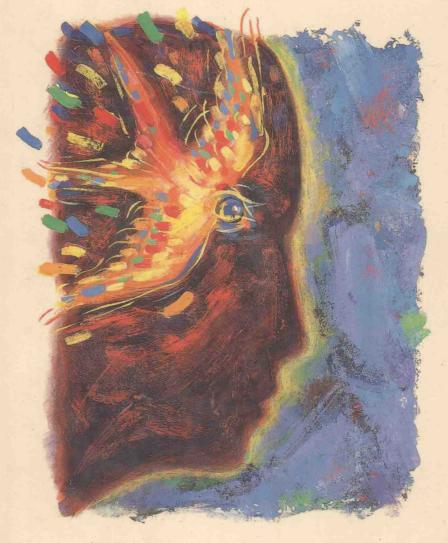
Peter Evans and Geoff Deehan

THE KEYS TO CREATIVITY



An inquiry into the mystery of creativity, and how to increase your own creative potential

THE KEYS TO CREATIVITY

THE KEYS TO CREATIVITY

Peter Evans and Geoff Deehan

GRAFTON BOOKS

A Division of the Collins Publishing Group

LONDON GLASGOW TORONTO SYDNEY AUCKLAND

Grafton Books A Division of the Collins Publishing Group 8 Grafton Street, London W1X 3LA

> Published by Grafton Books 1988 Reprinted 1988

Copyright © Peter Evans and Geoff Deehan 1988

British Library Cataloguing in Publication Data

Evans, Peter The keys to creativity 1. Creativity – Psychological perspectives I. Title II. Deehan, Geoff 153.315

ISBN 0-246-13274-4

Photoset by Rowland Phototypesetting Ltd Bury St Edmunds, Suffolk Printed in Great Britain by Hartnolls Ltd, Bodmin, Cornwall

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publisher.

> Composition studies for Picasso's Guernica reproduced by courtesy of the Prado, Madrid, © DACS 1988 Guernica reproduced by courtesy of The Bridgeman Art Library © DACS 1988

CONTENTS

	Preface	7
1	The Creativity Conundrum	9
2	Towards a Definition of Creativity	19
3	Measuring the Mystery	41
4	Some Varieties of Creativity	63
5	Creative Voices	89
6	Inside the Creative Brain	107
7	Strategies for Creativity	125
8	Expert Editors	155
9	Creativity in Action	177
10	The Creative Future	193
	Bibliography	215
	Index	217

PREFACE

Writing this book evolved into an unusual experience. We began with the intention of dissecting this much-used word 'creativity' from two angles. First, we set out to investigate the researches, theories and speculations of scientists trying to understand how and why creative people manage to produce works of excellence. Second, we wanted to see how the objective insights of science would match what creative individuals themselves have to say about their achievements: what motivates them; how they organize their thoughts; where ideas come from.

In both cases we were, we thought, on the outside looking in. But researching and writing a book is itself an act of creation. Inevitably, we too became a modest part of the creative population we were studying. We began to find it fruitful to look at 'us' as well as 'them'!

The original idea for the book stemmed from a documentary series on creativity which we were engaged in making for BBC Radio 4. Here, too, was a personal source to mine: namely, how to distil and present the many voices of scientists, artists, psychologists, writers, historians, designers and so on into a coherent, readily-understood broadcast series of programmes.

By thinking reflexively and sounding off our own experiences against those of our many interviewees, we arrived, on tape and on paper, at a surprising conclusion. Perhaps even a creative one.

Our thanks are due to Richard Johnson at Grafton Books for giving us a vehicle for expressing our ideas.

Peter Evans/Geoff Deehan London 1988

1

THE CREATIVITY CONUNDRUM

First there was the great cosmic egg. Inside the egg was chaos, and floating in chaos was P'an Ku, the Underdeveloped, the divine Embryo. And P'an Ku burst out of the egg, four times larger than any man today, with a hammer and chisel in his hand with which he fashioned the world.

Third century Chinese myth

Most cultures have their own story of the Creation. Usually an all-powerful supernatural being is described as making the world from the void, fashioning physical reality from what had been until then eternal nothingness or, at best, chaos.

In the biblical version of Genesis, the elaborate process takes just seven days. For today's scientists the Big Bang that initiated time, space and matter – including ourselves – was an instantaneous eruption from the timeless singularity that went before. Both these explanations of the creation of the universe, the religious and the cosmological, are clearly complementary to and compatible with each other. And both rely on some mighty force, presence, power or intention to set the whole cosmos rolling. Here then is, undeniably, an act of creation: from nothing is something, indeed everything, made by the agency of a creator. Here is the pinnacle of creativity. It has also become a universal prototype.

