

Lingua Spectra

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My program was based on the comprehensive research on contemporary American and Hungarian art and teaching of color studies. Exactly, it was an artist / researcher program on the methodology in teaching of parallelism and diversity of the classical American color system (R. Munsell, 1905) and the classical Hungarian Coloroid color system (A. Nemcsics, 2002) at the City University of New York, Hunter College, Art Department, spring 2011 in the United States of America.

In the frame of Fulbright Scholar Program I spent three months from the middle of March until the middle of June at Hunter, Art Department under the supervision of Professor Sanford Wurmfeld, painter, color theorist. The Hunter (founded in 1870) is a state and locally supported urban setting institution in the downtown, New York City. The College's main campus is located on Manhattan's Upper East Side at the intersection of Lexington Avenue and 68th Street. Today the College is a microcosm of New York's global, multicultural society.

Facts and Statistics¹

Awards: B, M. Entrance level for U.S. students is moderately difficult. Enrollment: circa 21,000 total, 15,000 undergraduates including 10% international students from 75 foreign countries. Faculty / Staff: 1,500. Library holdings: circa 750,000 books. Total majors: 65.

Academic Background

The Department of Art (The North Building) has a great and remarkable tradition in teaching of painting, sculpture, art history and color studies. After the Second World War several forerunners of new generation of free spirited young artists like Robert Motherwell (1915–91), Robert Morris (1931–), Ad Reinhardt (1913–67), Ray Parker (1922–90), Tony Smith (1912–80), Tony Milkowski (1935–2001) and Dough Olson (1936–2010) taught art at Hunter. Today's outstanding and determining abstract 'color devoted', moreover – 'enthusiastic' – established painters and teachers like Professor Gabriele Evertz says: 'I am interested in the sensation and perception of color interactions. My visual language consists of simple geometric elements such as

1 www.petersons.com/internationalstudent



squares and stripes because their basic formal units de-emphasize the viewer's concern for shapes. Aesthetic content is derived from color, its quantity, location, and interaction'.² Professor Vincent Longo³ (1923–) also has had a long and distinguished teaching career at Hunter. Professor Robert Swain (1940–) who, since the 70s has developed and created his own color system; in his statements – Color as a Content in Painting – writes: 'Color is a form of energy derived from the electromagnetic spectrum that stimulates our perceptual processes and is instrumental in conveying emotions'.⁴ The former Chair of the Department of Art at Hunter who was appointed to Phyllis and Joseph Caroff Professor of Fine Art in 2000, Sanford Wurmfeld⁵ (1942–) teaches here at present time. He teaches 'Theory and Criticism' – the history and current state of color theories in relation to art. During my Fulbright scholarship I took part on his Color Seminar and Lectures, which is the part of the MFA and MA program in the Art Department. His graduate course's goal is 'to investigate color in art and specifically in painting. The

2 <http://www.hunter.cuny.edu/art/faculty/evertz.html>

3 http://www.geoform.net/features/features_longo1.html

4 <http://www.robertswainnyc.com/Artist%20Statement.html>

5 <http://www.sanfordwurmfeld.com/>



approach to color will be limited to its study as a sensation, that is to say the effects of the psychophysical relation between painting and viewer. The sematic use of color in art, color as an iconographic device, will not be covered'. During these seminars I studied and reviewed the different teaching methods on the demonstration of color and light expression in art with special regard to the development of the European and American color systems and the extremely importance of objectivity and the individual approaches of color phenomenon. For me the atmosphere and the personality of these seminars have meant: 'There is art in teaching'. Michael Fehr, art historian, former museum director, writes: 'Wormfeld's paintings do not have any objective reference, nor can they be classified with abstract art, such as Mondrian's. Wormfeld's conception of a picture is quite clearly rooted in the tradition of non-representational art of an American stamp, but through the reflection of Luminist painting and intensive study of the theory of color, he gives it a new turn. By being not simply the recipient of an existing picture, but also the producer of a picture that exists only in his visualization, he can experience himself as both a viewer and observer of himself.'⁶

