

Rendering Techniques

Dick Powell and Patricia Monahan



© 1987 by Dick Powell First published in Great Britain by Macdonald & Co (Publishers) Ltd London & Sydney

First published in North America in 1987 by North Light Books, an imprint of F&W Publications, Inc., 1507 Dana Ave., Cincinnati, Ohio 45207 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 without the prior permission in writing of the publisher, nor be otherwise circulated in any form of binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

Colour reproduction by Colorlito

Printed in Italy ISBN: 0-89134-211-7

Contents

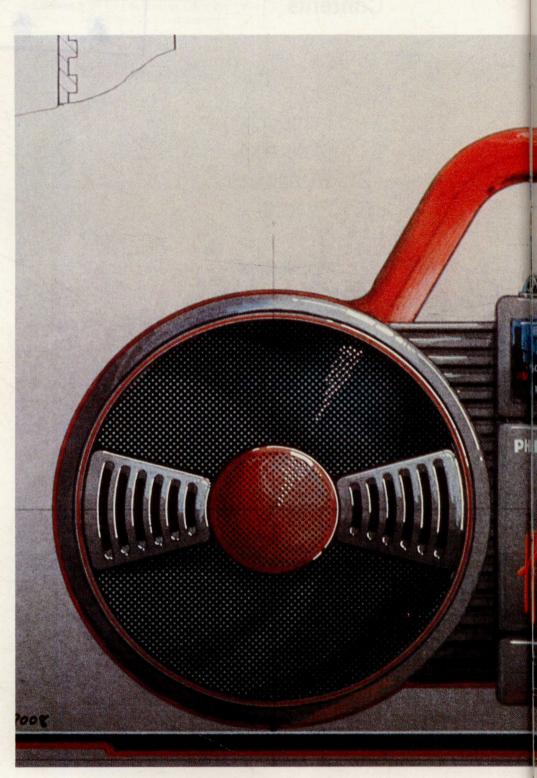
	Introduction	6
1	Materials	10
2	Techniques	22
3	Projects	42
	Applications	
4	Advertising	64
5	Film and video	88
6	Packaging	94
7	Product design	102
8	Automotive rendering	110
9	Architectural, interior and	
	exhibition design	126
10	Textile design	140
11	Illustration	146
	Index	156
	Acknowledgements	160

Introduction

The origins of the humble marker go back a long way; indeed the first markers, made from bamboo and a felt nib, originated in Japan many years ago. The first commercial marker, however, was not launched until the mid sixties. It was blotchy and unpredictable, but offered two advantages that no other media of that era could match — a fast drying time, and convenience.

Design Studio: Philips C.I.D, Eindhoven

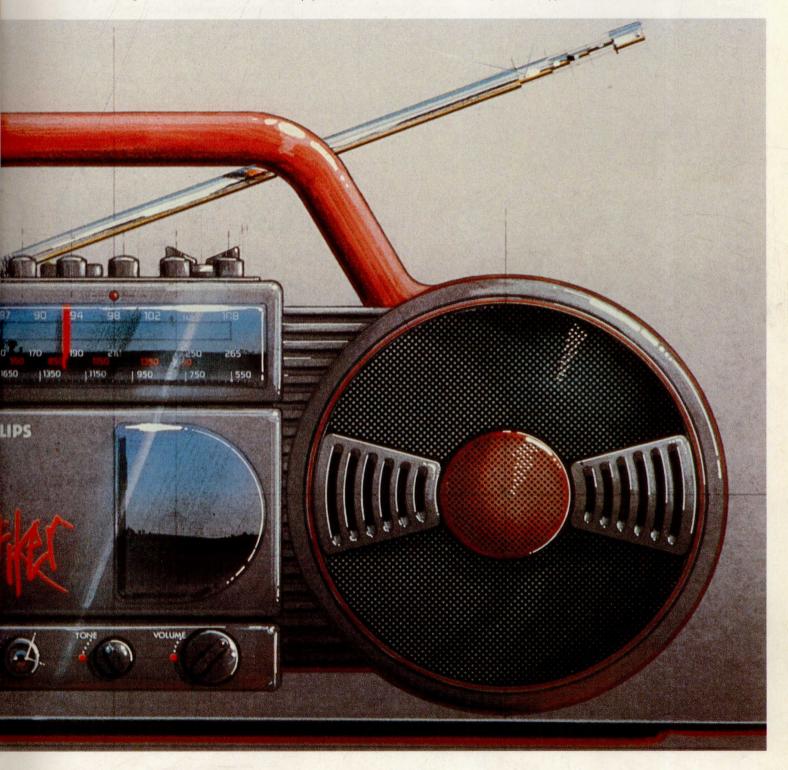
This rendering of a radio design is typical of the output of industrial design studios. It is drawn in side elevation so that dimensional accuracy and scale can be maintained, and the detail on which such a drawing depends can be quickly put in using rulers, circle guides and so on. Many different media, such as pastels and crayons, have been used over the basic marker work to achieve more subtle modelling of the forms and details, and gouache has been used for the final highlights.



