INFORMATIVE ORNAMENT: ‘THE MACHINE’

Enhancing the Communicative Potential of Colour

A thesis presented in partial fulfilment of the requirements for the degree of

Master of Design in Illustration

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Both empirical and anecdotal evidence indicates that visual communication\(^1\) design practices implemented by designers with full colour vision often disadvantage, and sometimes endanger, colour-blind people.

The thesis *The Machine* postulates that colour-blind people – comprising approximately 8% of males and 0.5% of females (Lewis *et al.*, 1990) – are marginalized by such practices. It argues that this group could benefit from a design strategy that enhances the communicative potential and visibility of colour.

The proposed strategy involves embedding pattern into potentially confusing colours such as red and green. The embedded pattern would function for colour-blind people as an additional clue to the identity of these colours.

The thesis contends that while colour alone can be confusing for colour-blind people, patterned colour could offer a solution with a wide range of possible applications.

The research aims of *The Machine* include: developing a system of patterned colour; creating a wordless picture book that demonstrates the effectiveness of the system; constructing a narrative around the condition of red-green colour-blindness; and employing visual rhetoric\(^2\) to increase awareness of and sensitivity to colour-blindness among those with full colour vision.

The design of the thesis is supported by research in a number of interrelated areas. These include the history of pattern post-1850, particularly in Western culture; precedents for patterned colour; and visual rhetoric in story-telling. The research also incorporates an analysis of the defining characteristics of ten late twentieth-century and early twenty-first-century wordless picture books. The thesis is further supported by applied research into patterned colour and visual rhetoric.

*The Machine* aims to benefit colour-blind people, a significant minority group whose visual needs are currently inadequately met. In addition, it proposes broadening the cultural role and significance of pattern. Moreover, by incorporating informative elements usually associated with pedagogic material, it aspires to extend the boundaries of the fantasy picture book genre.

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\(^1\) Visual communication *(n)*: communication that relies on vision (Wordnet, 2006).

\(^2\) Visual rhetoric: the use of visual techniques, such as the creation of visually ‘engaging’ characters, as a means of persuading a target audience.
ACKNOWLEDGEMENTS

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Ishihara, S., in The series of plates designed as a test for colour-blindness, Plate 2 (n.p). In Ishihara, The series of plates designed as a test for colour-blindness. Tokyo: Kanehara Shuppan Co., Ltd.

Ishihara’s Plate 2 with and without patterned colour, and colour-blind equivalents (as for a red-weak viewer).

Adapted from Ishihara, The series of plates designed as a test for colour-blindness. Tokyo: Kanehara Shuppan Co., Ltd.

Patterned colour applied to a simple graph.

Patterned colour applied to illustrations.

Later form of the pattern for red.

Aa.jpg. Adapted from Ishihara, The series of plates designed as a test for colour-blindness. Tokyo: Kanehara Shuppan Co., Ltd.

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