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# Book reviews

*Dimensions of Creativity*. Edited by M. Boden. (Pp. 242.) MIT Press: Cambridge, MA. 1994.
*Genius: The Natural History of Creativity*. By H. J. Eysenck. (Pp. 344; £37.50.) Cambridge University Press: Cambridge. 1995.

Boden opens the collection of essays she has edited with a series of questions on creativity. They could be summarized as follows – What is creativity? Is it a multi-dimensional phenomenon? Can we, in defining it, separate the context of discovery (the occurrence of a new idea) from the context of justification (the appraisal of a new idea)? Can it be measured or quantified? How does it happen? Over the next seven chapters, we encounter a variety of approaches to the problem of creativity. None of the posed questions are definitively answered, but we are left with a much clearer idea of the conceptual spaces(s) within which answers to these questions are being sought.

The first contribution is by a historian of science, Simon Schaffer. He takes a careful look at some of the cultural icons that populate our myths of the creative process in science. His particular target is the myth of the hero–discoverer embodied in such folk tales as Faraday's invention of the lightbulb and Kekulé's dream of the benzene ring. In such stories the hero is commonly presented as divinely inspired, caught up in a mystical Eureka moment. He then returns with the tablets to the awaiting mob of earthly colleagues who will translate them into viable science. As such the contexts of discovery and of justification are radically separated. The mystical moment is left to psychologists to explain; the validation process to the epistemologists. Schaffer blurs and complicates this neat distinction by illustrating the ideological context in which discovery arises and its necessary engagement with the justification process. He also scrutinizes the political ends served by the canonization of particular individuals.

Discoveries arise within scientific institutions requiring funding, recognition and kudos. Schaffer sees the canonization process as a retrospective and artificial iconization of a person and a moment. This serves to give the institution a coherent mythology, a cultural identity and a political edge on its opponents. However, in so doing, the reality of the discovery process, the interplay of scientists, technicians, equipment, models and theories is distorted. Taking Kekulé as an example, Schaffer places the now famous folk tale 'firmly … in the setting of *fin de siècle* debates inside the disciplines of philosophy and psychology' and the crisis in German science. His study of the actual history of the benzene ring clearly shows that there was no 'one moment' belonging to Kekulé, but an ongoing debate of trial and error involving many individuals.

This is all a useful and bracing reminder of the politics of science. My only doubt is as to Schaffer's own epistemology. There is an implicitly Nietzschean/Foucaldian flavour of truth as that which survives the fight, which it would have been useful to explicate.

Next we have an extremely thought-provoking chapter from Gerd Gigerenzer, a psychologist. The title 'Where do new ideas come from?' promises to address the subject matter of the book more directly. In a sense it does, but again at the level of the community rather than the individual. His basic contention is that the statistical tools employed in the development of psychology directly influenced not only the kind of experiment done, but also the kind of hypotheses formed to describe the mind. Taking Fisher's analysis of variance (ANOVA) as an example he convincingly demonstrates how this tool infected and structured the psychological community's collective mind, creating the hypothesis that 'when attributing a cause to an effect, the mind calculates an analysis of variance'. Thus, the notion of the mind as an 'intuitive statistician' arose, causal attribution becomes a major topic of study and ANOVA the major tool employed.

In a fine and intelligent analysis, he suggests that 'in the 1960s, 1970s and 1980s a broad

range of cognitive processes were redefined through analogy with statistical inference'. It is his description of the interplay between research tool, hypothesis formation and hypothesis testing by means of said research tool that raises particularly interesting doubts about the way psychology divides up reality. In modern physics the effects of the observer and the mode of observation are encoded in the observation process. There is no such reflexiveness in psychology, rather a worrying insouciance about scientific objectivity. As Gigerenzer points out, the 'scientific method' employed by psychology is not a universal guarantor of objectivity but a localized and idiosyncratic application of tools that can never be neutral.

So new ideas come from other successful ideas about ideas. There is a subtle version of Dawkins' notions of memes at work here. Ideas spread themselves through communities because they are successful in structuring the output of that community. However, this is no knee-jerk contructivism, rather a raising of awareness of issues in psychology that the harder sciences have long ago acknowledged and incorporated into their theory and practice.