Back in the sixties, the idea of manufacturing 150 different colours, each in its own small 6cc bottle which would stand only a few minutes of continuous use, seemed utterly ridiculous when compared to a palette of gouache. Now of course, there are hundreds of different brands, colours and types of marker for working on different surfaces and for producing different effects. The basic

advantages remain: the main one is the fast drying time that allows the user to overlay colours immediately, without the intermixing common to other media (such as paint), so that full-colour visuals can be produced without the need for extensive preparation. Another benefit of markers is that they work best on lightweight semi-transparent papers which allow extensive use of underlays, so

that paper stretching and tracing down are unnecessary. Markers have a third plus factor: familiarity with a particular brand gives the artist a colour memory that makes selection and use quick and easy. For these reasons the marker has come to dominate much of the graphics business, completely surplanting traditional media for many applications. When it first arrived, however, it



demanded a new approach, and so artists and designers had to alter their styles and develop new techniques to take full advantage of it. These were hard-won skills, and for anyone, student or professional, who is inexperienced with markers, it is a daunting task to acquire them by trial and error and it can take a long time. This book will not help you to draw, and it will not turn you into an accomplished marker artist, but, by showing some of the basic techniques and tricks of the trade alongside fine examples of marker renderings, it can help you move up that learning curve a bit faster.

Drawing is absolutely fundamental to marker rendering (or any kind of visualizing for that matter), and without this skill the marker is as limited as any other colouring media. This book assumes that you can draw reasonably well and that you are used to drawing from life, from memory, or from reference material. From such a base it will help the beginner acquire marker rendering skills, and it should offer

the more experienced a useful insight into how others achieve different finishes and effects. The book starts with a guide to the most common materials used by the marker artist. This is followed by two chapters that are devoted to practical stage-by-stage examples showing how drawings are created, and which include favoured techniques developed by individual artists and designers. The remaining eight chapters are devoted to specific applications. Each of these chapters gives numerous examples of drawings, from roughs and scamps through to finished artwork and illustrations, with a description of how they were done. These examples can be analysed for their technique and learned from, but more importantly, they are a source of inspiration, both for the beginner and for the experienced professional.

