

Colour - Effects & Affects 15-18 June, 2008 Stockholm, Sweden

Interim Meeting of the International Colour Association (AIC)

Hosted by the Swedish Colour Centre Foundation



Book of Abstracts

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WELCOME TO AIC 2008 AND STOCKHOLM

It is a great pleasure to welcome you to this Interim meeting of the International Colour Association (AIC). The very first congress of AIC was held in Stockholm in 1969, and we are now happy to once more host an exchange of colour knowledge and inspiration. The conference program includes 140 papers to be presented in oral or poster form, and the participants will come from at least 33 countries and from all continents.

This book of abstracts includes all papers that have been submitted and accepted for presentation. A book of proceedings, with longer versions and colour pictures, will be published on a CD-ROM after the conference and sent to all participants.

The yearly AIC conferences are important both for the scientific exchange and for the possibility of establishing and maintaining informal contacts with colour specialist from all disciplines and continents. We hope that our social program will give you rich opportunities to meet and discuss, and at the same time to enjoy the beauty of Stockholm.

We appreciate the great effort all of you are making for this AIC Meeting; the AIC Executive Committee for supporting our organisation and, the International Scientific Committee for all the abstract reviews with all contributions and comments.

Finally we will also thank for all the sponsorships and support which have made this AIC 2008 Interim Meeting possible.

The organising committee has tried the best to ensure that this meeting will work out under the best possible conditions and hopes that you will get a lot of memorable moments to keep in the coming years.



Berit Bergström
Conference Chair, AIC 2008 Interim Meeting

Stockholm, Sweden

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THE CONTRAST OF COMPLEMENTARY COLORS AS A RESOURCE IN PAINTING.

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Abstract:

Educating a future designer to be a good color professional is a challenge. There are different perspectives to understand the visual phenomenon we call color according to different disciplines. While I. Newton (1642-1727) settled the physical frame and investigated to understand the nature of color as a physic matter, J. W. Goethe (1749-1832) settled its philosophical premises (the different color ordering approaches between them is just an example of this evidence). Many other professors have been interested in visual aspects of colours and their interactions: W. Ostwald (1853-1932) in “Die Harmonie der Farben” (1923), A. Munsell (1858-1918) in “A grammar of color” (1921); Nemcsics (1927-) experimenting the “Color dynamic”; C.V. Jannello (1918-1985) and the logic harmonies; J. Itten (1888-1967) in “Kunst der Farbe” or E. Marx in “Optical colors and simultaneity”.

In these different ways, not exactly parallel ones, there have been punctual intersections, especially fruitful to artists, as it's proved in plastic panorama that we designate “modern art”. There have been artists worried about visual and optical effects produced by chromatic interactions (*dropping*) or interested, not only in light capture for the paintings, but also in theoretical writings about it, as impressionists did. For instance, french painter G. P. Seurat (1859-1891) owes to chemical professor M. E. Chevreul (1786-1889) much of his scientific way of painting, where dots of primary colors mix together to conform new colors. Other artistic movements like *Op Art* or *Rayonism*, also worry about certain optical effects reached with dashes or superimpositions. Some capital texts for creative artists which attend to chromatic interactions have been developed by artists and professors in the *Bauhaus*: J. Albers (1888-1976), W. Kandinsky (1866-1944) and P. Klee (1879-1940), in an intuitional way in the beginning of plastic production first, and with a deep acknowledgement next, improved complementary colors contrast theories, which keep our attention in this research.

This research presents some conclusions inferred from the work in progress developed with design students about complementary colours in historic paintings. They study the use of colour from its plastic point of view, separating from those symbolic, technological or fashion implications from which it could be polluted, and attending to color as an ingredient of the visual language, which is able to arrange, organize and give interest and coherence to the final image and the way in which it is perceived. We pay attention to the grammar of colour, not so much to its semantic content, to the evolution and conformation of this rule of syntax which is being inherited by generations of artists and which is a part of our visual culture.

The methodology consists in the abstraction of master paintings of some of the artists which used complementary color contrasts, by reducing them to their principal color components. An effective simplification makes possible an accurate balance of the relation of size, hue, chroma and lightness between principal color shapes of the composition, and the role of complementary color interactions in the image can be balanced easily.

We can notice three main effects devoted from the use of the complementary colours in the compositions, and about which the painters from each period have insisted in a different way.

First, the capacity of complementary colors **to emphasize the perception of chroma** of its surrounding colors. Although they are disposed in a small proportion and not leading the composition, the dynamism of the complementary colours can resurrect the whole group of the picture and its fading color ranges. Complementary colours are vigorous, and in this way they are understood by the painters from the Gothic period to the Renaissance, who use them to introduce these certain vividness, but in a controlled way, measured and moderated. In subsequent stages this effect is exploited without restriction, even as an object of research in itself. (*Postimpressionism, Fauvism, Pointillism, etc.*).

In a second place, complementary colours have the capacity to **organize the composition** of the picture and the “visual weigh” of its colours, without having to require geometric laws of equality. The colour schemes of the picture can be seen orchestrated by the complementary colours that can be disposed in an unequal proportion and position amongst them and in relation to the group. This second feature, added to the chromatic research of the impressionist period, allows the European ultramodern painters, in their attempt to break the classical laws of painting, to achieve balanced colour compositions but asymmetric. (*Neoplasticism, Suprematism, Cubism, Orphism, etc.*)

In third place, complementary colours have the capacity of **reaffirming the chromatic presence** of some of the two colours that act in these contrasts. This resource allows taking the colour over its own possibilities of saturation, over-saturating it. It is intended either that colour focuses onlooker’s attention in the leading element, either over-stimulates him to reach the limits of stridency and chroma of colour. (*Expressionism, Pop Art, etc.*)

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