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Misunderstanding Colour  
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The use of white can be seen as an attempt to escape the subjective and to replace it with objectivity, a controlled pureness. But even the whitest of white cannot be white enough. History however shows us that the urge to try to reproduce exactness of colours will always be a subject of mistakes. When the polychromatic European modern movement was misinterpreted as white in the 1932 MoMA exhibition of the International Style, organised by Philip Johnson and Henry-Russell Hitchcock, it influenced modernist architecture in North America, giving it an expression that differed from its European equivalent. The same occurred during the Renaissance when classical architecture was thought to have been white. These misinterpretations should thus not be regarded as mistakes but rather as generators of a new architectural expression.

Both historical examples, the classical and the modern, saw a (white) monochromatic culture which did not exist and made it a point of reference. The use of white, in these cases, represents objectivity. These misreadings also share an idealisation of what they interpret as a universal architecture. Both the classical and the modern have historically been seen as being beyond the definition of style, at least in the revivalist sense. The kinship is also mentioned in the introduction of the catalogue of the International Style exhibition. We believe there is a connection between the search for a universal architecture and willingness to imagine it as being white, a colour which in its presumed objectivity corresponds well to the idea of timeless form.

Winckelmann, whose texts on antiquity were highly influential during the 18th century, saw the white marble of Greek monuments and sculptures as a material that within itself contained the smoothness and authenticity, required to best enhance the formal qualities of the object. Semper on the other hand saw this very smoothness as proof of his theory of cladding, which together with his archeological findings came to disrupt the hegemonic whiteness of classical architecture. According to Semper the marble's smooth surface made it the ideal base material on which to apply colour and even paint the parts that were supposed to appear white. The «naked» marble structure was never meant to be revealed.<sup>1</sup> Le Corbusier's argument for the white wall fits in curiously somewhere in between Winckelmann and Semper. His aim is to eliminate all things decorative or added on, any superfluous elements in order to bring forward the essential. However, this does not mean simply peeling off layers until the structure is completely exposed in its nakedness. As Mark Wigley writes in *White Walls*, «Designer Dresses»: «(...) the sensuality of clothes has to be removed to reveal the formal outline, the visual proportion, of the functional body»<sup>2</sup>. This would be the essence which Le Corbusier is pursuing, but for it to be perceived as form, Wigley argues, it has to be seen through a screen that separates it from both the sensuality of the (naked) body and the distorting sensuality of ornament. To achieve the essential, Le Corbusier adds white-wash.

In this context white is not an objective attribute in the sense of being neutral. It is an active addition, meant to erase all traces of decoration and facilitating the visual experience of true form. It can be seen as objective in the role of a vision that identifies every surplus of elements and a background against which this excess stands out.

So far we have seen a clear presence of whiteness both in the theory and the built architecture of a protagonist of the early modern movement. Le Corbusier was, of course, not the only one to propagate for white walls at the time, nor was he the first. He drew extensively on the writings of Adolf Loos whom

Le Corbusier also published in «L'Esprit Nouveau». Despite this it would not be accurate to describe modern European architecture in the years leading up to the 1932 exhibition at MoMA as white or monochromatic. On the contrary: The use of colour was quite widespread and played a prominent role in the development of the style. In a chapter of her licentiate thesis «Färgperspektiv» («Colour Perspectives») from 2004, Gertrud Olsson offers a brief history of colour in 20th century architecture. Much was happening in this field during the early years of the century. Bruno Taut described colour as a material equal to other building materials, the Bauhaus school taught both artistic and crafts painting without distinction, De Stijl-movement introduced prefabricated and pre-coloured construction elements and Le Corbusier let painted surfaces in primary colours face raw concrete.<sup>3</sup>