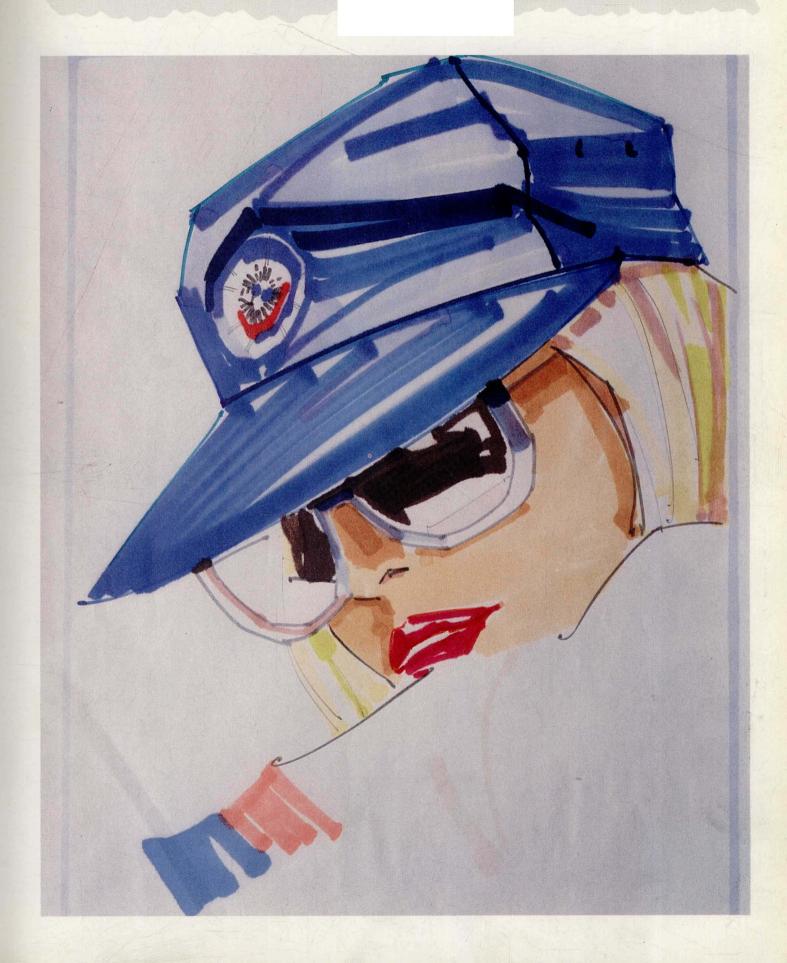
Artist: Paul Langford

This punchy image (right), is deliberately simplified so that the idea can be put across to the client quickly and efficiently. The artist has used the marker with absolute confidence and it shows! This boldness of approach is vital for producing slick, but informative, loose visuals.

Design Studio: The Design House Artist: Nigel Langford

A nice loose visual (below), with a fluid sketchy feel to it. The designer has obtained a good impression of the interior with the minimum of marks on the paper; note especially how the white of the paper is allowed to show through so that the drawing looks fresh rather than overworked.