It is interesting to go from this chapter to Boden's own 'What is creativity'. Three key metaphors dominate here: (1) creativity as the exploration and transformation of a conceptual space; (2) creativity as the rewriting of a conceptual grammar; (3) the computer as an embodiment of a cognitive grammar which can tell us about the construction and exploration of a conceptual space. Ideologically, she re-draws the distinction erased by Schaffer in Chapter 2, positing the context of discovery as separable from that of justification, the former being the proper object of ideological scrutiny.

Taking examples from jazz, classical music and architecture, Boden attempts to show how progress and revolution in the arts can be construed as, respectively, the elaboration and transformation of conceptual space. The latter can occur because the space is generated by grammatical propositions. Changing the more fundamental propositions will, thus, transform the produced space. This is of course a fairly familiar and uncontentious metaphor, which beneath its computational gloss, has points of isomorphy with Popperian, Darwinian and Kuhnian notions of ideological progress.

Boden, however, takes the metaphor further – 'expressing a psychological theory as a programme to be run on a computer is an excellent way of testing its clarity'. So the second half of the chapter is devoted to the exploration of such expressions. It is an extremely useful review of the current field of computational models designed to generate new ideas. And this is precisely what they do. For instance, Automatic Mathematician (AM) is programmed with 100 'very primitive mathematical concepts' and about 300 heuristics. The latter can combine and transform the former. In execution the program 'produced many arithmetic concepts' it was not initially programmed with. More complex programmes are described which contain meta-heuristics (heuristics for changing heuristics).

Describing the working of AM, Boden writes 'if it decides that a concept is interesting, AM concentrates on exploring the concept'. It is this anthropomorphic urge to attribute intention that raises my caution. Using metaphors derived from computer science to describe human creativity, computers are then programmed with these metaphors and oblige by generating new ideas. The tools to theory impulse against which we were cautioned in the previous chapter is here enthusiastically embraced. It raises doubts as to whether we are doing anything more than exploring and elaborating our own metaphors about creativity and how much this can tell us about the actual process.

The metaphor as theory recurs in the next chapter by David N. Perkins. Indeed, it is the same metaphor, creativity as the exploration of a conceptual space. Here, it is reconfigured as a Klondike Space, a territory where there is gold to be found. Initially, Perkins describes the problems of the prospector. Gold is rare, exists in isolated pockets, runs out eventually in a particular location and may be evenly distributed in others, leaving no clue to the best exploratory direction. Adopting the basic assumption that 'creative systems discover adaptive novelty through search', he enumerates the way in which different systems (evolution, memes, the individual inventor) can maximize their chances of hitting gold. Degrees of informed chance and meta-contextual shifts (where areas that are separate at one level of representation become contiguous at a more abstract one) are the key methods.

Again, one is left wondering if this elaboration of existing metaphor constitutes an addition to our knowledge about creativity. At best it appears to offer a meta-structure in which we can place the existing tropes of thinking about creativity, namely Dawinian and Lamarckian generation and selection; paradigm shifts and normal science; shifts of logical type and resultant new analogy. More subtly, in their metaphors of exploration and discovery, both Boden and Perkins invoke a dualistic paradigm of an isolated subject exploring a cognitive space. This is at odds with much current theory in cognitive science which is desperately trying to exorcise itself of the Cartesian ghost. It is difficult to write of such processes in a non-dualistic fashion, but it would have been nice to see a more careful scrutiny of the assumptions embodied in the metaphors they employ.

The next chapter is an unabashed return of the heroic, paradigm-busting story of creation. Howard Gardener's biographical enquiry of seven eminent domain explorers (Einstein, Schoenberg *et al*.) has been extensively reviewed elsewhere. Suffice to say that any tentative positive conclusions that can be drawn from such a selective sample are borne out by Eysenck's more wide-ranging, less elitist approach.

Before Eysenck, however, is Colin Martindale's extraordinary review of 700 years of English poetry. This is far and away the most creative application of science to creativity to be found in the book and, in line with Eysenck's theory, has an edge of psychosis. Starting from the assumption that art achieves its effect by continually renewing its novelty/arousal potential, he performs an extensive computer-aided textual analysis of seven centuries of poetry to ascertain how it has done so. His conclusions are fascinating and could form a review in themselves. Suffice it to say that the renewal of arousal hypothesis appears to hold water and appears to conform to the principle of increasing entropy in the arts. It leaves one wondering how near we are to the ceiling of this process. Cultural theorists, linguists, psychologists, artists and critics should take a look.