This polychromatic variety is not as present in the works selected by Philip Johnson and Henry-Russell Hitchcock to represent the International Style for the 1932 exhibition at MoMA, a crucial moment for the further development of the movement. In it, a set of principles were presented as the basis of this new style and these were exemplified with plans, photographs and models of contemporary projects gathered by Johnson and Hitchcock. Most of the represented architects were European and among them were Le Corbusier, Walter Gropius and Mies van der Rohe, to mention only a few. These three architects were the authors of some of the most iconic works on display at the exhibition; Villa Savoye, the Bauhaus school in Dessau and the Barcelona Pavilion. The buildings all differ in scale and program, but still have many things in common, perhaps most notably the use of white or transparent surfaces in the facade. This exhibition was hugely influential and became a landmark in the development of North American modernism and with this several features of the new style were in a way fixed and institutionalised, among them whiteness.

What caused this turn towards the monochromatic? Gertrud Olsson raises a few questions regarding the way the architecture of the period was perceived. For instance, photography was the main form of reproducing images of buildings and interiors and these were at the time all in black and white. This might have led to a wide range of light colours in different nuances to be understood as simply white. The perception of the new facades might also have been affected by their context and the contrast with darker exteriors of older architecture, making them appear white in photographs. Could it also be that the monochromatic is a consequence of the canonising character of the great exhibition and the idea of «a single new style»<sup>4</sup> as Johnson and Hitchcock described the evolving modernism? The use of white in architecture, whether it is in the form of unclad marble, white stucco or paint is inscribed in the very notion of an universal architecture or any form that strives for the ideal. As Le Corbusier writes to his friend William Ritter from his journeys around the Mediterranean: «I am crazy about the colour white, the cube, the sphere, the cylinder and the pyramid and the disc all united and the great empty expanse.»<sup>5</sup>

The white surface is an attempt at suppressing the inevitable imperfection of form when it is translated into the physical (material) world from the formal world of theory. White is seen as absence. An absence of colour and absence of material. Therefore it has been used as a representation of ideal form. It functions as a link to the world of theory, a lingering at the drafting board where the purity of ideas is still present. In the essay *Form and Material* by the Czech philosopher Vilém Flusser (1920–1991) he gives an interesting definition of the act of making objects, for example the carpenter constructing a



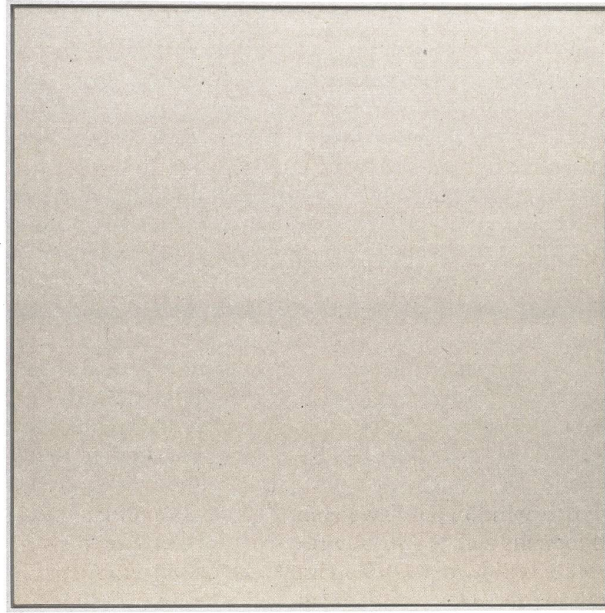


fig. a Agnes Martin, (1912–2004): Red Bird, 1964. New York, Museum of Modern Art (MoMA). Synthetic polymer paint and colored pencil on canvas, 71 1/8 × 71 1/8" (180.5 × 180.5 cm.). Gift of Philip Johnson. 514.1970.© 2017. Digital image, The Museum of Modern Art, New York/Scala, Florence

