

Culture, Cognition & Explanation

Dominic Murphy

University of Sydney

Malgri – Gulf of Carpentaria

- Symptoms include headache, abdominal pain and bloating, and often pain in lower extremities too. Sometimes vomiting.
- Local explanation: it is caused by eating terrestrial food and then going into seawater without washing in freshwater, or eating seafood and then going ashore without washing in salt water
- But only if you are not in your own totem zone, so the local spirit does not recognise you

Culture Bound Syndromes

- Yarragara [sea eagle] is boss of the sea around that part. I can eat swamp turtle belong to that land and I can go down to that sea and I can't *malgri*. . . If somebody doesn't belong to my country he will *malgri* there. If I go to South Side, Sydney Island way, I can *malgri* there – not my country. If people walk about a long time at my place, like Fred, they're all right – the sea gets their smell and knows them. It's strangers that *malgri* all the time.
- (Cawte 1974, p. 110)

We recognise widespread cultural variation in mental illness.

- ▶ Some conditions appear to vary across cultures.
- ▶ Others appear to be unique to one culture.

- ▶ Are they rare and exotic exceptions to universal mental illness, or particular forms of universal mental illness? Or neither?

- ▶ Are there culture-bound *WEIRD* conditions?
(Henrich et al 2011)

But also

- There are obvious culturally-dependent aspects to diagnoses that are given in the west.
- Some are just local colour – such as the content of delusions
- But some seem to show a culturally dependent epidemiology eg eating disorders

The plot

- Quick overview of culture in the DSM, to set up the terrain
- How do we combine cultural and neurobiological explanations?
- (Preview: I have no idea)

Culture-Bound Syndromes

- are patterns of behaviour, cognition and emotion that are generally limited to, and bound up with, specific societies or socio-cultural areas, but are regarded as forms of mental illness rather than merely cultural differences

Latah

- ▶ “Hyperstartle”: very sensitive startle reflex, echolalia, mimicry.

- ▶ Related to?

Tourette’s

Jumping (French Canada)

Myriachit (Siberia)

Baah-Tsi (Thailand)

Mali-mali/Silok (Phillippines)

Echolalia also found in e.g: Pibloktuq (Inuit)

Ataque de Nervios

- Description: Uncontrollable shouting, attacks of crying, trembling, verbal or physical aggression, dissociative or seizure--like episodes, fainting spells. Onset related to stressful family event, such as death or conflict.
- Location: Caribbean Latinos, also Latin America and Latin Mediterranean groups

Koro

- • Description: Fear that the penis (or occasionally vulva and nipples) will retract into the body and cause death.
- • Location: Malaysia, other parts of South and East Asia. Can occur in epidemics.

DSM-IV

- 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 culture areas and are localized, folk, diagnostic categories that frame coherent meanings for certain repetitive, patterned, and troubling sets of experiences and observations. (DSM-IV-TR, 898)

Are DSM categories universal?

- Generally, the authors of DSM-IV seemed keen to draw a sharp line between the 'cultural universality' of DSM disorders, and the 'cultural specificity' of CBS. Non-western conditions were seen as either CBS or as specific and idiosyncratic expressions of western conditions.

From DSM-IV to DSM-5

- DSM-5 has moved to a model of “cultural concepts of distress” (p.758) which are ways that “cultural groups experience, understand and communicate suffering, behavioural problems or troublesome thoughts and emotions”.

What DSM-5 didn't do

- Widen prior diagnoses to include non-western phenomena;
- e.g is *ataque de nervios* a kind of panic disorder?
- is *wacinko* a kind of reactive depression ?
- Some psychiatrists working with non-western groups pushed for this

What DSM-5 also didn't do

- Ask whether some DSM diagnoses might be CBS
- Muscle dysmorphia (“bigorexia”); symptoms include weightlifting and steroid abuse; how many people in the third world are doing that?
- All the studies are western