And so to Eysenck whose final chapter condenses the essential content of his book, Genius. Eysenck is an enormously re-assuring read, level-headed and imperturbable. His approach to creativity reminds me of the later Wittgenstein's suggestion, 'do not ask for the meaning of a word, ask for its use'. Rather than asking can we define creativity, he asks and answers the question, how have we defined it? Similarly, with the measurement of creativity, not 'can we?', but 'how have we?'. As such the book especially is an exemplary review of the conditions and correlates of creativity combined with a deft theorizing that never strays too far outside its empirical bounds.

He begins by reviewing the definitions of creativity and the study of the idea as defined within differential psychology. A picture emerges of an ability to think divergently which is independent of intelligence. A crucial distinction, which could have illuminated much of the discovery/justification debate above, is introduced between creativity as a personal trait or cognitive style, and creativity as shown by productivity. He convincingly shows that the former is necessary but not sufficient for the latter, which needs supplementing by a variety of co-factors – cognitive (intelligence, knowledge), environmental (educational, cultural) and personal (motivation, confidence).

Taking care to maintain this distinction throughout his review of the research, Eysenck looks for the evidence that creativity correlates with other personality traits. Having found that it appears to do so consistently, he then begins to suggest an explanation for creativity almost as a property emerging from the interrelationship of particular conditions and predispositions. As such Eysenck comes much nearer than anyone to answering Boden's initial questions which he does roughly as follows.

What is creativity? It is the ability to think divergently. This appears fairly close to the concept of over-inclusive thinking which occurs in some psychoses where the process of understanding fails to distinguish between problem relevant and irrelevant material. Interestingly, it is only in the (relatively) hard science of this and the previous chapter where we find the notion of the unconscious or primary process thinking being deployed. Eysenck's unconscious is more benign than Freud's and (I am sure he would have been pleased) closer to Lacan's, where the unconscious is the arena of the free-play of the symbolic function of mental activity, rather than

a hotbed of suppressed desire. So, creativity is the tendency to have the greater breadth of associative horizon commonly associated with primary thinking.

Is it a multidimensional phenomenon? Yes, indeed. The above cognitive style only becomes expressed as creativity in conjunction with other personal traits. What appears to distinguish creativity from actual psychoses is the presence of a high degree of ego-strength, independence of attitude, self-belief, etc. Eysenck has no doubt that high correlation with psychoticism (*qua* trait rather than illness) is an essential feature of creativity and consistently shows studies that demonstrate reciprocal links between them. What the two have in common is the over-inclusive thinking style. However, this on its own is not sufficient for creativity, or rather some self-protection is required as over-inclusive thinking in itself would result in psychoses. Thus, the necessary presence of other dimensions of personality.

Can we separate the context of discovery and justification? Surprisingly (to me), Eysenck is the only author here to make clear the social and political dimensions of this distinction. Even for Schaffer it was a notion within the politics of science rather than of the everyday. In his book Eysenck devotes some time to the work of the almost undiscovered Indian mathematician Ramanujan who, working in complete isolation in India, was only recognized as a genius when adopted by English mathematician Hardy. Eysenck's anger at a society so constructed that creativity requires institutional justification to be recognized is palpable. So yes, the separation is real, it requires justification for creativity to be recognized as such.

Can it be quantified? Yes. And has been, extensively. Interestingly, inter-rater reliability, in judging the creativity of responses to psychological tests, or in peer judgement of the creativity of artists and artisans, is high, suggesting that there is common consensus on what constitutes a creative product.

It is hard to quibble with Eysenck's findings unless one is inclined to deconstruct the entire enterprise of differential psychology and the notion of traits and measurement. This no doubt needs doing, particularly the construct of Psychoticism, which is the most contentious of his personality dimensions. However, once his assumptions are bought, the conclusions flow easily. As a chapter, it gives a sense of completeness to Boden's book, as at last one feels the solid sense of a hypothesis that can be tested.

