

## Phenomenology, science and the anthropology of the self: a new model for the aetiology of psychosis

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Recently there have been signs of a renaissance of interest in the role of the social environment in causing schizophrenia and other psychoses (van Os, 2004). This resurgence is fuelled by both a recognition that biological accounts of aetiology are insufficient (Eisenberg, 2004) and the persistence of findings correlating schizophrenia with socio-environmental risk factors (e.g. Pedersen & Mortensen, 2001). Indeed, the sheer complexity and multiplicity of causal pathways to schizophrenia and other psychoses are becoming ever more apparent, and this creates considerable challenges for researchers. Perhaps the most fundamental and important of these challenges is to develop conceptual models that link the social and the biological in ways that move beyond the vague dictum that schizophrenia is a biopsychosocial illness. In this there has to be a role for the social and human sciences, in which the influences of historical, social and cultural processes on human behaviour and functioning have been studied extensively. Taking as a starting point the repeated finding that rates of schizophrenia are higher in migrant groups, the following discussion attempts to show how anthropological concepts of the self may offer one such framework.

### EPIDEMIOLOGY OF SOCIAL RISK FACTORS

One of the most consistent findings in the epidemiology of schizophrenia is that of higher incidence rates in migrant groups. In the UK, for example, numerous studies have reported higher incidence rates among African–Caribbean migrants than among Whites. A range of explanations have been proposed, including selective migration and misdiagnosis; although these may have some part to play, increasingly research is focusing on a variety of social and environmental factors, with

some interesting insights emerging. A study by Boydell *et al* (2001) in the UK, for example, suggested that rates of schizophrenia were highest among ethnic minorities living in areas where they formed a relatively lower proportion of the population. This is leading to renewed interest in models of social capital as possibly predictive of a ‘schizophrenogenic’ environment for migrants (McKenzie *et al*, 2002). The most recent case–control study to investigate the social risk factors for schizophrenia among ethnic minority groups in the UK has further suggested that the absence of supportive social networks at key points in the life course may be of aetiological importance, particularly separation from parents in early childhood (Mallett *et al*, 2002).

Research to date has proceeded by identifying the socio-environmental correlates of psychosis (e.g. social class, unemployment and social isolation) as a basis for delineating social risk factors (Mallett *et al*, 2002). However, there remains an explanatory gap between this lengthening list of factors and the phenomenology of the illness: by what mechanisms do these stresses and disadvantages transform into the lived experience of psychosis? If we are to attempt to specify these mechanisms, the epidemiologically derived risk factors need to be conceived of as operating within a more complex model.

Psychiatry has always had an uneasy relationship with the social sciences, particularly the more hermeneutically oriented, and as a result only the cognitive models of psychology and empirical sociology have made any headway in mainstream psychiatry and neuroscience. What we offer here is an example of how insights drawn from anthropology can help in developing a framework for the study of severe mental illness, migration and other social risk factors, and directly affect the way we think about biological theory.

### THE ANTHROPOLOGY OF THE SELF

During the 1980s and 1990s anthropology developed models of the self, illness and healing that looked at universals as well as cultural specifics. These descriptive ideas unpick elements of a ‘lived life’: how it is constructed, assaulted and potentially healed. Although the language used in the phenomenological tradition is alien to most scientists, if understood it can form the link between statistically derived social risk factors and biological causation.

Any individual constructs a ‘self’ that is formulated at many levels. At its phenomenological foundation is a givenness, a being in the world that cannot be ontologically reduced. At a temporal level we perceive ourselves within time (Heidegger, 1962): experiencing and reckoning with time; having time to do something. We build ideas of agent, goal, means, hostility, success and failure (Ricoeur, 1984). We construct symbolic networks of meaning through interactions with others and the environment that enrich every word and sensation that we interpret (Geertz, 2000). Inseparable from this is morality, which forms an inseparable ethical code that frames all action in the world (Ricoeur, 1984). At these and other levels, it has been argued, the self can be better understood.

