

### Recommended Books (Long-list)

These books have been chosen because they are aligned with our 21st Century multi-disciplinary focus on colour education, are easily accessible, and mostly free from common misconceptions about colour. Note that this compilation is a work in progress, and assessment of new materials for the list is ongoing.

#### COLOUR BOOKS FOR EVERYONE

Ball, P. K. 2001. *Bright Earth, Art & the Invention of Color. Chicago:* The University of Chicago Press.

What does chemistry have to do with what we see? Color's material relationship to natural pigments is profound and elemental. If you ever wondered why the colors in your paint box look and act the way they do, Bright Earth is for you. Philip Ball takes us on a fascinating tour behind the scenes to learn about the dynamic historical collaborations between chemists, artists, and designers that give rise to new colors.

Batchelor, D. 2000. *Chromophobia*. London. Reaktion Press.

Highlights the fear of color in history and sheds light on the variety of ways we, as humans, instill meaning to colour. A thought-provoking look at how our relationship to color is connected to culture, time, and individual prejudice.

Blaszczyk, R. 2012. The Color Revolution. Cambridge: The MIT Press If you ever thought that color is merely decorative, this book is a game changer. Connecting the dots between transnational chemical industries that produce new synthetic colors and the massive growth of global markets in the 20th century, Blaszczyk shines light on myriad roles played by color in mass consumer culture.

Delamare, F. and Guineau, B. 1999. *Colors:* the story of dyes and pigments. New York, NY: Harry N. Abrams.

Although small in size, this little compendium of dyes and pigments and their history is packed with information and fascinating illustrations. An alternative to Finlay.

Finlay, V. 2002. *Colour. Travels Through the Paintbox*. London: Sceptre (Hodder and Stoughton)

An entertaining account of Victoria Finlay's adventures as she travels the world to track down the sources of pigments and dyes used by artists and artisans from pre-historic times to the middle of the nineteenth century. As she explains in the preface: "There is a little theory mixed in with the journey but this is not the place to find detailed debates on colour harmonies or colour science. Instead this is a book full of stories and anecdotes, histories and adventures inspired by the human quest for colour.

Finlay, F., 2014. The Brilliant History of Color in Art. J. Paul Getty Museum. Another entertaining volume on pigments from Victoria Finlay, consisting primarily of historical anecdotes relating to each pigment, accompanied by numerous illustrations of paintings and historical photographs, diagrams and artefacts.

Livingstone, M. 2014. Vision and Art: the biology of seeing (Expanded edition). New York, NY: Harry N. Abrams, Inc. Margaret Livingstone is a Professor of Neurobiology at Harvard Medical School. In this fascinating book, she provides a bridge between science and art. She presents a concise account of the mechanisms of vision and shows how this can explain some striking effects achieved by artists. The book is superbly illustrated with clear explanations. It will appeal to the general reader as well as to students of physiology and art.

Fox, J. 2021. The World According to Color: A Cultural History. New York, NY: St. Martin's Press.

Jarman, D. 2010. Chroma: A Book of Color. Minnesota: University of Minnesota Press. Derek Jarman was an artist, a poet and a film maker. This book is a curious but rather wonderful mix of observation, memoir, facts,

speculation, quotations and poetry. Jarman follows colour into many byways of human enquiry and experience, touching on aspects of physics, chemistry, physiology, psychology, sociology, and history, as well as art and design.

Shamey R., Kuehni R.G. 2020. Pioneers of Color Science 1st ed. Springer.

Ward, J. 2008. The Frog Who Croaked Blue: Synesthesia and the Mixing of the Senses. UK: Routledge.

Synesthesia is a fascinating phenomenon, where some people can hear colour, taste words or have numbers surround their bodies. Jamie Ward is one of the world's experts on synesthesia, and in this highly accessible book, he chronicles many synesthetes' experiences and presents a jargon-free discussion of the science behind synesthesia. A good read.

### Less accessible but highly recommended:

Albers, J. *To Open Eyes*. Re-issued: Danilowitz. B. & Horowitz. F. 2009. Phaidon Press.

Observation and experimentation are two essential pillars of the art and teaching of Josef Albers, along with a remarkable openness to the wonders of vision. Arguably the most influential color theorist and art teacher of the twentieth century, Albers impact on art education was immense, fundamentally shaping the way basic design was taught in the decades after WWII. To Open Eyes paints a nuanced portrait of Albers from his formative years in Germany as a student-turned-Master at the Bauhaus to his innovative, modernist legacy.

