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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.*)

Reference literature:

- Albers, J.; *La interacción del color*. Alianza Forma ed., Madrid, 2007
Arnheim R., *Arte y percepción visual*, Alianza Ed., Madrid, 1979
Delicourt, E.; 1842. *Album du contraste simultané des couleurs, d'après le système de M. Chevreul, ou recueil d'exemples*. Imprimerie de Chassaignon, Paris, France.
Kandinsky, W., *De lo Espiritual en el arte*, Labor Ed., Barcelona, 1992
Lluch, F. J., 1858. *Arte de armonizar los colores o ley del contraste en la yuxtaposición de los mismos*. El Porvenir, Barcelona, Spain.
Marx, E., *The contrast of Colors*. Van Nostrand Reinhold, New York, 1973.
Sanz, J.C; Gallego, R. *Diccionario Akal del Color*, Akal Ed., Madrid, 2001

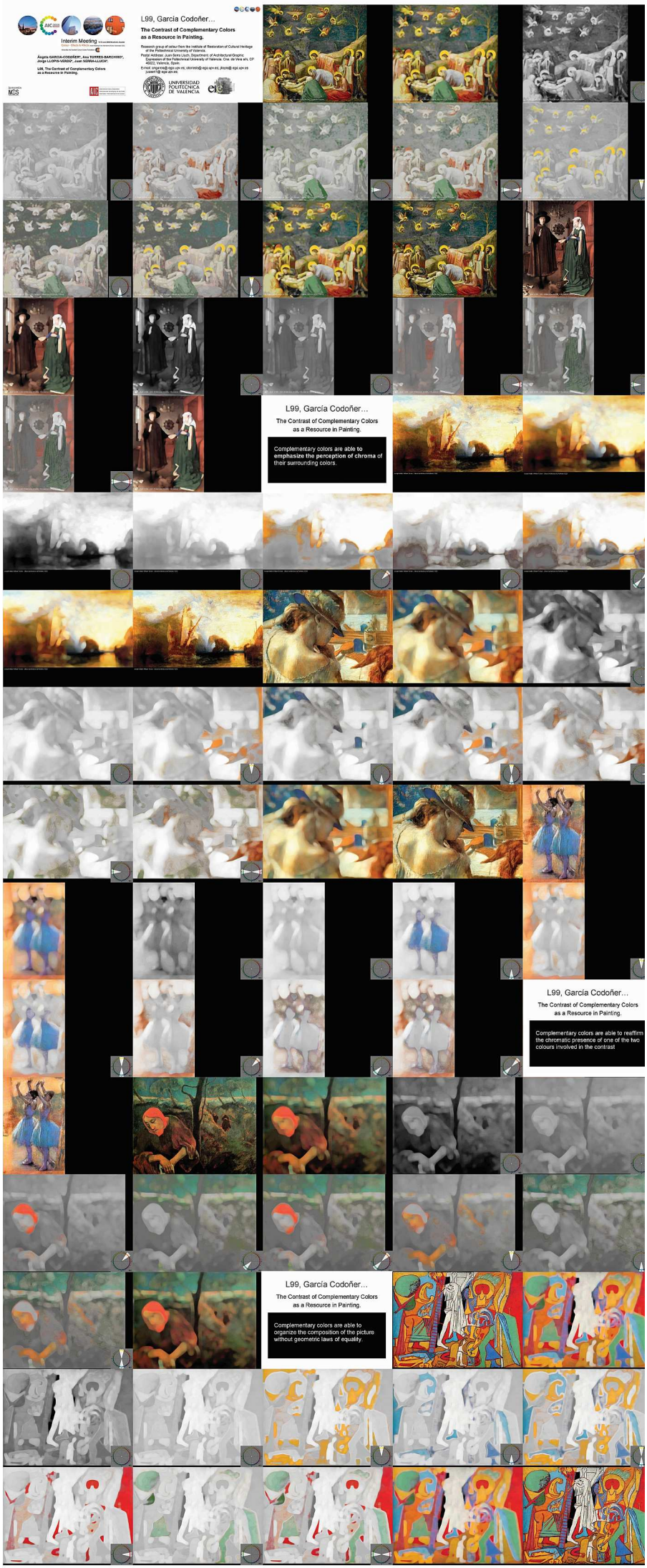


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The Swedish Colour Centre Foundation

The Swedish Colour Centre Foundation (Stiftelsen Svenskt Färgcentrum) was founded in 1964 by IVA (Royal Academy of Engineering Sciences), The Swedish Design Council and a number of important Swedish industrial companies. Its main objective was to carry out interdisciplinary research and development within the colour field. This work, lead by Dr. Anders Hård, together with Prof. Gunnar Tonnquist and Prof. Lars Sivik, eventually resulted in the Natural Color System, NCS, which became Swedish Standard in 1979.

Today the Swedish Colour Centre Foundation has around 150 individual members working with different aspects of colour and 25 organisational members from different sectors of society. Its tasks are to:

- Encourage scientific research within the colour field of interest for industry, education and people working with colour
- Spread new knowledge and experience within the field of colour
- Be a natural centre for colour and colour research

To fulfil these tasks the Swedish Colour Centre Foundation accomplishes the following activities:

- Yearly *Colour Days* with different themes
- *Newsletter* 4 times a year with information about colour research projects, colour use in practice and new developments within the field of colour in Sweden as well as internationally
- Regular *Members' meetings* with guest lecturers or study visits

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Prof. Dr. Guanrong Ye (Member)