VINCENT DEARY

*Mind, Meaning and Mental Disorders*. By D. Bolton and J. Hill. (Pp. 358; $75.00.) Oxford University Press: Oxford. 1996.

The authors state that this book addresses the unease felt by psychotherapists, concerned with personal meanings, that they are not being scientific. The powerful contemporary current of reductionism in psychiatry has the consequence that more and more attention is being paid to biological factors involved in the causation and treatment of psychiatric disease and less and less to psychotherapy and the concept of personal meaning. This is mainly the result of the recent dramatic discoveries in the biological area, but it also mirrors an influential movement in philosophy called eliminative materialism. Most cognitive neuroscientists today adhere firmly to the hypothesis that all mental events are identical to certain brain events and that all explanations currently given in psychological terms will eventually be replaced by (reduced to) explanations given in neurochemical and neurophysiological terms. In fact, a vast research enterprise doing just that is underway. In contrast, common sense still has it that people act in the ways that they do in accordance with their beliefs, emotions and desires. Eliminative materialists, such as Paul Churchland, claim that this is mere 'folk psychology' and that the concepts of 'beliefs, desires, and emotions' are outdated and have no more scientific validity in psychology than previous concepts in science such as phlogiston and the luminiferous ether. We should, therefore, get rid of them. Behaviour thought to be directed by a 'belief' is really directed by activity in complex distributed neuronal networks in the frontal, striatal and limbic areas of the brain. Likewise, an 'emotion' is really activity located in similar neuronal networks in the amygdala, hypothalamus and associated limbic cortex.

When we have described the activities in these networks we have said, as scientists, all that there is to say.

This doctrine is not accepted by everybody in the field, for various philosophical, scientific and moral reasons. For example John Searle argues that, although mental events really are biological events in the brain, yet in some subtle way, connected with the difference between semantics and syntax, they are not. Other such as Roger Sperry have argued that mental events are emergent properties of the organism and their description cannot in principle be reduced to biochemical and biophysical brain events. Yet other scientists, such as John Beloff, Undo Uus and Sir John Eccles, adhere to Cartesian dualism. Roger Penrose has stated that it is premature to come to any conclusions in this field as new advances in physics may well move all the goal posts.

The authors of this book have developed another way to avoid this form of reductionism. They present a closely reasoned argument that teleological explanations, in terms of wishes, emotions, and desires, belong to a different logical category distinct from physiological and biochemical explanations. They distinguish the causality inherent in physics and chemistry from that inherent in biological systems, which have built-in goals and which work towards well-specified objectives. They defend folk psychology as '… a proper subset of cognitive theory, namely that part dealing with the regulation of action by meaningful mental states'. They also claim that folk psychology has powerful predictive power, always a good indicator of real science.

As an example of a teleological mechanism in biology they point to the control of blood pressure by baroreceptors and associated hypothalamic mechanisms. This involves the concept of 'normal blood pressure', which the whole mechanism with its negative feed-back controls is there to maintain. As this concept does not appear in the physiological account they argue that we need a parallel teleological explanatory account based on intentionality. They then expand this concept to other biological systems including how DNA works. They list 15 ways in which the function of DNA requires a teleological account in addition to the purely chemical account.

I imagine that the response of an eliminative materialist to this argument would be to say that it does not grasp the way in which evolution has produced biological mechanisms. There is no such entity in nature as a 'normal blood pressure'. It is merely that those organisms survive whose blood pressure conforms to the physiology of the circulatory system and those, where it does not, do not survive. The concept of a 'normal blood pressure' is something *we* provide.

This book contains mainly philosophical arguments based for the most part on Wittgenstein, Ryle and Dennett. The authors adopt a functionalist version of the mind–brain identity theory. Mental states, they say, are not 'inaccessible, ghostly processes' but are 'theoretical constructs'. This hypothesis, however, is based on an account of introspection that is limited to introspection of our beliefs and desires (p. 43), notoriously treacherous territory. They mention the problems posed by the subjective phenomenology of mental states very briefly (p. 74) but for some reason do not develop this theme but proceed to concentrate on the 'objective, scientific perspective'. This ignores the currently flourishing science of introspectionist psychology (i.e. the subjective, scientific prospective), recently rescued from years of neglect by Gregory and Ramachandran. Conscious mental states, in this discipline, are not regarded as 'inaccessible, ghostly processes' but as observable and robust phenomena that go on in our various sensory and image fields. In fact, there is currently a swiftly growing literature presenting the results of experiments in this field. We can certainly make scientific theories *about* them, but, in themselves, sensations and images are natural phenomena and are not 'theoretical constructs'. In view of the practical success of this branch of science, the claims made by various philosophers that this approach is based on some type of philosophical fallacy (a 'category error', the 'phenomenological fallacy', etc.) seem rather pointless.