Austin, S. 1998. Color in Garden Design.
Newtown, CT. The Taunton Press.
Excellent visual communication using easy to understand graphics and beautiful photographs makes this both an informative and enjoyable read for those generally interested in color. Uses the Munsell system to great effect in explaining variations in color. Takes the traditional color theory concepts to a whole new level by including the effects of nuance, texture, form, and time. Even though it is written and illustrated for gardeners, it is recommended for the 'color curious' as a

practical way to start seeing color more clearly and to appreciate colour in the landscape.

#### RECOMMENDED FOR EDUCATORS

Albers, J. 2006. Interaction of Color. Revised and expanded edition. New Haven, CT: Yale University Press. A pocket-book version of Albers' classic work. A must for all students of colour. All middle school and secondary school teachers should read it and put it to practice in the classroom in some form or other. Can be studied all the way to post-grad university level and beyond.

Arnkil, H. ed. 2012. Colour and Light -Concepts and confusions. Helsinki, Finland: Aalto University. The aim of this publication is to clarify conflicting use of concepts around colour and light, and to suggest possible ways of improving interdisciplinary understanding in the area.

Available only as PDF, downloadable free at <a href="https://shop.aalto.fi/p/175-colour-and-light/">https://shop.aalto.fi/p/175-colour-and-light/</a>

Arnkil, H. 2013. Colours in the Visual World. Helsinki, Finland: Aalto University. This handbook for art, design and architecture students and teachers is a revised Englishlanguage edition of the Finnish-language book Värit havaintojen maailmassa, which was published for the first time in 2007. The emphasis is on contemporary theories of perception and their relation to the aesthetic and functional and application of colour in art, design and architecture. There are appendices on e.g. lighting, a glossary of colour and light terms and each chapter ends with a set of assignments. The 2021 e-book version has updates and is available at the Publisher's website, Google play and Apple books.

Coles, D. 2018. *Chromatopia, An Illustrated History of Colour*. New York, NY: Thames and Hudson.

An especially attractive book on historical and modern pigments by a leading manufacturer of artists' paints. For each pigment a concise account of its properties and history faces a striking full-page photograph by Adrian Lander.

Kuehni, R. 2012. Color - An Introduction to Practice and Principles (3rd edition). New York: John Wiley & Sons, Inc.

This book is an ideal introduction to the more scientific aspects of colour. Rolf Kuehni is widely regarded as one of the world's leading authorities on the science of colour. In the preface he explains that his intention is "to provide a relatively simple but technically correct and up-to-date introduction to many aspects of color... a contribution toward bridging the communication gap between technically and nontechnically oriented people." The book is well illustrated.

Kuehni, R.G. and Schwarz, A. 2008. Color Ordered: A Survey of Color Order Systems from Antiquity to the Present. New York, NY: Oxford University Press USA. A very thorough and beautifully laid-out compendium for just about every colour order system ever created. The writers are top authorities of the subject. Single chapters may be accessed from the publisher's website.

Osborne, R. 2004. *Color Influencing Form.* London: Thylesius Books.

Roy Osborne is a highly regarded artist, educator and author, awarded the Turner Medal in 2003 by the Colour Group (Great Britain) and the CADE Award (Colour in Art, Design and Environment) by the International Colour Association in 2019. Color Influencing Form is a compact, inexpensive, but authoritative coursebook for the study of colour in art and design. Chapters are concise but clear.

Purves, D., Lotto, R.B., 2011. Why we see what we do redux - A wholly empirical Theory of Vision. Sunderland: Sinauer Associates

The work on visual perception by neuroscientists Dale Purves and Beau Lotto received a very mixed reception from the vision science community, and their conclusions should be evaluated critically in the context of other evidence. But there is no denying that their outreach activities and striking "illusions" have fostered interest in the subject among the public generally. The book describes many visual phenomena, albeit with some idiosyncratic use of terminology, especially "brightness/lightness".

Reed. R., 2021. The New Munsell Student Color Set (Sixth Edition), Fairchild Books. A complete learning package that offers opportunities for experimenting with color effects using paint, paper, and computers. A full-color interactive and experimental guidebook for understanding color in all its dimensions. it includes 11 Munsell color charts. 18 interactive charts, 13 hue families of perforated color chips, and a textbook, all designed to facilitate hands-on learning of color's aspects and effects. The text provides a complete study of color use and color science, including extended discussion of visual perception, optical effects, and practical application of color phenomena in fine and applied art practices.

