

Light, Color and Radiant Force – on Ruth Campau’s painting, *Naphthol Red Light 419*

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Were we to devise a mind game and assume, as a jumping off point, that the task of describing colorist painter Ruth Campau’s use of color is so stringently delimited that it ventures all the way out to the precipice of the insoluble, with the corollary that one and only one word may be used to characterize her oeuvre, then what word would it be? On these premises, a good answer could be the word *intense*, because in any discussion about color, this word can be used in many different senses and would accordingly be capable of functioning as a keyword. Perhaps characterizing Ruth Campau solely as a colorist is hardly sufficient; the nomenclature can suitably be supplemented with the word “minimalist” in the sense that important works of hers make use of few and reiterated sequences, such as a single monochromatic hue that is being varied, and sometimes repetitively, in its tone/value.

Taking our mark in one particular artwork, *Naphthol Red Light 419*, created in 2001 (Fig. 1), it might be possible to introduce a new designation: *intense minimalism* or *insistent intense minimalism*, where the artwork is clearly aimed at a target that spreads itself out across, around and beyond the painted surfaces.

I would like to start with a comment about the work’s title, which will supposedly awaken most people’s curiosity but which hardly addresses its appeal to the common man with any serviceable information about the work’s significance – other than what we can immediately intuit about the word “red”. But then again, *which* red among the many possible hues in the reddish region are we talking about?

A chemist would most likely be able to guess, on the spot, that we are speaking about an azo-dye and would therefore deduce that what we have here is a characteristic double bond between two nitrogen atoms in ensemble with aromatic rings, including a naphthol-group. It is *the chemist’s art* to successfully produce/synthesize compounds, which can then be utilized/used/serve as dyes.

An attempt to determine the red color with the aid of a color atlas would lead us toward a time-honored term that is still in general use, *crimson*. Like the artwork’s color, crimson is a clear, vibrant and brightly red hue. Some viewers might even be able to sense a little bit of blue in their sensory impression of the work’s color, while others would boldly assert that what we have here is a pure color.

But what is a pure color? It's difficult to answer a question as straightforward and as relevant as this in a clear and unequivocal way. In any event, it is impossible to answer it in a succinct way. Consequently, the argumentation is long, drawn-out and ponderous. In practice, a parameter indigenous to color-ordering systems is employed, namely the *degree of saturation* or we could simply call it the *saturation*. The more clearly and distinctly a given color appears, the more saturated it is said to be. When one color is blended with another, the resulting mixed color's degree of saturation will accordingly be less than that of either of its constituent components.

Naphthol Red Light 419 is a color with a high degree of saturation in the reddish region. The reflection from a surface that has been painted with this color will appear to possess a great deal of intensity as a well-defined red color. In Ruth Campau's work (see Fig. 1), only Naphthol Red Light 419 has been used, without being combined with any other colors.

In its intensity, the color Naphthol Red Light 419 appears to approach the intensity of the spectral hues that can be observed especially vividly in the colors that "come to light" in Newton's prism experiments, where white light is refracted/deflected and dissolved into all colors ranging from red through yellow, green and blue to violet, where the individual colors continually glide over into the next one in the series: the spectrum is continuous. When all the colors of the spectrum are subsequently gathered together, so that they strike the very same spot on a white surface, white light is obtained once again. The hues in a well-executed prism experiment are in possession of a clarity, an intensity and a saturation which simply cannot be achieved or replicated with the help of pigments, with dyes used in fabricating paints or with printing ink used for making books.

When asked why the color Naphthol Red Light 419 was preferred/chosen/singled out, Ruth Campau replied: "*It has a persuasive radiant force.*" This property, radiant force, is the specific quality that Campau utilizes as her point of departure for exploring a color's inherent character and essential nature – exemplified here by the particular "product," Naphthol Red Light 419, which is available at the art supply store and for which people who make the paint, including chemists, manufacturers and dealers, are responsible. The *use* of the color, on the other hand, is Ruth Campau's responsibility. I would venture to guess that this sectional view – this boundary between *outside*, understood as the art supply dealer's territory, and *inside*, understood as Ruth Campau's realm – has been made explicit by using the art supply dealer's name for the color as the artwork's title rather than some other and more diffuse alternative such as "A Study in Red".