The authors claim that '… the pressure mounts to adopt some form of mind/brain identity theory' (p. 59). Actually recent developments in neuroscience itself have resulted in severe strains in this theory, as I have detailed elsewhere (Smythies, 1995). This involves, in part, the unsolved 'binding problem' and the

embarrassing fact that the Identity Theory can only be entertained if we bring ourselves to believe simultaneously in two mutually incompatible theories of perception – Direct Realism and the Representative Theory (Smythies, 1996).

The authors also consider the theory of Cartesian Dualism but their arguments against it are neither thorough nor convincing. It is all too easy these days to slip into the attitude that this theory was exploded long ago and so we do not have to go over all that again. The theory may not be true but the arguments against it given in most discussions depend more on prejudice than cold logic. Recently, four books have appeared written by leading philosophers (Madell, Foster, Swinbourne and Tagliaferro) defending this theory, which, although unfashionable and almost politically incorrect, deserves a fair hearing. Moreover, no mention is made in this book of more recent non-Cartesian dualist theories (Smythies, 1994). Also, there is no mention of the work of Viktor Frankl, which is very surprising as he has done more than most people to defend human freedom, dignity and the meaning of life.

In conclusion, this book represents a spirited effort to retain some respect for meaning in human life. It is very well written and eloquently argued. It should be read by all philosophers and by psychologists and psychiatrists interested in the foundations of their discipline.

J. R. SMYTHIES

## REFERENCES

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*Publicity for Mental Health Clinicians: Using TV, Radio and Print Media to Enhance Your Public Image*. By D. H. Ruben. (Pp. 216.) Haworth Press: New York. 1995.

The aim of this curious book is to guide mental health professionals in the use of the media to promote themselves as a way of assisting the growth of their clinical practice, or sales of their products – books, videos and tapes. Advice over what kind of radio programme it is best to appear on, includes 'While any show is better than none, a.m. and noon listeners (the lunch crowd) still have half the day to buy your product or apply your expertise' (p. 69).

Although the emphasis is unerringly on the individual's attempt to promote him/herself, there is some thought-provoking comment on the issue of how different professions vie for the 'clinical pie', and given in the USA some counsellors and social workers can now claim health insurance reimbursement, the possibility of future marginalization of psychiatry and psychology concerns the author.

Hence, he argues media promotion may be a way of drawing a border around clinical territory he feels belongs more properly to psychiatrists and psychologists, by ensuring the public are made more aware of the differences between professionals competing in the marketplace. But, the problem is that the author seems preoccupied with publicity, no matter how trivial, to the exclusion of any other considerations; for example, he writes 'local shows may be picked up by cable, syndication, satellite, microwave, even by scanners. Everybody and his brother can know you appeared on the air' (p. xiii).

Furthermore, image is clearly all – not only does the book suggest sending a photograph of yourself in to the producers of TV shows with a suggestion letter of subjects you are willing to talk on, but there is even advice on how to compose the photograph – 'overly serious, comedic, or academic-looking photos (glasses lowered on the edge of nose; pipe in mouth, standing in front of bookcases) will be a turn off' (p. 18).

Clearly, this advice is only relevant if your aim is to feature in media of the most populist nature. However, the guidance about how to get on to more serious media platforms, like US public radio is 'For public radio, for instance, change your segment to secret lives of the masters of classical music; here you reveal the untold or forgotten stories of emotionally distraught composers such as Mozart and Beethoven. Titbits from the composer's psyche and emotional history add a new flair of appreciation to the classical pieces' (p. 80).