Three basic options

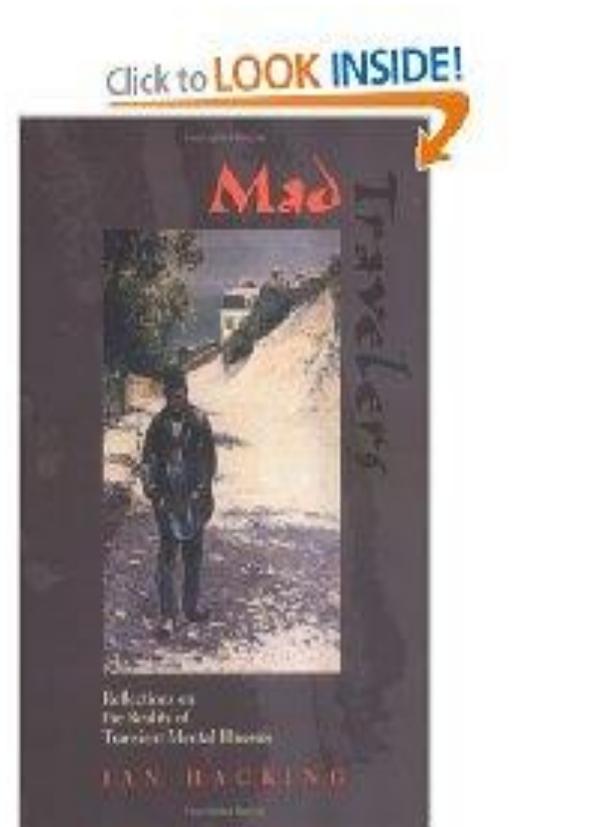
- a) CBSs are not disorders
- b) all CBSs can be incorporated in DSM disorder categories or other universal categories (the **universalist** position)
- c) all mental disorders, including DSM disorders, are to be considered as CBS (the **particularist** position).

Some complications

- 1. Some symptoms show up in western cases (such as fear of/belief in penis retraction in psychiatry) but are not regarded as definitive of a disorder
- 2. Some behaviours are regarded as disorders in some places but not elsewhere
- E.g Couvade v Couvade syndrome

Another issue: transience

- Sometimes a mental illness will flare up and then disappear. Hacking's example (*Mad Travellers*) : fugue in late nineteenth century France.
- What causes the sudden arrival and departure of a condition like this?



Another issue; history

Many medieval women who aspired to saintliness greatly restricted their caloric intake.

Were they anorexic, or something else?

Nineteenth Century:
Fasting Girls



Universalism

- Kleinman 1987
- “Depression experienced entirely as low back pain and depression experienced entirely as guilt-ridden existential despair are such substantially different forms of illness behavior with different symptoms, patterns of help-seeking, course and treatment responses that though the disease in each instance may be the same, the illness rather than the disease is the determinant factor”

Universalist response to variation

- Forget the behaviour, look for a stable underlying basis to the pathology. If that remains constant across changes, then we can identify that with the condition.
- We get a universal mechanism that the disease label refers to and explains the symptoms.
- The traditional scientific tactic when faced with variation is to idealize. In psychiatry, the assumption is that variation (within or across cultures) is *pathoplastic* (Karl Birnbaum 1923) and what we want is a model of *pathogenic* processes that are shared across the diagnosis
- Does cultural variation threaten this?

Horwitz and Wakefield 2007

- “we agree with Kleinman’s distinction between disease as a universal underlying dysfunction and illness as the culturally shaped expression of a given dysfunction. . . [but] if there are indeed underlying common dysfunctions, then treatment presumably depends in large part on the science of identifying and intervening in such dysfunctions irrespective of their cultural presentation.”

Unification

- Natural corollary of the unificationist approach: cultural variation feeds into underlying pathology to produce diverse symptoms. The common pathway is where we should look.
- We get a universal mechanism that the disease label *refers to* and which *explains* the symptoms.

Problems

1. How different do two syndromes need to be before we recognise them as distinct –e.g Panic Disorder and ataque de nervios, or reactive depression and wacinko?

2. What reason do we have to believe that the underlying architecture is the same?

- Evolution?
- Experimental Data?
- How deep does culture run?

Particularism

- Is everything Local?
- Well, what evidence do we have that the underlying architecture is not common?
- Where do we look for the explanations?

An empirical dispute:

- ▶ Is the structure of the mind shared (more or less) across all cultures?
- ▶ If you want to argue like Horwitz and Wakefield you make a bet that there is enough shared structure to make general explanations in terms of neuropsychological structures worth doing.

Particularism and Universalism

- Both consistent with a picture in which culture “plugs into” psychology. Different inputs affect the psychology and produce different outputs. We could see both CBS and local versions of universal conditions as reflecting the interaction of neuropsychological architecture and transmission of local cultural forms, via the realization of the latter through mental representations.
- The crucial explanatory system here is proximal mental representation (and methodological individualism).

