HUNTING THE MUSE

Dave Jago

Creativity and Madness: New Findings and Old Stereotypes, by Albert Rothenberg, is published by The Johns Hopkins University Press, Baltimore (£16.50, 199 pp., 1990). Professor Rothenberg is Clinical Professor of Psychiatry at Harvard University and Director of Research at the Austen Riggs Center in Stockbridge, Massachusetts. He is principal investigator for the project 'Studies in the creativity process'.

THE LINKS BETWEEN creativity and madness have provoked much discussion over the years, but it would seem that very little in the way of hard data has been collected. In the mid-1970s Rothenberg published a bibliography listing almost 10 000 references relating to scientific studies of creativity; it is unfortunate, therefore, that this wide-ranging and fascinating book is based almost entirely on his own studies and on his own literary analysis of his chosen subjects. Only a few other studies are quoted, and these come in for heavy criticism. That said, however, there is much of interest here.

Rothenberg's thesis is that there is a profound difference between the thought processes invoked by psychotic patients when producing poetry, paintings, or the like and those of artists who are 'genuinely creative'. This immediately raises problems of definition. Although the author shows that he is well aware of the problems involved in defining creativity, he still attempts to evade the issue to some extent. Science, for example, is undoubtedly creative, but whether it works in quite the same way is open to debate. Rothenberg's examples of creative scientific thinking are selected to show that this is the case, but one gets the impression that they have been selected with great care, and I doubt that examination of the germination of a random selection of important scientific breakthroughs would fit the pattern quite so neatly. More problematic is the fact that the examples he examines in detail are literary – primarily poetry and drama. While this makes his exposition easier to follow for the general reader, it is hard to see quite how his ideas extend to non-representational art such as music, despite his assurances that all creative thought follows the same processes.

The question of how to determine what constitutes a genuinely creative person or work is difficult to address satisfactorily. Should one rely on critical or popular acclaim? How should one establish a measure of each of these? Rothenberg has conducted over 2000 hours of interviews with winners of prizes such as the Nobel Prize and members of institutions such as the Royal Academy. This seems as reasonable a way of collecting creative individuals as any, but no details are given of the breakdown, or of how the categories were selected. He seems content to accept continued popularity over time as evidence of particular merit in a work. While there is some validity to this, it would be fair to say that many good works have perished over the years and much that is less worthwhile has survived – quality alone is not a guarantee of popular success. Ultimately, Rothenberg seems irritatingly sure of his own judgement in literary matters. His pronouncements on the artistic merit or otherwise of the poetry he uses as examples are unpleasantly plonking in tone.

> "Another poet subject said her first idea for a certain poem was the line, 'Cream of celery soup has a soul of its own.' She had been thinking, she recalled, about the simultaneously formed and unformed qualities of both souls and soup."

Rothenberg claims to have discovered two separate, specific thought processes which are essential to artistic endeavour. In the first of these, which he calls the 'janusian process', multiple opposites or antitheses are conceived simultaneously: in a leap that transcends logic they are seen either as existing side by side or as equally operative, valid, or true:

> "Think of attempting it yourself. Can you conceive of something lying both horizontally and vertically at the same time? Or of dry rain? Or of the sun rising and setting simultaneously?"

This process seldom appears in the final artistic product, but occurs at crucial points in its development. It is responsible for the germination of creative ideas, and produces material which is then elaborated on and developed.

The second of these processes, which Rothenberg calls the 'homospatial process', is involved in the formulation of metaphors and other unified structures:

> "As for homospatial conceptions, try to visualise a face and a tree occupying exactly the same space. Or a piranha fish and the moon. Or a nun and a racehorse jockey."

Concrete entities such as rivers, houses, human faces, sound patterns or written words are superimposed, fused, or otherwise brought together in the mind and totally fill its perceptual space. This conception is of necessity a fleeting one, but, he argues, one that produces elements which are not simply aspects of the original discrete entities.

Rothenberg provides anecdotal examples of both of these processes, culled from his extensive series of interviews, and assures us that he has found evidence of both throughout his study. While acknowledging that they can result in high levels of stress and anxiety, he is at pains to distinguish janusian and homospatial processes from psychotic thinking. His argument is that the former are active, intentional operations employed for purposes of producing creations, by people capable of tolerating the high levels of anxiety thus produced, whereas bizarre thinking develops in psychosis as a defence against extreme anxiety.