Yet, the author's vast media experience also

allows for some sensible advice, not so much on how to get into the media, but, once there, how to wrestle with it. For example, he suggests providing your programme host with a printed list of questions the interviewer could ask you just before your interview begins. Most interviewers' incorrect preconceptions about psychiatry often lead to questions that obscure, rather than illuminate, the issue. As they are grateful for any help they can get to appear intelligent on the issue – they will surprisingly often seize on your suggested questions gratefully.

Furthermore, the problems communicating clearly to a general audience are well illustrated, for example 'One talk show about ten years ago featured (B.F.) Skinner being interviewed about child discipline and reasons for a positive approach. Asked why firm discipline was a no-no, he replied that "punishment was okay on interval schedules but not on continuous schedules". On what? What's an interval schedule: what's a continuous schedule? Or worse, "see the expert said it was OK to PUNISH my child", technical words hit the airwaves and completely distorted his message' (p. 50).

While this book does cover more comprehensively than any other source the practical problems of dealing with the media, the advocated solutions will be controversial. What you agreed to talk on over the phone with the producer is, horrifyingly, not what the interviewer begins to question you on as the transmission begins – the author's solution – be flexible.

Hence, in his enthusiasm for advocating mental health professionals embrace the media he fails to question what the future might be for the standing of the profession once all his readers start bombarding TV producers with carefully composed photos of themselves not pipe-smoking, not near a bookcase and not staring over spectacle rims.

Towards the end of this book is a chapter on how to sell your movie screenplay to Hollywood, with an example letter using the author's own motion-picture proposal. Perhaps this is a book written by and for those who primarily want a media career, and happen to use psychology and psychiatry as an entrée. They are then, in reality, using the mental health field to enhance their image in the media – not the other way around.

RAJ PERSAUD

*Cambridge Handbook of Psychology*, *Health and Medicine*. Edited by A. Baum, S. Newman, J. Weinman, R. West and C. McManus (Pp. 677; £45.00 pb.) Cambridge University Press: Cambridge. 1997.

When I agreed to become Book Review editor for *Psychological Medicine*, I felt a keen sense of anticipation as I imagined all the books that would cross my desk. I expected to exercise the editor's equivalent of *droit de seigneur* on a regular basis, keeping the classics for myself, provided of course I took on the task of reviewing. Three years have now passed, during which time I have failed to exercise this right on a single occasion. True, I have diverted one or two promising titles to local reviewers so I could, if I chose, still have access to the book at a later date, but overall the expected steady stream of 'must have' books and consequent flow of editorial reviews has not materialized.

Until this week. The new *Cambridge Handbook of Psychology*, *Health and Medicine* is simply indispensable. It is a collection of over 150 brief articles covering the entire field of what we now call 'health psychology'. As such each entry is short, even terse, but to the point. Starting with general reviews of basic psychology, such as intelligence and personality, it moves onto the psychological processes around health, with a series of excellent brief essays on different aspects of coping, hospitalization, and health behaviours. Interventions come next. Here, the weakness of the format does show a little, since there is insufficient space to do justice to the evidence for any of the various interventions, so instead each author basically gives a narrative review of a few illustrative findings. Indeed, the overall effect is perilously close to Eysenck's famous dictum 'all have won and all must have prizes'. However, it is difficult to see how the format could have permitted any more in-depth and quantitative approach.

The last and longest section is devoted to medical topics. From abortion to the well-woman clinic, we travel by way of all the major medical illnesses, passing by elegant essays on psychological aspects of topics as diverse as allergies, breastfeeding, lead and RSI. Of course standards do vary, but in general the editors have managed to keep the contributions brief and to the point.

The book will find a wide market. No clinical psychologist is going to be without it. Perhaps more importantly, many doctors will continue to dip into it from time to time, since one of the book's virtues is to be written in a generally jargon-free manner, accessible to all health professionals. Journalists from the better papers will use it frequently, since it gives a quick synopsis of the current state of play on a vast range of topics that are rarely absent from the health pages. Finally, journal editors will find it a valuable address book when they need referees for the ever increasing flow of research papers in this fascinating field.

SIMON WESSELY

*Akathisia and Restless Legs.* By P. Sachdev. (Pp. 425; £45.00.) Cambridge University Press: Cambridge. 1995.

In an era of multi-author tomes, hurriedly and unevenly prepared 'books of congresses and workshops' and the pervasive invasion of cyberspace it was a delight to be asked to review this diligently researched and lucidly written monograph.