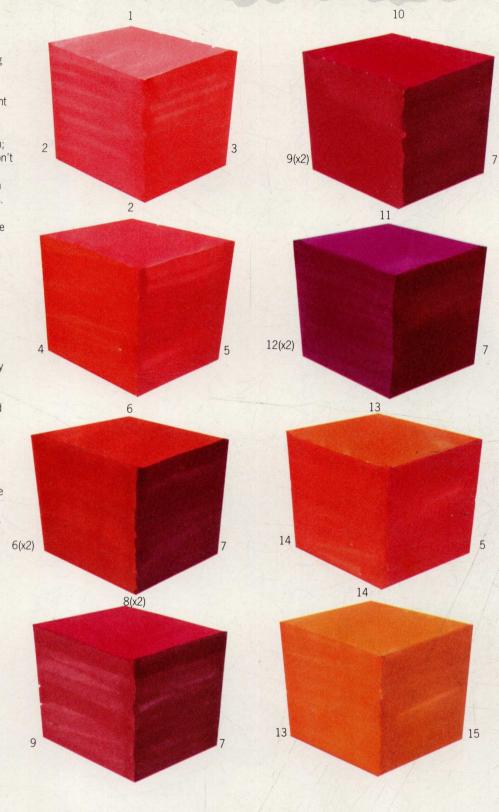


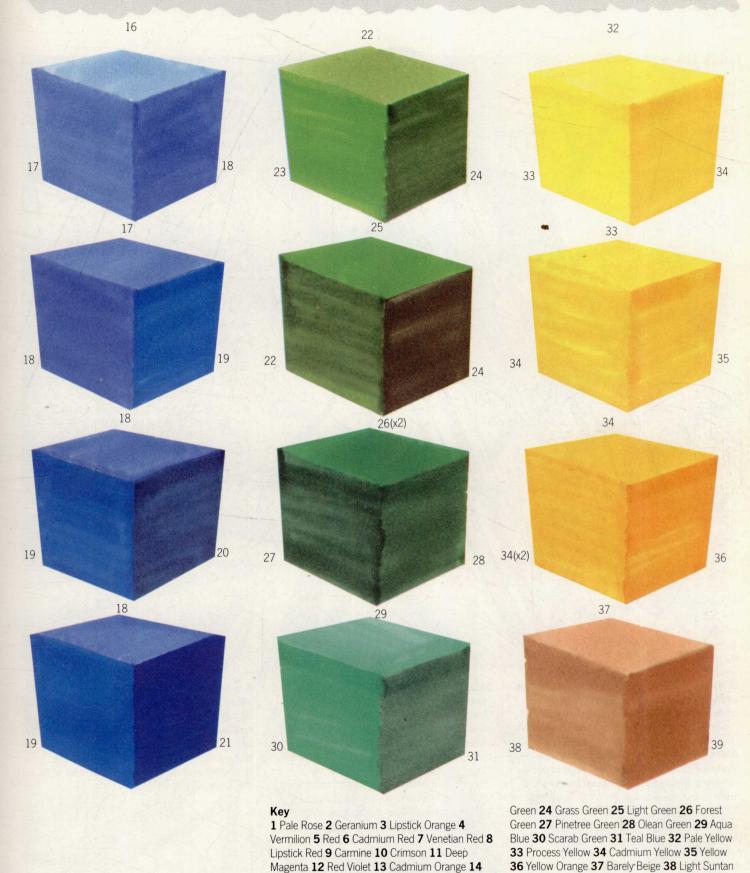
Marker range and tonal rendering

One important secret of good rendering is knowing how to use colour effectively to model threedimensional objects. The world is a threedimensional place, and virtually everything you want to depict has form which reflects light and throws shadows. Sometimes you may be working with hard objects with clearly defined breaks in the form: in such cases, sharp contrast between surfaces won't look odd and is often desirable. And at other times you will be dealing with soft organic surfaces which blend and flow together in smooth tonal transitions. In the former case it doesn't matter if the colour dries before you apply an adjacent shade, but in the latter you need to work fast to keep the colour wet so that newly laid colours can be subtly blended. In either case the real trick is recognizing which colours work well together to give sufficient tonal contrast, and yet can be successfully blended for tonal transitions. This usually comes with practice and experience, but for the beginner investing in markers for the first time a chart, such as the one shown right, can save a lot of time testing markers in the shop, and a lot of money buying unnecessary colours. If you are new to marker rendering it is always a good idea to keep a reference chart such as this so that you have a record of what works and what doesn't. If you do make a chart, be sure to use your regular marker paper and fix it to a board with a tape hinge down the centre: this will allow you to fold over the paper and thus protect the colours from direct light.

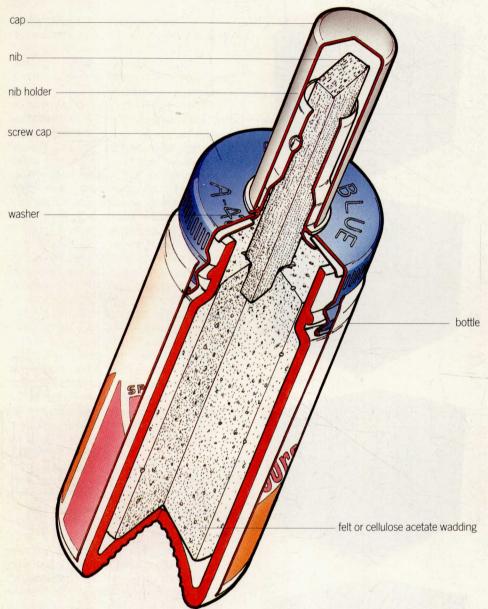
The standard method of creating two tones of the same colour is through overlaying: the colour is laid down once, allowed to dry, and then overlaid again. This gives quite a subtle tonal shift which is usually insufficient for sharp modelling so a second, darker colour is needed. The beginner is often tempted to use cool or warm greys for this shadow tone, but this invariably makes the colour 'muddy'. To keep the perception of the colour clear and bright it is essential to choose a new colour. This second colour can, in turn, be overlaid to produce a still darker tone. A third colour is usually necessary to produce the really dark tones, and this can also be overlaid yet again for the deep shadows. In this way, a subtle transition of six tones can be produced by careful selection and overlaying.

The colour chart right was rendered with the Magic Marker range, but it could easily be carried out in any other brand, although some experimentation would be needed. The limitations of printing have made it very difficult to achieve accurate colour matchings, so you should only refer to the colour names when referring to this chart. Each colour has been used only once (unless stated as overlaid x2) to give a reasonable tonal balance, but more subtle effects can be obtained through overlaying.





Chrome Orange 15 Sanguine 16 Pale Blue 17 Manganese Blue 18 Pthalo Blue 19 Mid Blue 20 Blue 21 Antwerp Blue 22 Pale Green 23 Marine 39 Dark Suntan.



find yourself using one type most of the time and reaching for alternatives in the few cases when a particular colour is only available in a different brand. The colour chart on pages 12-13 shows how a single brand of marker (in this case Magic Markers) can be used for three-dimensional modelling. Most experienced artists and designers will not need this chart, but for the beginner it should save a lot of experimenting in the graphics store. For the professional, you should restrict yourself to 'art' or 'studio' markers, so-called because they are available in a selection of more than 100 colours. Any brand that offers less than this is inadequate for most visualizing, and you will find significant gaps in its range. When choosing a brand, make sure that you try all the different types that are readily available from your nearest supplier - don't fall for a marker that is only available by mail order from a stockist the other side of the country, as they always run out at the most critical moment! See which ones feel comfortable to use and suit your own style of drawing and try to talk to experienced artists about why they use particular brands. Look also at the work they produce—assess the quality and finish and compare it with your own requirements. When testing markers, see how they perform in the following key areas.

Colour range

As already discussed, you need a comprehensive range of colours. This should include a range of warm and cool greys in at least five, and preferbly nine, shades. Make sure that you have a good range of pale shadow colours: pale blues, greys, and flesh tones, etc., as you will find that these are more in demand than any of the other colours. This is because they are used for delicate modelling on white paper where the bleed-out to white needs to be subtle.