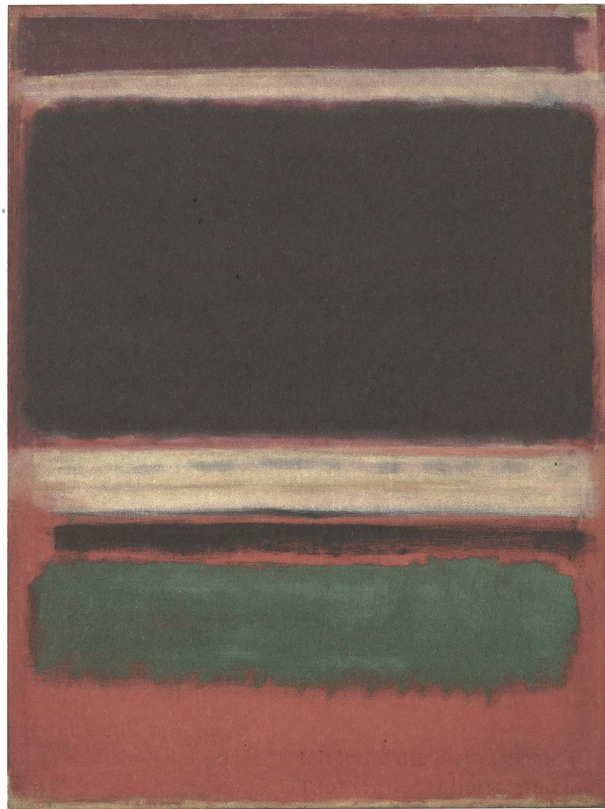


fig. b Mark Rothko, (1903–1970): No. 3/No 13, 1949. New York, Museum of Modern Art (MoMA). Oil on canvas, 7' 1 3/8 × 65" (216.5 × 164.8 cm.). Bequest of Mrs. Mark Rothko through The Mark Rothko Foundation, Inc. 428.1981© 2017. Digital image, The Museum of Modern Art, New York/Scala, Florence

table, as imposing a form (the idea of a table) on a material, in this case an amorphous piece of wood. In this act of transformation, or rather forming, lies a tragedy according to Flusser because «it is impossible to make an ideal table», since the idea of the table, the eternal form, is always distorted in the wood.<sup>6</sup> This is arguably even more true for our time where digital design tools further delay the point at which the idea enters the material world.

In the painting 'Red Bird' by Agnes Martin (MoMA, 1964), the artist's wish for creating something perfectly abstract, becomes evident. A perfect square canvas, painted white, tries to approach the perfect abstract world of the idea. But the painting once donated to the MoMA by Philip Johnson, fails in its attempt. The act of perceiving implies a subject and thus the very nature of colours is that they will always be subjective. When a white painting or surface is seen together with coloured surfaces it will be affected by simultaneous contrast as well as other phenomena, and no longer be perceived as white. Mark Rothko, also an abstract expressionist painter, contemporary to Martin, had a diametrically different approach to colour. In the early 1940s Rothko took interest in the creation of the myth. Reading Nietzsche's first book 'The Birth of the Tragedy', he aimed to create paintings that could revive the mythical in art. The mythical was supposed to bring up the primordial subjects of life. He said: «Only that subject matter is valid which is tragic»<sup>7</sup>. In 'The Birth of the Tragedy', Nietzsche explains the driving forces of art represented through the gods *Apollo* and *Dionysus*. *Apollo* represents the beautiful, the ideal, form and images, *Dionysus*, on the other hand, represents the uncontrollable, the frenzy and intoxication in which the human is absorbed by feeling and becomes one with nature. According to Nietzsche, science and logic, which are part of the *Apollonian*, are representations that are lifeless. The only way to save society from sterility is according to him to embrace the *Dionysian* impulses.