Akathisia is the most distressing, and in many ways the most important of the neuroleptic provoked movement disorders. The dysphoria is intolerable, at least 30% of patients started on neuroleptics experience it, it may be persistent and seriously affects compliance. Despite this, the literature is sparse and very few of the world's numerous brain researchers have its eradication as their primary research goal. It remains becalmed in the murky waters of insubstantial phenomenology and an operational clinical definition is still under peer debate as Dr Sachdev makes clear in his text. Our knowledge of the pathogenesis of akathisia is rudimentary, which makes reading of this book reminiscent of Gower's or Charcot's textbook of neurology more than 100 years ago.

Restless legs is a rather different kettle of fish, and despite the shared association of unpleasant sensations accompanying unwanted movements, the mechanisms which underlie it and akathisia are probably very different. An interesting unresolved discussion, well covered in this text, is whether the disturbance of movement is simply an epiphenomenon consequent upon the primarily unpleasant feelings, a question that has also been resurrected with respect to the motor disorders associated with major psychoses. This of course leads into the debate relevant to all exquisitely specialized books, as to what the text should embrace and what it should reject. Tics are tangentially discussed, and rightly so, because of the links between the relatively voluntary nature of the abnormal movement and the presence of involuntary sensations or urges. There is also an interesting chapter on restlessness, where the motor accompaniments of acute anxiety are compared with those seen in akathisia. Serotoninergic jitteriness is also well covered, and the possible relation between akathisia and violent outbursts, and suicide is also mentioned. Although akathisia has been reported to occur frequently in Parkinson's disease, my own view is that the 'motor discomfort' that one sees in this disorder is distinct.

The author has attempted to interlard his own extensive work in the field into the text with mixed success, and at times with disproportionate emphasis leading to imbalance. The bibliography is encyclopaedic and will be of great value to the few researchers in the field, and the beautiful clinical descriptions of the disorders deserve to be read by all neurologists and psychiatrists.

To my mind this book confirms that monographs still have a place in certain selected areas of neurology and psychiatry, particularly if the author is a recognized authority and writes well. Unfortunately, I fear that the specialist nature of the book and the relative neglect of the subject covered, even by those purporting to specialize in this area of neurology and psychiatry, will lead to limited exposure. Perhaps the best Dr Sachdev can hope from his commendable efforts, is that the book will lead to an insidious growth of interest in the field, and perhaps, as he mentions in his summary, a spawning of a second book on this topic in 3 to 5 years' time.

A. J. LEES

*AIDS and People with Severe Mental Illness*. Edited by F. Cournos and N. Bakalar. (Pp. 346.) Yale University Press: New Haven, Connecticut. 1996.

*Changing HIV Risk Behavior: Practical Strategies*. By J. A. Kelly. (Pp. 159.) Guilford Press: New York. 1995.

AIDS continues to spawn a number of books concerned with the behavioural and psychological aspects of the pandemic. These newcomers, although taking different approaches and sometimes dealing with different populations, are more similar than their titles suggest.

The first is an edited book on HIV infection and people with severe mental illness. It deals with the issues faced by the long-term mentally ill, including high rates of drug abuse and increased frequency of trading sex for drugs or other favours. It considers how to assess risk of HIV in the long-term mentally ill, the difficulty of instituting behavioural programmes for prevention and the confusion that may occur between HIV encephalopathy and severe mental illness. There is considerable overlap with Jeffrey Kelly's book in which strategies are suggested for changing HIV risk behaviour. Much of the practical advice given in Kelly's book could apply equally well to those with long-term mental illness.

The volume edited by Cournos is comprehensive but tends to waste precious space with chapters on the epidemiology and medical manifestations of HIV infection that are better described elsewhere. There is a lack of any consideration for the risk of other infections such as hepatitis B and C. A chapter on the risk of tuberculosis occurs in an appendix at the end and is not directly related to the long-term mentally ill. Kelly's book provides strategies to help people make changes in behaviour to reduce their risk of HIV infection. It aims to inform a wide range of professionals from those in public-health settings to those in substance-abuse treatment programmes. The book is based firmly on evidence for the effectiveness of interventions to reduce the risk of HIV transmission but does not become bogged down in the academic minutiae of the research. The author points out that interventions need to be tailored to the client group involved, be they gay men or disenfranchised inner-city women.