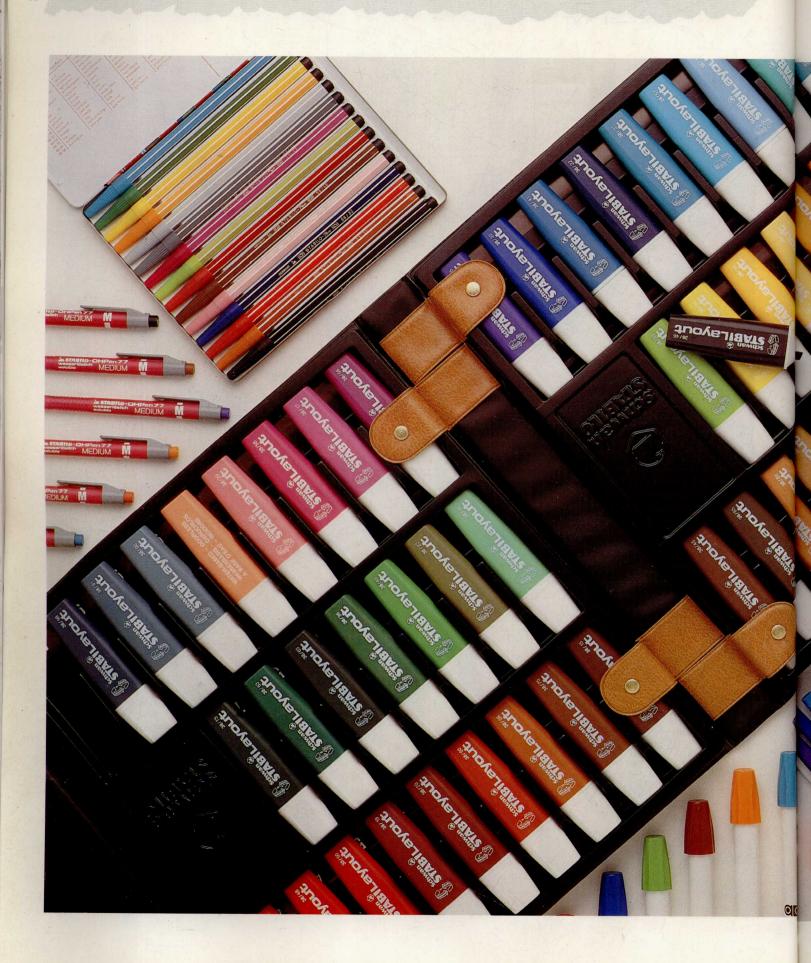
This cut-away view shows all the parts that go to make up a Magic Marker. The manufacturing tolerances and quality control need to be very tight to prevent loss through evaporation and on-shelf deterioration. The felt wadding can be eased out with a scalpel and held in a bulldog clip for use as a giant marker.

Selecting a brand

There are so many different brands of marker to choose from that the beginner is often at a loss when it comes to knowing what to buy. Every experienced artist and designer has a favourite brand, and even the launch of a scintillating new range of markers will not tempt him or her to change. The main reason for this is that he or she has built up experience with the product and is familiar with the colours and the exact results. This predictability is vital for the busy marker artist and the prospect of changing to a new brand is very daunting. This section therefore includes a survey of marker characteristics against which a beginner can measure the performance of individual types of marker. Of course, it is not necessary to restrict yourself to a single brand, but in practice you will

A selection of other solvent-based markers. When starting out, try one from each brand and see how you get on with it: above all, talk to someone who is very experienced and get the pros and cons well sorted out before committing to a range. Note the excellent and unique extra-wide and wide Illustmarkers from Japan.







Left: a selection of the water-based markers available. Staedtler fine-liners are available in a good range of colours. The unusual Mars brushpens have some of the feel and quality of a traditional brush because line thickness can be easily adjusted by delicate changes of pressure and angle on the tip.

Markers are available for marking in many different types of media on various surfaces—from concrete to glass. Shown below are some of the more unusual types found in the graphic studio. In paint markers the medium is not held in a tampon—because it is opaque and free flowing, it requires a valve action in the tip and an agitation ball in the reservoir.

Consistency and continuity

If you buy a marker from your local graphics supplier and the same colour from a shop the other side of the country, or you compare a new marker with one that has been around for a couple of years – assuming it is well sealed (and many manufacturers do guarantee their products for shelf life) – you should expect identical colours from each. However, some manufacturers have better quality control than others, and because markers are batch-produced there is always a risk of inconsistency. Colour continuity refers to the colour remaining the same throughout the life of the marker. Some colours of certain brands have a tendency to separate in hard use or when they have been left around for a while.