Swirnoff, L. 2003. Dimensional Color. New York. NY: W. W. Norton & Co. Lois Swirnoff was one Josef Albers's favourite pupils and an important art and colour pedagogue in major American art schools and universities. Dimensional colour is an extension into three dimensions of the Albersian approach.

Zwimpfer, M. 1997. *Color: Light, Sight, Sense.* West Chester, Pennsylvania: Schiffer Publishing Ltd.

For someone who teaches colour (at whatever level) this book is an excellent introduction to the subject. Loaded with clear illustrations which are accompanied by easily understandable text. Amazingly still in print. A classic introduction to colour.

## Less accessible but highly recommended:

Evans, D. and Williams, C. 1993. *Let's Explore Science: Color and Light*. Dorling Lindersley. London.

Uses simple observations and experiments to explore the properties of color and light. Clean design, illustrated with photos of children conducting the explorations. (Used copies available.)

# RECOMMENDED FOR PROFESSIONALS & SPECIALISTS

Batchelor, D. ed. 2008. Colour/edited by David Batchelor (Documents of

Contemporary Art). London: Whitechapel/Cambridge, MA: MIT Press. An anthology of writings on colour from Adorno to Wittgenstein and Apfelbaum to Whiteread in the famous series Documents of Contemporary Art.

Berns, R. 2016. Color Science and the Visual Arts: A Guide for Conservators, Curators, and the Curious. Los Angeles, CA: Getty Conservation Institute.

The seven chapters in the book fall naturally into two sections: fundamentals, covering topics such as spectral measurements, metamerism, and color inconstancy; and applications, where artwork display, painting materials, and color reproduction are discussed. A unique feature of this book is the use of more than 200 images as its main medium of communication, employing color physics, color vision, and imaging science to produce visualizations throughout the pages. An annotated bibliography complements the main text with suggestions for further reading and more in-depth study of particular topics.

Berns, R. 2019. Billmeyer and Saltzman's Principles of Color Technology (4th Edition). New York, NY: John Wiley & Sons. This a completely revised fourth edition of Fred Billmeyer's and Max Saltzman's a classic work that originally appeared in 1967. It covers just about every imaginable aspect of colour technology, combining the clarity and ease of use of earlier editions with two decades of advancement in colour theory and technology. Roy Berns, a former student of Billmeyer and Saltzman is Professor of imaging science at Rochester Institute of Technology.

Evans, R. 1948. *An Introduction to Color.* New York, NY: John Wiley & Sons. *A classic of colour science.* 

Fairchild, M. D. 2013. Color Appearance Models (3<sup>rd</sup> Edition). Wiley A very approachable textbook that overviews current colour science in the first half, followed by the definitive text on recent research into colour appearance models in the second half.

Fridell Anter, K and Klarén, U. (Editors). 2017. *Colour and Light – Spatial Experience*. London & New York: Routledge. This is an updated English language edition of the original Swedish Färg & Ljus för människan – I rummet (2014). The book is based on the interdisciplinary research project SYN-TES: Human colour and light synthesis – towards a coherent field of knowledge and includes contributions from thirteen Swedish and Norwegian researchers and professionals in the fields of colour and light. A must for students and teachers of architecture, interior design and lighting.

Gage, J. 1999. *Colour and Culture*. Berkeley and Los Angeles: University of California Press.

An incredible wealth of information and references of colour in art. Gage (an art historian) explains it in the introduction: "Colour is almost everybody's business but it has rarely been treated in a unified way: thus my book opens and closes with instances of how a failure to look at colour comprehensively has led to absurdities of theory, if not of practice." An absolute must for any serious colour professional.

Gage, J. Colour and Meaning: Art, Science, and Symbolism. Berkeley: University of California Press. John Gage is the cultural historian whose infectious curiosity and encyclopedic research cracks open the vast world of color. Training his eye on the history of art, Gage leaves no stone unturned as he tracks the story of color across centuries, places, and disciplines as diverse as philosophy, linguistics, science, psychology, anthropology, and visual art. You will discover complex color codes that transform over time and place, due to changes in production technologies and the evolution of the symbolic cultural values they represent.

Gurney, J. 2010. Color and Light.
Kansas City, Mo Andrews McMeel
Publishing. (Printed in China.)
A researched study on two of art's most
fundamental themes, Color and Light bridges
the gap between abstract theory and practical
knowledge. Beginning with a survey of
underappreciated masters who perfected the
use of color and light, the book examines how
light reveals form, the properties of color and
pigments, and the wide variety of atmospheric
effects. Gurney cuts though the confusing and
contradictory dogma about color, testing it in

the light of science and observation. A glossary, pigment index, and bibliography complete what will ultimately become an indispensible tool for any artist.

