Book Review

Daylight Influence on Colour Design: Empirical Study on Perceived Colour and Colour Experience Indoors, by Maud Hårleman (Stockholm: Axl Books, 2007) 192pp. ISBN 978 91 976644 0 0.

The book is based upon various studies that have been carried out by the author on the impact of lighting on perceived colour generally, and colour experience indoors specifically. It is divided into two parts, the first part serving as an introduction to the heart of the book which is a compilation of six research papers. All of the latter have been published elsewhere, but their publication together in this form is helpful in order to present to the reader a cogent and contextualised view of the recent work carried out by the author. The introduction describes the context of the work to follow and also provides a concise literature review. The central problem that the book addresses is the significant impact of natural daylight on interior design particularly on hue shift. Definitions and terms are clearly defined and well referenced.

The second paper presents a method for comparing colour appearance in differently illuminated rooms, and is a preliminary study on visual matching between interior wall colours and NCS samples that have been placed and illuminated in a newly built colour reference box. Useful observations have been noted to better evaluate room colours under practical situations. The study suggested that the use of the colour reference box is a reasonable way to identify colour changes due to the influence of daylight. This work has also inspired the ideas for further developments of the colour reference box to provide a more standardised viewing condition for psychophysical experiments.

The first (colour appearance in different compass orientations) and the third (study of colour shifts in various daylights: dominantly reddish and greenish rooms illuminated by sunlight and skylight) papers investigate the impact of natural daylight on colour appearance of interior design. In particular, north- and south-facing rooms with four walls painted in one of the four selected hues: yellow, blue, red and green (each with three different chroma levels) are studied. Several experiments, with observers who have a background in architecture, were conducted. Some of the experiments including a method of visual evaluation (visual evaluation of light situation) and an associative reflective method (verbal descriptions) are purely subjective measures, and some including memory matching and asymmetric matching (with reference to NCS samples displayed in the colour reference box under illuminant D65) are more psychophysical. It is, perhaps, unfortunate that no analytical results are reported; instead the results are visual and verbal. The findings of this paper are consistent with intuition. For example, the impact of sunlight leads to a more yellowish and chromatic colour appearance and the impact of skylight is less obvious.

The fourth paper deals with the significance of colour on room character (a study on dominantly reddish and greenish colours in north- and south-facing rooms) introduces robust statistical analyses such as factor analysis and *t*-test to investigate room characters (impressions). The other two papers (on colour emotions in various enclosed spaces) continue in a similar way to explore various aspects of colour perception indoors but mainly focus on semantic studies on room colours.

In summary, the book is well written and extensively referenced with nearly 100 references. This book would be of interest to academics or research students working in the field of colour

perception. One weakness of the work is that it does tend to be subjectively analysed in parts and would be stronger with a more analytical/objective approach. However, this does not detract from the general usefulness of the book. Certainly it will of great interest to many designers and architects.

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