About the book

The book is a research report from the Nordic research project SYN-TES: Human colour and light synthesis – Towards a coherent field of knowledge, carried out during 2010-11.

The experiences of colour and light are interdependent and cannot be analysed separately. The colours of the environment influence our experiences of light and the need for lighting – and vice versa: the intensity, quality and distribution of light are essential for our perception and experience of colour. The aesthetics of colour and light play an important role in the fields of art, design and communication. In the built environment they influence our experiences and feelings, our comfort or discomfort and our physiological wellbeing.

A profound understanding of the interaction between colour, light and human beings calls for an interdisciplinary approach, which up to now has been rather rare. As a result researchers and practitioners have often had difficulty in understanding and relating to one another's methods and results, although they work with similar questions. One important aspect of this is the absence of common and generally accepted concepts. These were the starting points for the interdisciplinary research project SYN-TES: Human colour and light synthesis – towards a coherent field of knowledge, carried out in Konstfack, Stockholm during 2010–11.

The SYN-TES project was funded by the Knowledge Foundation (KK-stiftelsen) and was supported by several Swedish companies working within the area of colour and light. The project has gathered internationally acknowledged scientific and technical experts within a number of fields working in colour and light. These include art, architecture, psychology and healthcare sciences, as well as leading companies dealing with lighting, colour and window glass.

SYN-TES has brought together researchers from five Nordic universities and institutions: Aalto University School of Arts, Design and Architecture, The Centre for Visualization at Chalmers University of Technology, the Department of Environmental Psychology at Lund University, The Perception Studio at the University College of Art, Crafts and Design (Konstfack), the Department of Architectural Design, Form and Colour studies at the Norwegian University of Science and Technology (NTNU) and the Faculty of Health Sciences at The Sahlgrenska Academy of the Gothenburg University.

The texts in this book were written within an epistemological subproject of SYN-TES. The aim is to present different scientific approaches in a broader epistemological perspective, to clarify conflicting use of concepts and to suggest possible ways of improving inter-disciplinary understanding. In his introduction to the book, C.L. Hardin takes a look at the problem of bridging the gap between conscious experience and scientific data, with particular regard to the variability of human colour experience. Ulf Klarén, in *Natural Experience and physical Abstractions*, discusses different epistemological theories concerning perception, their evolution and their implications for our understanding of colour and light. In *Seeing and Perceiving* Harald Arnkil takes a closer look at these seemingly simple concepts, providing a starting point for discussing our visual experience of the world. *Light and Colour: Concepts and their use* by Karin Friddell Anter provides an overview of different approaches that have led to diverging uses of terminology and concepts within this field. Some of the most problematic terms and concepts are further discussed by Harald Arnkil in *Lightness and Brightness and Other Confusions.*
**PROGRAMME**

Tuesday 8th May

12.30 Welcome  
*Harald Arnkil*

12.40 The Nordic research project  
*SYN-TES: Human colour and light synthesis – Towards a coherent field of knowledge*  
*Karin Fridell Anter*

13.00 Introducing  
*Colour and Light: Concepts and Confusions*  
*Harald Arnkil*

13.15 Colour Science and Colour Experience  
*C.L. Hardin*

14.00–14.30 Coffee break

14.30 Panel discussion on themes from *Colour and Light - Concepts and Confusions*  
*Harald Arnkil, Karin Fridell Anter, C.L. Hardin, Ulf Klarén (and audience)*

**Speakers and Authors**

*C.L. Hardin* is an American philosopher and Professor of Philosophy Emeritus at Syracuse University, USA. He is the author of *Color for Philosophers: Unveaving the Rainbow* (1998) and co-editor of *Color Categories in Thought and Language* (1997). He takes colour to be a test case for theories about how the qualities of everyday experience manage to find a place in a quantitative universe consisting of matter and energy. *Color for philosophers: Unveaving the Rainbow* received the Johnsonian Prize in Philosophy in 1986 and has since been published in an extended new edition.

*Ulf Klarén* is a researcher, writer and lecturer on perception, colour and light. Until his retirement in 2011, he was Associate Professor and head of the Perception Studio at Konstfack, University College of Arts, Crafts and Design in Stockholm, Sweden. Ulf Klarén’s publications include a textbook on colour, several scientific reports and contributions to anthologies as well as articles on art education. During 2010–11 he was assistant project leader of *SYN-TES: Human colour and light synthesis – Towards a coherent field of knowledge*.

*Harald Arnkil* is a Finnish artist, educator and colour researcher. Arnkil is Lecturer in Colour Studies at the Aalto University School of Arts, Design and Architecture. Besides teaching, he is presently pursuing doctoral studies and research in the field of colour. Arnkil’s book *Colour in the Visual World – a handbook for artists, designers and architects*, originally published in 2007 in Finnish as Värit havaintojen maailmassa, is due to appear in October 2012.

*Karin Fridell Anter*, architect SAR/MSA and PhD architecture is a researcher specialized in colour in the built environment. She is an associate professor at the Royal Institute of Technology and a researcher at University College of Arts, Crafts and Design, both in Stockholm. She has written several books on colour in architecture and numerous articles in Swedish and international journals. During 2010-11 she led the Nordic research project *SYN-TES: Human colour and light synthesis – Towards a coherent field of knowledge*.  

**Free Admission – All Welcome!**