This volume brings together a collection of seven articles previously published by the author, with a new introduction reframing the articles in the context of past and present questions in anthropology, psychology and human evolution. It promotes the perspective of 'integrated' social science, in which social science questions are addressed in a deliberately eclectic manner, combining results and models from evolutionary biology, experimental psychology, economics, anthropology and history. It thus constitutes a welcome contribution to a gradually emerging approach to social science based on E. O. Wilson's concept of 'consilience'.

Human Cultures through the Scientific Lens spans a wide range of topics, from an examination of ritual behaviour, integrating neuro-science, ethology and anthropology to explain why humans engage in ritual actions (both cultural and individual), to the motivation of conflicts between groups. As such, the collection gives readers a comprehensive and accessible introduction to the applications of an evolutionary paradigm in the social sciences.

This volume will be a useful resource for scholars and students in the social sciences (particularly psychology, anthropology, evolutionary biology and the political sciences), as well as a general readership interested in the social sciences.

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6. Detecting Mental Disorder

Introductory Note

Who do we see as mad, and why? How do people decide that some person (possibly themselves) suffers from a mental disorder? History and anthropology tell us that in all human societies, people readily identify some forms of behavior as evidence for some dysfunction. In modern societies, we delegate final decisions about such matters to medical specialists. But that is of course a recent phenomenon (Porter, 2004). And, even in places with psychiatric experts, an individual must be identified as suffering from some disorder before medicine is involved. All this raises the question, how do people detect mental disorder?

I was surprised to find that there was very little description of these criteria in the literature. Anthropologists did describe various local interpretations and explanations of madness, e.g., as the work of spirits, a consequence of witchcraft, an imbalance in humor or elemental components of the person... but what behavior had prompted the initial perception of disorder? In brutal terms, what do you have to do to seem mad?

One might imagine that the criteria could be entirely specific to each culture, but that is certainly false. Manifestations of mental disorder are identified in strikingly similar ways in very different places. We can recognize what Horatio describes as Hamlet’s ‘wild and whirling words’ (Hamlet, I–v), as well as the hallucinations, incoherent speech, inappropriate emotional reactions, conversations with non-existent interlocutors, etc. Anthropologists who do fieldwork have little difficulty in perceiving mental disorder in the most exotic (to them) cultural environments.
In this article, I proposed that people in different cultures use the same implicit criteria for mental disorder, which derive from our intuitive psychology, sometimes called ‘theory of mind’ (Leslie et al., 2004). It provides us with interpretations of people’s observable behaviors, utterances, and gestures, in terms of things that we could not observe, such as other people’s beliefs and intentions. Our intuitive psychology works on particular assumptions about the way minds work, how perception causes beliefs, how beliefs interact with intentions, how intentions explain behavior, etc. Naturally, all these assumptions are implicit. In our everyday interactions we need not be aware of their content or their operation.

Intuitive psychology is present in all normally functioning human minds, mostly as a result of natural selection pressures for cooperation (Tomasello, 2009). Humans cannot coordinate their behavior on joint goals unless they mentally represent other agents’ intentions and beliefs. This evolutionary context explains why our intuitive psychology generally works smoothly when we interact with typical adults who would have been the cooperation partners that mattered most to our fitness, but is defeated by atypical minds, like those of infants or animals from another species. (Interaction with those two kinds of agents is handled by systems specialized in kin-selection and parenting (Hrdy, 2009) or predator-prey relations (H. C. Barrett, 2005), respectively).

This origin in cooperation has the important consequence that intuitive psychology is not just a descriptive mechanism that tells us what happened in other minds. It is also normative—it implies a description of the way a mind ought to work (Stich, 1983). But that also explains why our intuitive psychology alone does not produce any description or explanation of mental disorder. It just produces a ‘mind not working’ signal when it is defeated, a natural equivalent of the ‘syntax error’ of computer systems.

In this article I describe two consequences of these features of intuitive psychology. First, they allow us to predict which kinds of behaviors will be identified as evidence of underlying mental disorder, and which will remain ‘invisible’ to our intuitions. Second, the fact that intuitive psychology detects dysfunction but produces no representation of how it occurs creates an explanatory gap that is filled by all manner of culturally transmitted explanations, in many cases imagined agents like
witches or spirits. Interestingly, people imagine those mystical agents as endowed with the kinds of minds that our intuitive psychology expects—minds that perceive what happens around them, form beliefs on the basis of perceptions, combine desires and beliefs to form goals, and so forth (J. L. Barrett, 2000; Boyer, 2003). So it seems that in most human societies, people cannot escape intuitive psychology when they want to explain behavior—first, it triggers the intuition of disorder, and second, it is used to explain disorder.

Isn’t modern psychiatry often engaged in the same operation? Medical detection of mental disorder is of course framed by expectations of intuitive psychology. Patients are confirmed as patients because their behavior deviates from the expectations of intuitive psychology. Indeed, the catalogue of symptoms used by the American psychiatric profession, the Diagnostic and Statistical Manual (American Psychiatric Association, 1995), is mostly a list of deviations from the expectations of normative intuitive psychology. But beyond detection, the ideal of a scientific psychiatry would be to provide explanations, to describe the connections between observed behaviors and reported states of mind, on the one hand, and particular neuro-cognitive mechanisms, on the other (Murphy, 2006). Unfortunately, we are very far from having sufficiently precise computational descriptions of the neuro-cognitive processes that underpin mental dysfunction. Perhaps that is because the initial description, in terms of deviations from our theory of mind expectations, just does not capture the underlying similarities and differences in disorders. That discrepancy between our intuitions and possible underlying mechanisms is particularly clear in extreme cases of delusion, in which the patient seems to hold an irrational belief, e.g., that a part of their body is not actually theirs, that a relative has been replaced with a clone, and so forth. Interpreting delusions constitutes a formidable challenge, precisely because we cannot use any of the inferential tools supplied by our intuitive psychology (McKay, 2012). The most precise models for such delusions necessarily rely on neuroscience models that are completely alien to intuitive psychology (Gerrans, 2014). So intuitive psychology, which is indispensable to human interaction—its impairment in autism, for instance, has catastrophic consequences for the social life of patients (Lai et al., 2014)—may also constitute the most formidable obstacle to our understanding of mental disorder.
References


