

COLOUR ON THE MIND

from Colour Perception to Colours in Art



21th – 23rd of September 2016

Tübingen, Germany

Recent findings from neuroscience highlight the complexity of neuronal processes underlying our colour perception as it arises in the brain. More precisely, the **colour percept** is constructed in a sequence of neuronal processing chains in specific areas of the cortex, based on signals of the photoreceptors in our eyes, on the interpretation and evaluation of this information, and on the input of inferences from cognition and memory. Moreover, colour signals interact in the brain with other sensory data in order to form a holistic percept of our environment.

In its origin, colour has a **biological function**, with evolution being the biggest innovative factor: both, humans and animals, use colour in order to identify and evaluate their environment as well as a means of communication. Researching the colour schemes of animals reveals a fascinating variety of ways for using chromatic information.

Humans sense, feel and experience colours and create a coherent reflection of their world; these colour-images serves as a starting point for a limitless game of association and variation of the colour components that form our imagination. We use our inner colour palette when it comes to expressing emotions, decorating our home, painting a picture or making a film. Colour is also used as a cue for navigating within our environment; in the context of the ageing society, clinical and psychological research on changes in colour perception, related to neurological disorders or healthy ageing, receives increasing interest.

The human need for colour leads to an immense **cultural diversity** when it comes to colour preferences in the design of environments, fashion, art, theatre or in movies. For example, Europe adheres to other design rules than the US, Latin America, Asia, Africa or Australia. Today,

inspired by digital media, we experience a cultural exchange that has never been seen before in the history of humankind. Having access to the internet also means having access to pictures and movies from all over the world with colour aesthetics that are in return influenced by technology.

Films belong to the most complex products of human creativity and to our biggest cultural achievements. When it comes to internationally produced and received films and TV-series, the digital shift causes visual cultures to merge constantly. However, even though new transcultural syntheses are formed, the roots in the different design traditions stays visible.

The interdisciplinary conference „**Colour on the Mind**“ will pick up on this rich context of colour and connect its various aspects. The conference will take place from **21. - 23. of September 2016**, in the pitoresk university town of **Tübingen**, Germany. It is hosted by the Deutsche Farbenzentrum e.V. – Zentralinstitut für Farbe in Wissenschaft und Gestaltung (German Colour Center – Central Institute for Colour in Natural Sciences and Design), the Institute of Media Studies and the

Research Institute for Ophthalmology of the Eberhard Karls University Tübingen.

The conference will focus on two main aspects: (1) it will address characteristics and neural correlates of **human and animal colour perception**, including current findings in neuroscience, medicine, biology, and physics; (2) the second focus will lie on **colour and colour preferences in the human culture** (film, media, design, and fine arts), illuminating outstanding examples of artistic and communicative expression with colours.

The **conference program** consists of talks and presentations accompanied by a varied fringe programme of practical workshops, exhibitions and art installations. Internationally renowned speakers will introduce the audience to the main topics of the conference. In addition, young researchers will be promoted during in the Tübingen Summer School „Colouring the Future“, which will be part of the conference. Furthermore, the venue will offer a platform for companies and potential sponsors who are associated with visual neuroscience, media, art and design to present themselves during the conference.