By analogy we have come to regard the process evoked by this much-used, if ill-defined, word 'creativity' as akin in general to a divine act of innovation. The creative person we think of as endowed with quasi-supernatural powers that mysteriously set to work to bring into being works of art or theories in science that are totally new, fresh and original. From nowhere something is materialized. The intermediary - the creator - we call 'gifted' or 'touched with genius'. Consider, for example, these accounts by creative people of the 'creative process' as they see it: ' . . . the germ of composition comes suddenly and unexpectedly. If the soil is ready – that is to say, if the disposition for work is there – it takes root with extraordinary force and rapidity, shoots up through the earth, puts forth branches, leaves and, finally, blossoms.' Or: 'I rely entirely on the unconscious.' And again: '... creation . . . is the activity in which the human mind seems to take least from the outside world, in which it acts or seems to act only of itself and on itself."

In these brief autobiographical comments we can detect

several key ingredients in the 'inspirational genius' notion of creativity. The first, from the composer Tchaikovsky, embodies the idea of the sudden flash of insight, the 'Aha! Experience'. From out of nowhere, in a manner analogous to the Creation, comes something which the prepared mind goes on to work over into a musical composition. The second, offered by the spectacularly successful advertising man David Ogilvy, treads similar ground. In order to generate what he terms the 'Big Idea', Ogilvy listens to a client's briefing, then leaves it to his unconscious mind to simmer away below the surface in order to come up with a novel thought. Again, a variant on inspirational genius. Third comes the celebrated nineteenth-century French mathematician Henri Poincaré. whose book on the foundations of science contains an attempt to pin down the true nature of scientific and mathematical creativity. Once more the drift of the argument is towards the 'elusive genius' explanation. Poincaré talks a lot about 'intuition', and perceiving 'hidden harmonies and relations', the mysterious emergence from the subliminal self of 'privileged unconscious phenomena'.

Perhaps the most telling advocate of this kind of creative process is Mozart, that extraordinarily prolific composer of enduringly beautiful music who, from time to time, tried to relate to others how he did it. Typically, Mozart wrote in a letter that his ideas flowed most freely when he was alone and in a good mood, say after a satisfying meal. But, he added of these precious ideas, 'Whence and how they come, I know not; nor can I force them.' Having perhaps hummed a melody to himself, Mozart would then go to work on a composition in his head, not piecing it together note by note on paper. Eventually the whole work, even a long one, 'stands almost complete and finished in my mind, so that I can survey it, like a fine picture or a beautiful statue, at a glance'. All the parts of a complete orchestral score are heard, not as a succession of instrumental voices but as a coherent

unity, playing together. The final step would be to transfer all this near-finished music from mind to manuscript sheet, like copying a disc on to a cassette. And almost as quick.

In the face of such a description of the creative process it might seem that the inspirational genius case stands proven. For Mozart, writing music was not, apparently, like constructing an edifice brick by brick, rather more like taking dictation from some divine and sublime inner self. In Peter Shaffer's play *Amadeus*, indeed, the jealous, less accomplished Salieri observes that his rival Mozart seems to be composing as if in direct creative communion with God himself

Can we understand the incomprehensible?

Although the concept of the ill-defined, mysterious, inspired, sublime creative genius has been popular for many centuries, there is some evidence that it is not the end of the story: nor even the beginning or the middle. In fact mysteries quite often evaporate into more hard-nosed phenomena when you investigate them in the right way. Think of how the invention and development of the telescope changed humanity's whole perception of the universe. By being able to look at distant astronomical bodies, we began to see the cosmos not as an earth-centred artefact of the gods, but an extraordinarily big natural machine subject to certain universal laws, motions and interactions. In doing so we did not, and do not, abandon our sense of wonderment at the scale and complexity of the physical world. But we should stop calling events and observations 'mysteries' when what we really mean is that we do not understand them.