I would have liked to have seen more material on strategies for prevention in the severely mentally ill in the book edited by Cournos and at least some reference to this group in the book by Kelly. Both will be of use to professionals in the field although I suspect that Kelly's will prove more appealing and useful in a wider range of circumstances. It also has the fluency and lack of repetition that single authorship brings to a book of this kind.

MICHAEL KING

*Behavioural Phenotypes*. Edited by G. O'Brien and W. Yule. (Pp. 211; £37.50.) MacKeith Press: Cambridge. 1995.

This book consists of seven chapters written by different authors. Chapter 1 gives a general introduction to the different concepts of behavioural phenotypes and the approaches to studying behavioural phenotypes. Chapter 2 gives an interesting historical perspective, but it would not be a good introduction to molecular genetics for non-geneticists. Chapter 3 gives an overview of the main methods used in behavioural phenotypes research, including sample selection, choice of syndrome and control groups and ethical issues. Chapter 4 reviews the types of measures (general behaviour questionnaires, psychiatric interviews, observation schedules, electrophysiological and activity monitoring) that can be used. Chapter 5 focuses on Fragile X syndrome. This chapter is excellent and consists of a clear account of the clinical manifestations and molecular genetics of Fragile X. Chapter 6 is a thought-provoking chapter in which the author argues that investigating behavioural phenotypes for genetic syndromes provides another approach to understanding the pathway from genotype to phenotype. Genetic and phenotypic heterogeneity are discussed and the complexity of the relationship between genotype and phenotype are emphasized. There is also an interesting section on the use of animal models for investigating the genetic basis of behaviour. Chapter 7 is the most outstanding aspect of this book. The chapter consists of a review of over 30 genetic syndromes, both single gene disorders and chromosomal anomalies. A description is given of the genetics, physical features and behavioural phenotype for each syndrome.

Overall, this book would be extremely useful on the book-shelf of any clinician involved in the care and assessment of those with learning/developmental disabilities. A particularly useful feature is the description of clinical syndromes. The only shortcoming is that it has to be said that this book would not be a good introduction for those hoping to seek an understanding of genetics *per se*. Also, although chapter 4 is interesting and gives useful lists, the criticisms of diagnostic schedules and questionnaires and the pitfalls of using them have not been highlighted. However, these are minor points and I would recommend this book to clinicians and to those interested in research into behavioural phenotypes who require an overview of and introduction to the subject.

ANITA THAPAR

*Homelessness and Mental Health*. Edited by D. Bhugra. Cambridge University Press: Cambridge. 1996.

There has been an erosion of alternative housing and open access hostels for the homeless in Britain. The British Government's Right to Buy Scheme has reduced the stock of cheap rented accommodation. As Bhugra says, housing, welfare benefits and service delivery have be interlinked. They were in the Reception Centres, which were increasingly innovative and effective in providing advice and advocacy on benefits, but have now been scrapped.

Substance abuse and alcoholism are rampant. Psychiatric illness is common, including psychosis. There is a relationship between psychiatric illness and crime and criminal convictions, mostly repetitive minor offences. The proportion of younger people with personality problems may well be increasing and there is exploitation and robbery of the older and more vulnerable.

Apart from the human suffering there are serious problems of communicable diseases, of which partly treated tuberculosis raises particular concern.

The chapter by Joseph on criminality was well balanced and informative and that by El-Kabir and Ramsden on primary health care was clear and compassionate in identifying barriers to care. However, the book is largely a compilation of statistics of uncertain reliability and the picture is confusing. The scale of the problem is difficult to assess. Those conducting interviews have various backgrounds, training and agendas, using different instruments. The psychiatrically most disturbed avoid centres of congregation and avoid being interviewed. It is difficult to combine studies and when we do the results may be misleading. Marshall has tried to disentangle some of the strands but familiarity with one of the cited studies makes me hesitant to accept his analysis.

Various models of care have been tried. The more assertive and proactive, the more successful. Many years ago the Government enunciated a policy that money should follow patients. The implementation of such policy would create positive incentives for professional involvement across geographical and professional boundaries.

MALCOLM WELLER