What does it mean to be bound to a culture?

We could explain this in terms of local systems (religion etc) or in terms of potentially global cultural forces.

If a Brazilian soccer fan commits suicide when his team loses, do we blame Brazilian cultural traditions or British cultural exports?

Is there an explanation that shifts the locus of the explanation to more distal cultural forces?

Does Culture-Bound = Socially constructed?

- *Social construction* seems like a natural way to understand what it is to be bound to a particular culture.
- We could explain the persistence and replication of syndromes using more general social theory.
- In that case, we could do psychiatry via a marriage of neuroscience and cultural transmission/evolution

But can you explain the deviant by a theory of the normal?

- if we use models of cultural transmission we are using models designed to explain the normal case and applying them to the abnormal.
- E.g Runciman 1994: “Explanation of the growth of Christianity in the third century Roman Empire has long been controversial. However, recent game-theoretic research shows how a strategy of unconditional altruism such as Christianity formally enjoined can, under certain conditions, resist invasion by defectors, free-riders and cheats. It is accordingly plausible to suggest that in the particular environment of the third century Empire this uniquely distinguishing feature of Christianity accounts for much of its otherwise surprising degree of success”

Social roles

- An Anglo-Saxon king, bishop, landowner, merchant, peasant, craftsman, soldier, priest, clerk, tax-collector, schoolteacher, servant or slave would be immediately at home in Hammurabi's Babylonia, and vice versa. In both societies, there were royal and ecclesiastical estates side by side with private landholdings, taxes paid to the king as well as dues to the church or temple, private capitalists engaged in long-distance trade for profit, an active land market, tenancy and serfdom as well as slavery and the possibility of manumission for debt slaves, written law codes, local agents of royal power liable for military or auxiliary service, administration of justice at village level, and for women, subordinate though they generally were, a right to retain a dowry and bequeath it in due course to a child or children. None of this adds up to some impressively lawlike generalization about how all 'agrarian' societies function. But it does add up to a clear demonstration of the extent to which similar role-maps reflect similar environments and similar selective pressures acting on the practices by which the roles are defined."
- (Runciman *The Social Animal*, p.120)

How far can models of cultural transmission that apply to normal minds fit the dynamics of mental illness?

- A theory designed to explain socially constructed phenomena as the interplay of representational and cultural structures will go badly wrong if CBS are in fact mental illnesses that have quite another cause.
- Are the first-rank symptoms of schizophrenia a form of social contagion?

A theory of psychological transmission

- . Put very simply, the problem is that theories of social construction work on the basis of everyone's psychological systems functioning normally, since that is what enables social learning and imitation to proceed. If psychopathology results from breakdowns in the underlying systems, then theories of cultural transmission lack one of the engines that they need to work, because normal modes of cultural transmission cannot apply to abnormal brains without some amendment.
- But we can look at some options

Sperber on belief change

- “...you used your own background knowledge and preferences to put into perspective information you were given about Clinton, and to arrive by a mixture of affective reactions and inferences at your present view. The fact that your views are similar to many other people's may be explained not at all by a copying process, and only partly by an influence process; it may crucially involve the convergence of your affective and cognitive processes with those of many people towards some psychologically attractive type of views in the vast range of possible views on Clinton. [1996 p. 106]”
- Representations have basins of attraction – maybe in the mentally ill the psychology is different enough to combine with social forces to arrive at different parts of the possible space

Runciman: Types of behaviour

- Three kinds:
- Evoked – more or less direct instinctual product of natural selection (eg fight v flight, basic emotions)
- Acquired – due to cultural transmission or social learning –eg using a longbow or a pike
- Imposed – due to authority (eg being conscripted and not deserting)
- Could there be different psychiatric dynamics across different types of behaviour?

Messy conclusion

- both social and psychological processes need to be entangled in our general understanding of psychopathology – and not just cross-culturally – it may be that we can imagine a spectrum
- if it is the case that any member of the local population will *malgri* in the right circumstances, then we might consider it a case in which cultural forces, operating on neurotypical minds, do all the explanatory work.
- At the other end, some people may suffer from widespread neuropsychological collapse, perhaps in cases of advanced psychosis or dementia. They might simply not be able to act as agents of social learning or cultural transmission in any theoretically interesting sense. Such cases would be as culturally unbound as anything human.