Colour Vision and Communication Design. Older People – problems of legibility and the readability of analogue supports

Moreira da Silva, Fernando
\textsuperscript{1}CIAUD - Research Centre in Architecture, Urban Planning and Design, Faculty of Architecture, Technical University of Lisbon. E-mail: fms.fautl@gmail.com

Abstract

This paper presents the results of a Post-Doctoral research project developed at Surface – Inclusive Design Research Centre, University of Salford (UK). The project implemented a systematic approach to an overlap between Colour Vision, Visual Communication Design, Printed Colour, Legibility, Readability and Inclusive Design, for older people, with the aim to develop a set of research-based communication design guidelines and recommendations for the use of Colour in printed material (analogue displays). The initial literature review included a critical synthesis mainly crossing the areas of colour vision, older people and vision common diseases, communication design and inclusive design. The second part of the research project focused in the implementation of an experiment, using quasi-experience methodology, to measure the different colour experiences of the participants in four sample groups (two in UK and two in Portugal), using printed material, to find out the colours one should use in analogue communication material, being aware of the colour contrast importance (foreground versus background) and the difficulties experienced by older people to read and understand lettering, signs. After crossing the results from the two first phases, and as main contribution of this research project, we developed a set of guidelines and recommendations based on the reviewed literature and the sample groups’ findings, trying to demonstrate the importance of these guidelines when conceiving a new communicational design project in a way this project will achieve vision comfort and understandability, especially for older people, in an inclusive design perspective, underlining the importance of having colour, colour vision and colour contrast knowledge to develop such a project.

Keywords: Colour Vision, Communication Design, Older People, Inclusive Design, Legibility, Understandability