There are several ways for an artist to vary a color's intensity, saturation and radiant force. Ruth Campau has focused on *the light* – the illumination of the work – in order to achieve this kind of variation. In Fig. 1, for example, where the traditional stretched canvas has been substituted with “glass plates” of Plexiglas/acrylic plate, through which visible light can pass, the paint/color has been applied on the back side of the plate with the after-effect that the radiant force in the reflection is enhanced, as compared with the reflection that would result if the paint were placed on the front side of the plate. This effect is due to the reflection- and transmission-properties of electromagnetic radiation, to which light – the illuminating light as well as the reflection – is subject.

The acrylic plate's surface is so smooth that when standing there in the light that is being reflected from the plate's front side (as well as from the plate's back side), what can be observed is an image formation which, in the event that the plate happens to possess the form of a flat surface, is an ordinary mirroring.

(On the basis of the laws of optics, it is possible to calculate what percentage of a given quantity of light is being reflected by – and also what percentage is being transmitted through – a surface.)

When the surface is uneven, for example, when it is a frosted or sandblasted glass plate/acrylic plate, where the surface irregularities' dimensions are comparable with the magnitude of the light's wavelengths, the mirroring property disappears. Moreover, the portion of reflected light will increase in relation to the transmitted portion.

When the layer of color is applied to the front side of the acrylic plate, the paint will dry in such a way that the surface becomes uneven and the perceptual impression of the color will become matte and appear to be less saturated, because the reflection from the color layer is blended with the reflected (white) illuminating light.

(We speak about “white light” whenever the reflection from a white-painted surface – stimulated by the electromagnetic radiation, which is invisible in itself – happens to be white.)

Another way the intensity emanating from the work's color can be varied is by blending the color from the paint tube with a medium/binding agent, which is transparent in itself. What is achieved in doing so is a variable glazing effect that depends on the quantity of tube-contained color in the combination. The linear courses with vertical brushstrokes, which can be plainly seen on Fig. 1, have been achieved with the aid of a broad brush/broom and paint with varying quantities of color and binding agents. In certain parts of the strokes, the color layer is thick (opaque), while in other parts it is so thin that the white wall in back of the work dominates the perceptual impression. By these means, the impression regarding the color comes to be a variation on the color's value/tone in its

gradations from maximally saturated to almost white, as can be seen when we scan our gaze horizontally across the striped sequence (the progression as it runs perpendicular to the brushstrokes).

Here, the effect of simultaneous contrast is the cause of an interesting repercussion, namely a heightening of the differences in tone/value between the stripes. (The effect of simultaneous contrast is partly due to the sense of sight's physiological functions and does not result from the external world's physical light.) When you allow your gaze to graze over the stripes, the effect of tone contrast will induce a sense of movement, a vibration, a flickering, all of which add an element of dynamism to the experience.

In the vertical orientation, there is, by and large – and altogether deliberately – no variation in the color layer's thickness, with the exception of a marking that will be mentioned below. The linear course is conspicuous and pronounced; the artwork's most essential spatial-construction element is the vertical line. The brushstrokes, the stripes, are thus a parallel bunch of lines, which consequently do not share any points of intersection that could function as a vanishing point. The parallel lines do not appear to have either beginning or end; they are not delimited by any frame or any framing. Only the floor and the ceiling impede the lines from continuing indefinitely.

Similarly in the horizontal orientation, there is nothing in the striated sequence that marks out any conclusion or any starting point other than the fact that the acrylic plate is no longer what it once was. Not even the corner of the room, which compels the plate to continue onto a perpendicular plane, is felt to be any hindrance to continuing for as far as the mind can reach.

In a purely practical respect, the work is comprised of a number of equally large rectangular acrylic plates. The brushstrokes, which have been applied lengthwise onto a plate (while the plate was placed horizontally on the floor, during the act of creation), have all commenced at the same end of the plate: it is clear to see that at the beginning of each stroke, a little more paint has been deposited on the surface than what is deposited in the remainder of the stroke. Ruth Campau calls this the "brushstrokes' feet". When (ultimately) linking the vertically positioned plates together, the ends, with the "feet," are placed horizontally beside one another: this can be spotted quite distinctly in the work ([Figs. 1 and 2](#)) as an adumbrated horizontal line, which is red. When we turn our attention to the vertical junctures of the plates, there are no analogous markings to be seen. When the gaze passes vertically over a "foot-line," a shift between the two plates' individual strokes can be seen. You might be able, at your own discretion, to envision these "foot-lines" and changes in the brushstrokes as phased steps in the vertical direction.