In this sense Agnes Martin aims to speak to the *Apollonian* through perfection and controlled beauty. The unclear colour surfaces of Rothko, framed by borders working as architectural frames, speak, contrary to Martin, of the *Dionysian*. The paintings of Rothko contain a depth deeper than the material representation of an abstract concept. Perhaps it is not very surprising that the Italian architect Carlo Scarpa drew inspiration from Rothko's paintings when choosing colours for his interiors. The intuitive, atmospheric qualities of Rothko's art correspond well with the, in some aspects, anti-modern sensibility of Scarpa.

In contemporary architecture colour is almost exclusively attributed to the *Apollonian*. This could be attributed to the fear of a clash between the potential arbitrariness of applied colour, with its complex relations between pigment and light, and the precision of digitally produced form. The mathematical, vectorised realm of AutoCAD is fundamentally at odds with the very real, physical presence of colour. What is the transparent background of the empty modelling space in which lines are drawn and spaces and surfaces are gradually defined? They have no content other than portions of the background suddenly constrained within the lines, they are as Flusser writes «material-free, empty forms»<sup>8</sup>. If colour is applied in contemporary architecture it usually follows a concept or another constructed logical framework. This is the usual case in polychromatic glass facades where colours are applied according to mathematical algorithms, or in a diagrammatic manner to distinguish programmatic functions in a building. In other cases it appears that contemporary architects have revived the ideals of the 19th century art historian and critic John Ruskin in which any

colour present is logically derived from the process of construction, it is the «natural» colour of the materials used. Ruskin was a strong proponent of truth in architecture and thought that colour was never to be used as ornament or to imitate other materials.<sup>9</sup> In opposition to Bruno Taut's ideas, colour is today no longer itself considered a material. It is hierarchically subordinate to steel, glass, stone, brick and concrete. For this reason colour theory is almost no longer taught in architecture schools.

In the search of the ideal or objective in architecture, colour has resisted a rationalisation of its use and qualities and repeatedly proved those wrong who believe they can control it or simply discard it. But in each misinterpretation, each historical slip, lies another path branching off from the canonical in a new direction. Its elusive nature has generated these misreadings and played an important role in the evolution of architectural style and aesthetics. Perhaps a certain degree of conviction should be encouraged.

The visual culture is currently experiencing a revolution similar to the one of the 19th century explained by Walter Benjamin.<sup>10</sup> Then the invention of the modern camera, optical toys as well as the monitoring of production lines increased the importance of the visual. Today in the numeric world the sense used for communication is again the visual. Whether images, letter, or symbols, all is communicated through the eyes. Learning from the cyclical nature of history one can thus assume that the time coming will revolutionise the use of colour as it did with the modern art movement. Since computers never will be able to work in a sensual state of intoxication, a *Dionysian* dimension needs to be injected. But the curse can also be seen as a blessing. If the pedantic exactitude of architecture is left to the computers to handle, the architect can find him—or herself—engaged in the *Dionysian*. Colour can then regain its importance and reinstitute its phenomenological effects onto architecture.

- 1 Mark Wigley, 'White Walls, Designer Dresses: the fashioning of modern architecture', Cambridge / London 1995, p.14.
- 2 Ibid., p.15.
- 3 Gertrud Olsson, 'Färgperspektiv – kunskap och forskning om färg i arkitekturen', Stockholm 2004, p.93.
- 4 Henry-Russel Hitchcock & Philip Johnson, 'The International Style', New York 1932, p.35.
- 5 Mark Wigley, 'White Walls, Designer Dresses: the fashioning of modern architecture', Cambridge / London 1995, p.9.
- 6 Vilém Flusser, 'Form and Material', 'The Shape of Things', London 1999, p.24.
- 7 Anna Chave 'Mark Rothko: subjects in abstraction', New Havens 1989, p.77–80.
- 8 Vilém Flusser, 'Form and Material', 'The Shape of Things', London 1999, p.27.
- 9 Gertrud Olsson, 'Färgperspektiv – kunskap och forskning om färg i arkitekturen', Stockholm 2004, p.87.
- 10 Walter Benjamin, 'The Arcades Project', Cambridge MA 2003, Print.

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