome that is marked by 'episodes of intense anxiety that the penis (or in females, the vulva and nipples) will recede into the body and possibly cause death' (APA, 1994, p. 900)). This disorder is tendered as a prima facie 'upgrade case' for two reasons. First, as it is listed, there are no references to similarities with other DSM disorders which indicates that it may not be a mere variant of another disorder. Second, the references to purely folk diagnoses and explanation within the DSM description of *koro* are minimal. In so far as these are reasons to regard it as a candidate for upgrade, *koro*—and, similarly, the Latino 'disorder' *ataque de nervios* (*ibid.*, p. 899), along with *taijin kyofusho*—may stand alone in the DSM as future a bona fide CBS.

The second possible outcome is assimilation into currently listed non-CBS. Such assimilation would indicate that such disorders are not culture-bound in a narrow sense, given that any such assimilating disorders are currently listed in the corpus of the DSM, and therefore the cultural backdrop of the disorder is apparently redundant. Thus, it is most unlikely that bona fide CBS, which are currently listed within the main DSM-IV classification, will act as assimilating disorders. There are numerous examples of CBS listed within the DSM that are described as similar to non-CBS DSM disorders. At the very most, this immediately suggests the possibility that such CBS may be superficial, cultural variants of these mature categories of disorder. Examples might include: *bouffée délirante*, *falling-out* or *blacking out*, *brain fog*, *nervios* and *shenjing shuairuo* (*ibid.*, pp. 899–902). To take just one example, *bouffée délirante* is described in Appendix I of the DSM as follows (*ibid.*, pp. 899–900 [italics added]):

A syndrome observed in West Africa and Haiti. This French term refers to a sudden outburst of agitated and aggressive behaviour, marked confusion, and psychomotor excitement. It may sometimes be accompanied by visual and auditory hallucinations or paranoid ideation. *These episodes may resemble an episode of Brief Psychotic Disorder.*

The possibility of this syndrome being assimilated into Brief Psychotic Disorder cannot be ruled out. Certainly, in this case, it does not appear that the syndrome need even be regarded as a distinctive cultural variant of this disorder.

Finally, the elimination of currently listed CBS cannot be ruled out. Just as in those cases of folk theory elimination in the history of pre-science (whereupon posits and 'observables' are eliminated

³ Paul Churchland endorses a rather more pessimistic view of folk theories (infamously, including folk psychology). Indeed, he defends a particularly strong version of the pessimistic meta-induction [see Footnote 7] in support of 'eliminative materialism' (the theory that folk psychology is radically false): Churchland argues that the history of pre-science shows us that all folk theories except folk psychology have been eliminated, therefore 'it would be a miracle if we had got that one right the very first time' (1988a, p. 46). Churchland's eliminative materialism is highly problematic, not least because its self-refuting and (as noted) mature successful scientific psychology actually invokes folk psychological posits.

⁴ The displacement of homosexuality from the DSM was protracted. The seventh printing of the DSM-II (1974) modified the diagnosis to 'sexual orientation disturbance'; in DSM-III (1980) this was changed to 'ego dystonic homosexuality'. The current DSM-IV-TR contains the category 'sexual disorder not otherwise specified', which includes 'persistent and marked distress about one's sexual orientation'. These modifications sought to medicalise the individual's perception that he or she was abnormal, rather than maintain the medicalisation of homosexuality per se. Cooper notes that these piecemeal amendments to the DSM were an attempt by the APA to find middle ground between lobbyists for the gay community and their detractors (2004, pp. 6–7).

⁵ We can see this trickle-down effect from science to folk understanding in numerous cases. Consider, for example, the fairly widespread folk notion that various forms of substance abuse are diseases and associated with 'addictive personalities'.

⁶ Consider, for example, the addition of '*tacit*' beliefs and desires within scientific psychology—an augmentation that has been, to some extent, embraced by folk psychology in a sort of 'trickle down' effect.

tout court), the possibility of wholesale elimination of some current CBS, in the wake of further scientific scrutiny, is likely. In this way, once again, folk theories are no different in kind from folk theories occurring in earlier times. Paul Churchland describes the case of the outright elimination of 'witches' from Western folk theories of behaviour by the scientific explanations of psychosis:

Psychosis is a fairly common affliction among humans, and in earlier centuries its victims were standardly seen as cases of demonic possession, as instances of Satan's spirit itself, glaring malevolently out at us from behind the victims' eyes. That witches exist was not a matter of any controversy. One would occasionally see them, in any city or hamlet, engaged in incoherent, paranoid, or even murderous behaviour. But observable or not, we eventually decided that witches simply do not exist. We concluded that the concept of a witch is an element of a conceptual framework that misrepresents so badly the phenomena to which it was standardly applied that literal application of the notion should be permanently withdrawn. Modern theories of mental dysfunction led to the elimination of witches from our serious ontology. (Churchland, 1988b, p. 44)

Many of the CBS listed in Appendix I are similar contenders for elimination. They include: *bilis* and *colera*, *dhat*, *hwa-byung*, *mal de ojo*, *rootwork*, *spell*, *shin-byung*, *susto* and *zar*. To take the example of *rootwork*, the DSM describes this as follows:

