

`For all its scholarly apparatus, this is not an academic book.' These opening words of John Gage's engaging introduction to his massive tome should not be dismissed as a conventional apologia. He is right in claiming that his chosen topic, 'the way in which the societies of Europe and the United States have shaped and developed their experience of colour', does not lend itself easily to systematic treatment, for, strictly speaking, the 'experience of colour' can no more be said to have a history than has the experience of light, of sound or of smell. Histories can be written, and have been written, of the science of optics, of physiological and psychological theories of colour vision as well as (related to these distinct subjects) the technology of colour photography, colour television and the various wizardries of the computer which have recently resulted in a spectacular improvement of colour reproductions (not always evident in the plates of this book). Martin Kemp in his book The Science of Art, subtitled 'Optical Themes in Western Art from Brunelleschi to Seurat', has devoted two chapters to the impact of these theories on art and technology, but it appears that this work, published in 1990, came too late for Gage to do more than list it in the bibliography of one chapter.

Admittedly, the two books overlap only in certain areas for, as we have seen, Gage has cast his net much more widely. Packed with out-of-the-way information which, one readily believes, took thirty years to assemble, his book is enticing to browse in, but less easy to read from cover to cover. Despite the chronological framework, it is best approached as an encyclopaedia of colour lore. A good many of its chapters are likely to remain the standard treatment of their respective topics for years to come, for example its discussions of ancient colour terminology, of the renderings of the rainbow in painting, of the history of the palette and of theories of colour music.

Gage cannot be blamed for the fact that other sections are less rewarding, since their results are largely negative: for example, the chapter on the 'Fortunes of Apelles' surveys a large number of futile attempts to make sense of Pliny's report that the painter used only four colours (since this list does not include blue, it is hard to imagine how Apelles rendered Venus rising from the sea). An equally learned account of colours in heraldry can best be read as a warning to historians not to expect a fixed code of colour symbolism in these constantly shifting practices.

Among the sections likely to be of special interest to art historians, Gage's treatment of Abbot Suger's account of his remodelling of Saint Denis may well take pride of place. Like Peter Kidson in his article in the Journal of the Warburg and Courtauld Institutes, L, 1987 (though for different reasons), Gage challenges Erwin Panofsky's classic interpretation of the text as 'an orgy of neo-Platonic light metaphysics' and argues that the blue glazing would rather have created a mysterious darkness which we are to identify with the 'negative' theology of Dionysius who, in various passages, advocated the use of dissimiles similitudines as an aid to contemplation. Psychologically there is much to be said for this interpretation: Milton speaks of a 'dim religious light' and Burke reminds us in his discussion of the Sublime that 'nearly all heathen temples are dark'. But for this very reason one may wonder whether the remarks of the Areopagite (who speaks more of monstrosity than of darkness) are needed to account for this choice of glazing, and whether the author here and
elsewhere in his pages on medieval art has not been carried away by his extensive scrutiny of contemporary texts to underestimate the autonomy of craft traditions.

Similar doubts may assail one on reading Gage's ingenious interpretation in alchemical terms of Van Eyck's *Arnolfini Wedding* and of Cosimo Rosselli's frescoes in the Sistine Chapel. For all his interesting observations on texts and images one may also wonder whether he has done full justice to the contest between *disegno* and *colore* in renaissance theory and practice. Though these ideals are not incompatible, we have also learned increasingly in recent years that they rely on alternative perceptual systems. But any such reservations must yield to gratitude for the many insights we owe to his subsequent pages. We learn, for instance, to what extent the search for the true primary colours that preoccupied subsequent centuries was often linked with metaphysical theories long before Kandinsky and Mondrian. In this respect the author might also have profited from Albrecht Schune's masterly book on Goethe's *Farbentheologie* (Munich, 1987) which shows convincingly that the poet's objection to Newton's experiments with the spectrum was rooted in his identification of Light with God, reinforced by his dislike of the doctrine of the Trinity. (Little did he know that here Newton would have agreed with him.) In any case we must be grateful for the care with which Gage has pursued the influence of Goethe's heretical doctrines, and most of all for his treatment of nineteenth-century theory and practice from Delacroix to Seurat and particularly Van Gogh, not to mention his disentangling of the complex effects of Ostwald's colour charts on twentieth-century painters in Europe and in the United States.

It must be admitted that the disjunctive arrangement of the book does not always make it easy for the reader to grasp certain salient themes in the relation between colour and culture which the author brings only intermittently into focus. There is first of all the psychological link between colour and sensuality that explains the ambivalent attitude of aesthetes and moralists towards loud and conspicuous colours. It is not before page 208 that we read the remarks by a psychologist that `pleasure in bright saturated colours was common to all periods and peoples'. What is relevant, however, is the observation that some cultures relished this pleasure while others came to disapprove of all that was `gaudy' and therefore vulgar. The key passage is to be found in Cicero *De Oratore* III, XXV, asking why we tire so soon of the very sensations we most enjoy at first, a tendency that accounts for our preference for `old paintings over new and "florid" ones'. It is a testimony that not only would have reinforced Gage's interpretation of Pliny's garbled passage about Apelles, but also offers a kind of measure for the refinement and aesthetic sophistication of a culture and its elite.

If these issues largely depend on various responses to colours in the sense of hues, another all-pervading theme is the relation of hue to tone. It is a problem that concerns any art historian who has had to deal with a black and white reproduction of a painting. We all know that there are no fixed equivalences in such a translation, which will partly depend on the emulsion employed in the photographic process. What concerns the painter even more is the placing of individual hues along the scale that extends from white to black. Aristotle had ignored the problem, asserting that all hues could be so fitted into a linear gamut. Efforts `to reconcile the irreconcilable demands of hue and of tone' (p.137) are frequently referred to by the author. What he seems to have taken for granted is the motivation behind this desire: in monochrome media the tonal scale from darkness to light suggests recession no less compellingly than linear perspective, but landscape painters had to restrict their palette severely to avoid disturbing this desired effect. Constable notoriously ridiculed the advice of his patron to keep the foreground brown like the tone of an old violin, by putting a violin on the green lawn, but the need for uniform gradients in the rendering of the visible world could not be obviated by a good joke. Indeed hue was only emancipated from the tyranny of tones by the Fauves, who
sacrificed the gradients of modelling and of aerial perspective (in contrast to the Cubists who largely reverted to monochrome).

This problem, it turns out, concerns the relationship of colours and their mutual interaction. Gage is, of course, fully conversant with the theory of colour-contrasts codified but not discovered by Chevreul. But we know increasingly that this "law" describes only one of the effects contiguous colours can have on each other. Indeed, Ruskin was right when he wrote in *The Elements of Drawing*: 'while form is absolute . . . colour is wholly *relative*. Every hue throughout your work is altered by every touch that you add in other places.' Strangely enough these interactions are hard to predict, witness the observation of von Bezold (mentioned, but not explained by Gage) that adjoining colours can become assimilated to each other. Modern experiments, notably those by E.H. Land (the inventor of the polaroid camera), have brought fresh surprises, and a recent article in the journal *Perception* (Vol.22, 4, 1993) on 'Relational Colour Theory' shows that there is no end in sight. But, surely, this is all to the good. It will enable John Gage to spend another three fruitful decades on his exhilarating quest.