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This seems a little thin; the differences in response to anxiety could well affect what is made of the results of these thought processes, given the need for extensive development of the ideas following this stage, but need not necessarily imply a major difference in the actual processes.

The principal evidence for a concrete distinction lies in a word-association study Rothenberg conducted with a group of 12 Nobel laureates, using a control group of 18 psychiatric in-patients with a wide range of diagnoses. Since only three of the latter had a history of psychosis, his report that the experiment

> "sharply distinguished between mental illness and tendencies to creative thinking through the Janusian process"

seems a shade optimistic.

Rothenberg interprets his title very loosely. He starts by discussing the thought processes involved with the creative process, and the mystique that has grown up around creativity; this is followed by a look at poetry produced by schizophrenic patients; and that by a section on self-destruction and self-creation. He takes a close look at the specific instances of August Strindberg, Emily Dickinson, Sylvia Plath, and Eugene O'Neill; discusses the links between creativity and both alcoholism and homosexuality; puts forward his views on creativity and mental illness; and finally assesses the implications of psychoanalysis of creative people. Sadly, these various threads are not drawn together as well as they could be. Some of the chapters have been published previously in other forms, and show signs of inadequate adaptation. The chapter on Dickinson, for example, reads largely as a review of J. Cody's study of the poet (*After Great Pain: The Inner Life of Emily Dickinson*, Belknap Press, 1971), and would have benefited from an analysis directed more at her life and work and less at trading points with Cody.

Creativity and Madness raises many fascinating questions relating to both creativity and mental illness, and is an easily digestible and thought-provoking read. There is still a long way to go before these issues are fully understood, but Rothenberg has taken us a few steps further down the path.

MAN AND MACHINE

Eric Crouch

Medical Technology and Society: An Interdisciplinary Perspective is published by the MIT Press, Cambridge, Massachusetts (£15.95 (pb), £26.95 (hb), 571 pp., 1990). Its publication is sponsored by the Alfred P. Sloan Foundation as part of a New Liberal Arts Program for undergraduates. The authors, Joseph D. Bronzino, Vincent H. Smith and Maurice L. Wade, are university teachers–Bronzino and Wade at Trinity College, Hartford Connecticut, and Vincent Smith is Professor at Montana State University.

WHEN MY DAUGHTER Matilda was born seven weeks prematurely in 1978 she was transferred straight away to an incubator in a special-care baby unit. A brief period of apnoea led to multiple investigations, including arterial blood sampling and a lumbar puncture. Because she was unable to suck, a nasogastric tube was installed and instead of the breast, she experienced the plastic syringe. Eighty years earlier her great-grandmother, also Matilda and also premature, was wrapped in cotton wool and fed through a quill. Did the younger Matilda benefit from her early exposure to medical technology or did her great-grandmother get a better deal from the close contact with her mother, who nursed her with such care?

Certainly the baby down the aisle in the special-care baby unit, a boy born at 24 weeks, benefited from the available medical technology. Or did he? Without it he would not have survived. But what was the likely quality of his survival? Would he grow up a normal individual, or would such early prematurity leave him permanently damaged? In any case, how should we decide, firstly about the ethics of providing or withholding such a lifesaving form of care, and secondly whether we can afford the resources necessary to provide that level of care to the individual?

As we know, these are modern dilemmas. The authors of this book suggest that the discovery of X-rays in 1895 by Röntgen dates the start of the modern age in medicine, but that only in the last 50 years have medical technology and modern therapeutics begun to take hold. This is exemplified by the introduction of the heart-lung bypass machine in 1939 and of penicillin in the 1940s. The introduction of computerisation in the 1970s was a further step and brings us to where we are today.

Of course the introduction of medical technology parallels the general development of technology in modern societies. We seem to react to new technology by fairly quickly taking it for granted (after the initial phase of bafflement) and, as consumers of health care, we begin to take it for granted that there will be an available technological solution to each health problem. This ranges from the common assumption that there will be a test or X-ray to give a definite cause for every ache or pain to the almost routine acceptance that there will be a machine to take over failing functions or an operation to mend or replace a failing organ.

At the same time, technologically sophisticated devices have become the modern equivalent of wizardry. The black-box works a magic spell to give the answer needed or mysteriously sustains life when we had seen it ebbing away. On the whole the readers of this review will know how these devices work, but the majority of even our well educated patients may not.

Does this in fact matter? The answer is that it does. The dilemmas

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