Brief Historical Review and Professional Context of the Research on Color

In the Ancient Greek World, Plato (424/3 BC–348/7 BC) the philosopher, with contribution of his student, Aristotle, has laid the fundamentals of 'Euro-Western' modern civilization, stated: colour is the expression of the first principles and forms. White is the colour of the universal, the universe. Aristotle (384/3 BC–322 BC) writes about the origin of colour: where darkness meets light there the colours of real world come into being. The development of different color systems influenced art, many determining inventors mainly from the European Renaissance period have come into the focus. It was the first maybe, the Italian Leon Battista Alberti, architect, the author of 'On Painting' (*Della Pittura*, 1435) who suggested, to arrange and organize colors including non-colors i.e. black and white and grays, creating a space form, an absolutely new theoretical construction, moreover a system in three dimensions.

In 1666 in a darkened room in his paternal home someone broke the poetry of the rainbow. Someone separated the Sun's light, which had got through the Earth's atmosphere and was called white optically, into its spectral elements and with his prism he made it see that the iris, the 'rainbow', the different colours appearing on the wall are in a definite range of elements of white light, and with another prism he collected the outstretching and colourful light spectra again and rewhitened them. Sir Isaac Newton's (1642/3–

1727) 'color-circle', similarly to other colour wheels which are a visual appearance of colourful light using pigments, is merely the illustration of the main colours of the spectrum. To resolve this contradiction (in his *Opticks*, 1704) to his circle he added the purple, as a seventh colour, which is not part of the physical spectrum, having no wavelength of its own and can be created by the additive mixture of red and violet, the two far ends of the spectrum. (The phenomenon of this perceptual gap later 'threw light' upon the fact that the physical spectrum does not entirely contain all colours perceptible to humans and vice versa: our perceptual world might differ, and basically does, from our external world.) It was Newton who took color under the control of modern science. Oppositely to Newton the German poet and dramatist Johann Wolfgang von Goethe (1749–1832) also was studying color and light extensively, but in an other way. He was interested in color as a complex relationship between physical stimuli and the resulting perception. (*Zur Farbenlehre*, 1810, translated into English as *Theory of Colors*, 1840) His studies solved as great results to understand color for art, artist and to the forthcoming two hundred years' artists, scientists, psychologists, physiologists, physicists and color researchers, – theorists. In the 20th century American Munsell Color System, in the color solid, so called the 'Color Tree' the surface colors are built in a three dimensional space. In this system Professor Albert Henry Munsell (1858–1918), who was not only a color specialist, but artist, teacher too was the first to separate the colors into perceptual uniforms. The system is based on very strict measurements of the human 'eye-brain' system's visual response to color. The arrangement of Munsell's colors refers to the human visual perception. The system consists of three dimensions, which can be represented cylindrically in space as a color solid: *hue*, measured by degrees around horizontal circles; *chroma*, measured radially from the neutral (gray) vertical axis; and *value*, measured vertically from black to white. Munsell determined the spacing of colors along these dimensions by taking measurements of human visual responses. In each dimension, the Munsell colors are as close to perceptually uniform as he could make them, which makes the resulted shape surprisingly irregular. His system is widely used today, mainly in higher education in the U. S. Munsell created a 'rational way to describe the color'. The Munsell *Book of Color* was published in 1929, posthumously.⁷

Professor Antal Nemcsics's *Coloroid Color System*⁸ has been developed since about 1960, in Hungary. It is rather a color space, containing both the surface colors and the color of light. In the *Coloroid* the perceptual color uniformity also exists, like at Munsell's system. Added to it, Nemcsics, who – also not surprisingly – is not only a scientist but a painter and teacher, inaugurates a new concept. Nemcsics's 'Color – Universe' is based on harmony threshold. The colors in the Coloroid color space are fundamentally specified