A set of cultural interpretations that ascribe illness to hexing, witchcraft, sorcery, or the evil influence of another person. Symptoms may include generalised anxiety and gastrointestinal complaints (e.g. nausea, vomiting, diarrhoea), weakness, dizziness, the fear of being poisoned, and sometimes being killed ('voodoo death'). 'Roots', 'spells', or 'hexes' can be 'put' or placed on other persons, causing a variety of emotional and psychological problems. The 'hexed' person may even fear death until the 'root' has been 'taken off' (eliminated), usually through the work of a 'root doctor' (a healer in this tradition), who can also be called on to bewitch an enemy. 'Rootwork' is found in the southern United States among both African American and European American populations and in Caribbean societies. It is also known as *mal puesto* or *burjeria* in Latino societies. (APA, 1994, p. 902)

Posits such as 'hexes' and processes such as 'bewitchment', 'evil influence' and 'voodoo death' are certainly candidates for elimination.

5. CBS: assimilate or eliminate?

As it stands, the classification of CBS within the DSM embraces putative disorders that invoke different levels of theoretical maturity. As a result of systematic scientific investigation into the explanations for the behaviour expressed by those with these 'disorders', we can expect one of four outcomes with respect to each CBS in Appendix I: (1) retention as a bona fide disorder, caused by culture-specific factors, and therefore correctly listed as legitimate; (2) retention and refinement of the 'disorder' under a scientifically improved description, which is justifiably deemed to be a CBS; (3) assimilation of the 'disorder' as a variant of a currently listed (and furthermore, justifiably listed) non-CBS; (4) elimination of the 'disorder' outright as invoking false explanations for behaviour.

This paper is a call for serious review of the DSM classification of CBS. Given that the DSM openly lists what we can term 'legitimate CBS' within the main corpus of the manual, we might argue that there are grounds for complete reappraisal for the organisation of the DSM. In an ideal manual, the definition of a CBS would

derive from mature scientific explanations, based on narrowly construed cultural causal factors.

However, the DSM does indicate two pragmatic grounds for the inclusion of CBS, even folk theoretically couched CBS, in a separate appendix. These are: (a) ease of use of the manual; and (b) as a 'stop-gap' measure for folk theory-based CBS. While both grounds have some merit, the DSM needs to present all folk theory-based CBS as suspect, in less equivocal terms than it presently does.

The notion that CBS should be inserted in an appendix at the end of the manual is asserted in the Introduction to the DSM (APA, 1994, pp. xxxiii–xxxiv [italics added]):

Special efforts have been made in the preparation of DSM-IV to incorporate an awareness that the manual is used in culturally diverse populations in the United States and internationally. . . The provision of a culture-specific section in the DSM-IV text, the inclusion of a glossary of culture-bound syndromes, and the provision of an outline for cultural formulation are designed to enhance the cross-cultural applicability of DSM-IV. It is hoped that these new features will increase sensitivity to variation in how mental disorders may be expressed in different cultures and will reduce the possible effect of unintended bias stemming from the clinician's own cultural background.

The manual is apparently intended for international use. Nonetheless, the APA also admits (p. 899) that inclusion of CBS in an appendix is predominantly designed to help *North American* clinicians to identify disorders that are presented by individuals from diverse cultural backgrounds. Given that the manual is forthright about the inclusion of CBS such as Anorexia Nervosa within the main DSM-IV classification, it might be argued that CBS that are not narrowly caused by and 'culturally typical' of North America, are deserving of a separate Appendix *purely for ease of reference*. The intimation is that such a separate listing provides clinicians in North America with fast access to less recognised, less prevalent disorders.

However, we might contest the provision for an appendix wholly devoted to these 'less common CBS' on the grounds that: (1) if they are not uncommon, clinicians ought to have a good working knowledge of them anyway, and there is thereby some degree of cultural chauvinism being perpetuated within the DSM layout; and (2) if such disorders are uncommon, we need to ask whether an appendix devoted to a more inclusive 'uncommon disorders' category (which might also embrace non-CBS) is more appropriate. Certainly, on grounds of practicality one would not wish to contest (2).

As we have seen, the second pragmatic concern of the DSM—the inclusion of the appendix—as it stands, as a stop-gap measure, is hinted at in the tentative recommendations for what amount to 'pidgin' diagnoses and treatment. Given that individuals may present with symptoms through their own (folk theoretical) understanding, should the clinician turn them away? Should he suggest that such individuals turn to folk remedies or practitioners of 'folk medicine'? These are practical problems that clinicians may face and, as such, we need sensible solutions. Some understanding and deployment of 'local', cultural remedies coupled with mainstream, scientific medications and treatments (where the clinician considers symptoms to be similar to DSM-IV classifications) provides such a response by (conceivably) inducing a placebo-effect (where folk remedies fail) and, where feasible, by providing science-based treatments. Nonetheless, unless such pragmatic responses are matched by a programme of research that continues to probe such putative disorders (and, it is hoped, in a trickle-down process, thereby to educate 'folk') the long term legitimacy of such an appendix in the DSM will be seriously undermined.

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