When individuals migrate, it is possible – and in many situations unavoidable – that change will occur at all of these levels, the consequence being no less than an entire reordering of the self. Even at a temporal level, the hours of sunlight to the norms of a full day are often vastly different from those in the host country. What constitutes ‘agent’, ‘goal’, ‘hostility’ or ‘success’ is very different in rural Trinidad or Western Africa and in London. However, some of the greatest cultural variation occurs within symbolic meaning. Symbols are more than just a semantic code. They connote an underlying network of meaning that is personally as well as culturally specific. As noted above, morality itself is inseparable from any change in this symbolic web.

One dichotomy that has been highlighted in many older anthropological texts is the difference between the highly individuated Western self and the more socio-centric self found in much of the developing world. Where freedom, potential and choice form the essence of the modern Westernised individual, a more static

identity formed by reference to the wider social whole is often the norm elsewhere. This position should only be seen as a heuristic one with which to frame the argument. Those familiar with the literature will know the well-trodden critiques of this 'structuralist' position. Particular ethnographies will vary, and no individual ever grows in isolation. More recently the dynamics of globalisation have placed every static historical description of culture in a state of flux.

## CLOSING THE EXPLANATORY GAP

In biological psychiatry, schizophrenia is often described as a neurodevelopmental disease. Genetic loading plus accumulating insults from birth throughout childhood lead to the growth and pruning of neurons that form a brain predisposed to schizophrenia. Strangely, models of the self fit well within this framework. As children find themselves in the world and construct a culturally and personally specific self that enables them to function as an adult, their brains are at their most plastic. It is perhaps self-evident, at least within the assumption of materialism, that everything from the temporal to the symbolic will require a biological correlate. The interaction of a child with the world is represented in its neurology.

Migration may have similar effects. The migrant is likely to encounter change on every level: the length of day, the rhythm of the working week, the language; a different perception of agency, success, hostility, cooperation and failure; a new symbolic network, the basis of meaning in any culture, and a change in the morality accompanying it – in fact, an entire reordering of the way one perceives oneself and one's relations to others and the world. Now, is it not likely that these fundamental changes will be reflected in neural and neurochemical plasticity on a massive scale? It is potentially just these conditions that would provide the possibility of a self that is remade with an increased vulnerability to severe mental illness.

Not only does this suggest that schizophrenia in migrant people can be explained through an understanding of the biological consequences of a reformulation of the self, it has repercussions for the disorder as a whole. If social factors have the power that this model suggests in adult migration, then

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these can only be increased in the context of childhood and the changing gross anatomy of a developing brain. Given that the impacts of social isolation, poverty and restricted opportunities all contribute to concepts of the self, second and subsequent generations would continue to be at increased risk, as suggested above and as borne out in the research evidence (Sharples *et al*, 2001). Likewise, leaving aside questions about migrant populations, it behoves us to consider how social factors may operate at a deeper level in all our patients, and how children, whatever their genetic predisposition, can develop a biology of a severe mental illness in the context of what previously has been defined purely in terms of social risk factors.

From the perspective of anthropology, any defined link between an experiential description and our biology may appear antithetical. However, it is only by refocusing on this older meaning of phenomenology and trying to link what we find to the empirical data that we provide a meaningful point of entry to psychiatry. It is the loss of this deep analysis that has impoverished our ability to link epidemiologically defined social risk factors with biological entities. From a biological perspective, anthropological models such as the one described here can show how deep the change can run. What on the face of it is simply a change in environment or political economy can be explained as a fundamental shift in formulations of the self. The challenge to biology is to find the correlates of this change.

## A DEEPER PHENOMENOLOGY

Any new model needs to make predictions that can subsequently be tested. By starting with a description of the phenomena of lived experience, a challenge is set *de facto*. In other words, can testable hypotheses be drawn from the above? If we can reinvigorate our phenomenological descriptions in ways such as the one begun here, we access possibly measurable aspects of human experience. These are more likely to have

correlates in the brain than the accounts accessed through other approaches.

What is presented here is necessarily an outline sketch of a potential model. It requires development and refinement, and it is our hope that what has been argued here will be a starting point for fruitful debate. In this context, it is of interest to note that this type of approach has recently begun to attract some interest in the neuroimaging literature (see Zahavi, 2003). As cognitive scientists come up against the limits of their paradigm there is an increasing willingness to engage in other approaches. Although (as in any academic project) there are disagreements in foundational principles, the insights of anthropology can be seen as arising from this phenomenological and more recently narrative tradition.

## DECLARATION OF INTEREST

None.

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