⁷ Munsell Book of Color The New Munsell Student Color Set,

⁸ Colour Dynamics Coloroid Colour System, HU ISSN 1418-7108: HEJ Manuscript no.: ARC-030520-A

⁶ You have to want to see!

according to the perceptual attributes of ‘luminosity’ or ‘lightness’ (V), ‘saturation’ (T) and ‘hue’ (A). The A – T – V components define a cylindrical color geometry, with (V) as the achromatic vertical axis (lightness or brightness), (T) as the horizontal distance from the achromatic axis, and (A) – (chroma) as the hue angle around the hue circle. This Color Space is continuous, comprising all existing light and surface color. In 2000, the Coloroid was registered as Hungarian Standard. (MSZ 7300)

Summarizing of the Artist/Research Project

The basic aim of my Fulbright scholar project was to compare the two similar color interpretations and explanations. The basis of my theory was to indicate if there was a significant influence of the two color systems, Munsell and Nemcsics, on contemporary abstract painters’ teaching methods and works of art. During my grant the fundamental question was to find the relation between art and education and seek the personality of the teacher and the quality of her/his pieces of art, the oeuvre, and to investigate after the fundamental importance of the exemplarity in teaching creating the authenticity. These individual artistic values forming a close working relationship in between generations of artists during the decades working together create the character and the profile of ‘Grande École’ moreover: the spirit and ethos of a school. I think, at Hunter I was given clear and true answers to these quests.

My artist/research program was based on the exploration of the influence of these two, basically similar color systems (Munsell and Nemcsics), and their effect on today’s artists’ methods and practice on teaching of color devoted painting. It was both a theoretical and practical program, in which me and my colleagues thinking similar way, tried to explain and showed the essential similarity and non-essential dissimilarity in our progress in art. Seemingly we work in different ways in the U. S. and Hungary to fulfill our role in education, but our attitudes and goals are basically the same. In my program the familiarization of Munsell’ and Nemcsics’ activity on color teaching has been fulfilled. The ‘complementarity’ of both color systems among the American and Hungarian students and artists is a novelty in the education of art. The evidence of the enrichment of visual art by teaching color studies, color in art in higher education in U.S. and Hungary might be a long term perspective, both for the multicultural students and teachers henceforth. The clearly defined aim of the Lingua Spectra project was to study the contemporary American art and artists with special regard to the ‘color devotion’ in painting and ‘color consciousness’ in teaching.

The other part of the project plan was: to focus on the connection between the color effect (inducted by the artist through her/his pieces of art) and color sensation and perception (the viewer as a receiver) with regard to the space

and time in which the color and viewer ‘co-exist’ spending time, in round, oval, spherical or square, rectangular cubic space. This theoretical, however personal program has been realized by studio visiting, bilateral discussions and in the frame of Wurmfeld’s tutorial program and lectures. Wurmfeld, who deals consequently in his series of paintings with the problem of transparent ‘film color’ and later the ‘360 degree painting’ in his absolutely new (‘this had not yet done before’) abstract panorama paintings, in his paper ‘Perceptual Color Phenomena in Abstract Painting and the Cyclorama Project’ writes: ‘The primary prerequisite for such an approach to color usage is the assumption of an active and searching viewer willing to look and to exact visual information from the environment. Clearly the experiences of such emergent properties are enhanced by the control of the context in which colors are presented. The more the viewer is in a controlled selected color environment, the more the possible presentation of such a variety of experiences’.⁹

Methods

Visiting lectures, courses, seminars, involving in tutorial programs
 Studio visiting, meeting
 Interviews, discussions
 Working and research in libraries
 Visiting of museums, art collections, galleries
 Taking part at venues
 Personal contacts with colleagues, artists, art historians, curators, critics and students

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⁹ *pan horama ‘view’ horan ‘see Barker Vanderlyn Mesdag Árpád Feszty Monet és Cyclorama 2000E Cyclorama*

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