The work's surface constitutes a monumental two-dimensional space, which opens toward the infinite. And this has been attained with the use of but one color and only one spatial element.

As has already been mentioned, there is a mirroring that takes place within the shiny acrylic surface. By this means, the space of the *viewer's* side of the artwork is being depicted: in principle, in a way that conforms to how the eye normally sees space (when looking away from the lateral inversion). The mirror image, which might consist of objects, people, plants, walls or ceilings, is superimposed on top of the colored light from the paint, while the luminosity in the mirror image depends on many parameters, such as the light's angle of incidence, the viewer's placement and the source of the illumination. As soon as the viewer moves, so does the picture. There is a variability in the image formation that makes the situation come alive.

In a corresponding manner, the space on the back side of the painting can contribute to the aggregate impression because a number of the brushstrokes are transparent and the space situated in back of the work can consequently be seen by the viewer.

Proceeding in this fashion, Ruth Campau has successfully managed to build ordinary three-dimensional space right into her work, without resorting to any illusionist contrivances or geometric techniques like central perspective.

One of Ruth Campau's ambitions is to build in, through the vehicle of the work's structure, the process of formation as an essential element in the impression that the work will leave on the spectator. The plain and simple one-dimensional expression – the linear course – is enlarged and expanded with a "human dimension", which gives rise to a few importunate questions: how has she gone about doing this and how has she managed to do it? Accordingly, the *personal gesture* in the brushstroke, in the process's technique and in the work's precision comes to reflect the artist's participation and mission as a central element in the work.

The comparative distribution of the brightly colored and of the more transparent, glazing brushstrokes constitutes an entirely special matter, an area of inquiry that embodies a span from the "miniscule" to the larger "overall". The stringent "overall," with the vertical and wide brushstrokes has, in the horizontal orientation, been dissolved into "miniscule" changes in color intensity that fluctuate in such a manner that cannot immediately be put into a formula, that is to say, that cannot be assigned a comprehensible rational explanation. Is the distribution of the color's quantity in the stroke/strokes haphazard and consequently chaotic? Or is there a structure, a periodicity or quasi-periodicity built right into the distribution? Can any parameter related to order be attached to the distribution –

that is to say, an order-related parameter that can be transposed into an aesthetic parameter if and when there is a consensus that at the core of any conception of aesthetics the concept of order/structure necessarily forms a part? To a considerable extent, the situation has something in common with the fundamental situation in physics (i.e. science), and especially with chaos theory, wherein what is being explored is precisely the conditions for chaos in natural phenomena and an examination of when structure/order/local order springs forth from chaos. The description of the results constitute pictures of nature, of a sort: running, in principle, somewhat along the lines of understanding that similarly assume, axiomatically, that art's works are pictures.

Ruth Campau's work with the unusual brushstrokes lies precisely within the investigation of this border region between structure and randomness, an investigation that transpires via the brushstroke's distribution of color.

The aspiration common to art and physics can be exemplified by an examination of some of Jackson Pollock's later works.

Such an examination (Ref. 1) was carried out by the physicist and art historian, R. P. Taylor, who, on the basis of concepts from modern physics, mathematics and chaos theory, was able to demonstrate that Pollock's paintings are built up over a fractal structure. Moreover, in a temporal sense, Pollock's paintings were created before the conception of fractals was developed.

In Ruth Campau's works, the "hard" minimalism is "softened up" by the surrounding space through the agency of reflections and glazings, with the result that what is so specifically vigorous and powerful about the work, the line and the intense color, stand as the center, which in turn commands our concentrated attention, while the work, in its beingness, is essentially a part of the world. And the artistic means for attaining and for showing this is *the light* – the light that is every thing's beginning.

translated by DAN A. MARMORSTEIN

Ref. 1: Richard P. Taylor, "Order in Pollock's Chaos," in *Scientific American*, December 2002, p. 116.