Eastaugh, N., Walsh, V. Chaplin, T. and Siddall, R., 2008. *Pigment Compendium*. Routledge.

Elliot A. J., Fairchild M. D. & Franklin A. (Editors). 2016. *Handbook of Color Psychology* (Cambridge Handbooks in Psychology) 1st Edition. Cambridge. Outstanding detailed coverage, with chapters by preeminent specialists on subjects ranging from cone cells to colour symbolism and associations.

Gilchrist A. 2006. Seeing Black and White. Oxford.

Comprehensive account of lightness perception and associated phenomena, including a fascinating and detailed historical survey and a comprehensive account of current problems, by a leading expert in the field.

Hardin, C.L. 1993. Color for Philosophers – Unweaving the Rainbow. Expanded edition. Indianapolis, IN and Cambridge, UK: Hackett Publishing Company A thorough examination of the physical and neurobiological facts behind colour phenomena and colour appearances. Hardin wrote the book for philosophers. As he remarks, they are fond of referring to colour as an illustration about epistemological and ontological truths, without really knowing much about the physical and biological reality of colour. An entertaining lesson in scientific integrity for us all. The book won the 1986 Johnsonian Prize for Philosophy.

Hubel, D. 1988. *Eye, Brain and Vision*. Scientific American Library, distributed by W.H. Freeman

Hubel is one of the few scientists who have been awarded the Nobel prize for research into colour vision. Free to read online or download via Internet Archive Wayback Machine. https://web.archive.org/web/20070606010129/http://hubel.med.harvard.edu/bcontex.htm

Kobayashi, S. 1990. *Color Image Scale*. Tokyo: Kodansha International.

Color Image Scale, by Shigenobu Kobayashi, is an attractive and inexpensive paperback which deals with the ways in which colours, colour combinations communicate particular images. Kobayashi's ideas have been tested with students of design who found that their conclusions were essentially the same, in effect endorsing Kobayashi's findings.

Lambert, P., Staepeleare, B. and Fry, M. G. 1986. Color and Fiber. West Chester, Pennsylvania: Schiffer Publishing Ltd. A beautifully illustrated book for textile professionals. Color theory is treated in the traditional way (therefore not exactly up to modern expectations) but showing superb examples of textile applications. The chapter on the relativity of colour illustrates the interaction of colours on fibre, yarn and fabric, optical mixture with fibre blending and also good advice on how to control and reduce the effect of simultaneous contrast. Still in print.

Luo, Ming Ronnier (ed) 2016 Encyclopedia of Color Science and Technology 1st ed. (Second edition edited by Renzo Shamey in prep.). Springer.

Nassau, K. 2001. The physics and chemistry of color: the fifteen causes of color. New York: Wiley.

Comprehensive graduate-level text on the science of colour. Comprehensive graduate-level text on science of colour. This classic volume studies the physical and chemical origins of colour by exploring fifteen separate causes of colour and their varied and often subtle occurrences in biology, geology, mineralogy, the atmosphere, technology, and the visual arts. It covers all of the fundamental concepts at work and requires no specialized knowledge.

Porter, T. and Mikellides, B. 2009. *Colour for Architecture Today*. Oxford, UK & New York, NY: Taylor & Francis.

A re-edition of a ground-breaking book on colour in architecture. For someone teaching architecture or interior design, this provides a good overview of the role of colour in the built environment, and will open the door to many avenues of investigation. This is a collection of articles from several important writers. Porter was a colour consultant and a Visiting Fellow at Oxford Brookes University. Mikellides, a Professor in the School of Architecture at

Oxford Brookes University, is an environmental psychologist and researcher.

Riley, C. 1995. Color Codes – Modern Theories of Color in Philosophy, Painting and Architecture, Literature, Music, and Psychology. Lebanon, NH: University Press of New England.

The book consists of a series of essays discussing colour from many different angles, not all entirely visual. Contains plentiful quotations by artists, philosophers, writers etc. A good read.

Simner, J. and Hubbard, E.M (eds.). 2018. The Oxford Handbook of Synesthesia. UK: Oxford University Press.

A broad body of knowledge is brought together into one definitive state-of-the-art handbook. It contains chapters on synesthesia's origins, neurological basis, links with language and numbers, attention and perception. It describes how synesthesia provides inspiration for artists and designers. The book ends with a series of perspectives on synesthesia, including a first-hand account, and philosophical viewpoints which show how synaesthesia poses unique questions about sensation, consciousness and the nature of reality.

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