So it is with creativity. For many years psychologists tended to treat this particular area of human behaviour as *terra incognita* – unknown territory – that had never been and probably could never be charted. In an address given at

Pennsylvania State College in 1950, the President of the American Psychological Association, J. P. Guilford, chose Creativity as his theme, 'with considerable hesitation, for it represents an area in which psychologists generally, whether they be angels or not, have feared to tread'. Guilford we shall be meeting again later, because he has done much to explore the badlands of creativity. But a few decades ago he was voicing the general apprehensions of behavioural scientists: that creativity is simply not amenable to objective description, analysis, experimentation or inquiry. Like religion or aesthetics, it belongs to a different universe of experience to the motions of planets around stars or the reactions of one chemical with another. Or so it seemed at the time.

Later in his talk Guilford went on to point out how neglected the study of creativity had been. Of approximately 121,000 books and papers listed in *Psychological Abstracts* in the previous 23 years, only 186 seemed, from the index, to have some bearing on the topic of creativity: a mere one-fifth of one per cent. Nearly forty years later the proportion looks decidedly healthier: even so there are still signs that psychologists feel uneasy with the topic. Compared to the numbers of papers published, say, on the differences in thinking abilities between pre-school boys and girls, or the personality traits of lawbreakers, creativity still takes a back seat. However, there have been some outstandingly revealing attempts to pin down the 'mystery' of creativity, and these form the core of this book.

What these investigations suggest most importantly is that the process of creation need not necessarily remain a closed book to the scientific investigator. It is amenable to analysis. As the eminent British scientist Peter Medawar – awarded a Nobel Prize for his exceptional contributions to the study of the immune system – once stated: 'That 'creativity' is beyond analysis is a romantic illusion we must now outgrow.'

This conviction finds an echo in the work of Dr Robert

Weisberg, one of the key researchers active in the creativity field whose ideas we shall be exploring in some detail later on. Dr Weisberg too argues that we should jettison the persistent myths that we use to explain the phenomenon of creativity. 'Much of what we believe about creativity,' he writes, 'is not based on hard data but is more or less folklore, passed down from one generation to the next as if it were the truth.'

Clearing the ground

In order to acquire some of that 'hard data' on creativity to which Dr Weisberg refers, it is first necessary to decide precisely what it is that we are going to scrutinize. A straightforward enough ambition you might think, yet, with creativity, hardly a simple one to meet. For one thing, there is no agreement over what constitutes creativity. Certainly it is the sort of thing that people acknowledged as creative do. In the narrowest sense, according to Guilford, 'creativity refers to the abilities that are most characteristic of creative people'. He goes on further in this circular vein with: 'Creative abilities determine whether the individual has the power to exhibit creative behaviour to a noteworthy degree.'

Such definitions beg so many questions that they are hardly satisfactory. It is as if one were to define an electric light bulb as something that lights up when you pass current through it: adequate in a broad sense, but hardly illuminating as a description of the way a bulb uses electricity to generate and scatter light. We need to know more. We need to know, for example, who the creative people are: whether these creative powers are confined, for example, to the superstars of literature, art and science or whether they are shared by more humble folk. Perhaps by us all.

We also need to know more about the personality of the

creative individual. Clearly he or she does possess certain qualities of mind that are brought into service in order to invent, contrive, compose or construct. Are these 'special' qualities or are they in common supply? If the latter, are we then talking about a certain necessary admixture of talents, like a finely balanced chemical formula?

Another series of questions concerns motivation. Creative people tend to work hard at being creative. The French writer Balzac would drive himself relentlessly night after night, sustained by huge (and no doubt unhealthy) amounts of coffee, to revise and complete his novels. Others have a similar inner urge to get things done, to work out of their system a poem, play or painting. Contrary to popular myth, creative people are not fey, ethereal beings waiting to be touched by some fickle muse before setting pen to paper or brush to palette. They work with the intensity, even ferocity, of the beaver to construct the edifices mapped out in their minds. Again, we need to understand the origins of this pressure to create in order truly to understand the process of creation.

A further area that needs clarification is the much-discussed relationship between creativity and intelligence, by which we usually mean an IQ score as derived from an intelligence test. Again we confront a popular misconception. 'Einstein was a genius, an egghead with a telephone number IQ.' 'Sure Picasso was creative. He was a very bright guy, wasn't he?' 'Shakespeare? A creative genius, with an IQ you couldn't measure.' Such comments are typical. Of course creative people are intelligent, runs the argument, therefore the first-leaguers – the 'genius' types – are ultraintelligent. The logic is inescapable. But it is false. As we shall see later, there is little or no connection between adult IQ and creative achievement beyond a certain level. This baseline is not a stratospheric score of 160 or 180 but a mere 120 – bright but not outstandingly so. As a predictor of