# Using Color Factors to Characterize Space in Painting

**BY STEPHEN KNUDSEN**

IN OUR CURRENT ERA, it can be difficult to imagine that there was once a time when the illusion of space in a painting seemed miraculous. Six hundred years ago, Jan van Eyck's paintings pioneered convincing atmospheric perspective — depicting heaven and earth in previously unimaginable realism, with figures and objects in a landscape that vanishes delicately out into infinity. Is it any wonder then that Van Eyck's *Ghent Altar Piece* was considered a spiritual marvel in its time — the destination of innumerable religious pilgrimages?

*Route 80 at Bull River, July Morning,* **2010, by Roger Mark Walton. Oil, 44" x 44".**

## Looking at Art History with Fresh Eyes

The masterful technical advancements of the Renaissance fostered a love affair with the third (or illusionary) dimension that continues today. With the advent of photography in the 19th century, however, some painters began to question the longstanding supremacy of illusionary dimensionality, expressing their desire to direct the viewer back to the surface of a painting. Early Modernists loosened mimetic painting from its strict conventions; for them, the objective of painting was less the copying of nature and more the manipulation of paint to express personal vision. As Cezanne described, "Making a new parallel reality to nature."

A crop of later Modernists then gave us examples of painting that collapsed the illusionary plane and even negated it entirely. Today, it is all up for grabs. The germane question for the contemporary painter is *not*: What is this contemporary period dictating in regard to space? But rather: What spatial decisions will help deliver particular effects, aid *gestalt* (the essence of a work as a whole) and make a painting relevant, memorable and engaging?

As classes in landscape painting increasingly disappear from the curriculum in art schools, we lose an education previous generations took for granted. The understanding of how aerial perspective functions in nature and how to mimic the nuances artistically has become compromised. This can limit an artist's versatility concerning spatial issues in one's work.

You might be asking, 'What is the problem as long as one knows that cools recede and warms advance?' Granted, *temperature* is a color factor in manipulating space, but it is only one of eight color factors and probably not even the strongest factor. (See the sidebar listing the eight factors for manipulating space listed in a loose hier-

*Vastus Maximus*, 2010, by Stephen Knudsen. Oil on canvas, 5' x 7'.

archy from strongest to weakest.) Decisions about illusions of space can be as important as any other formal consideration in a painting. Whether your decision is to create space, negate it or to do a bit of both, an understanding of the many color factors that negotiate space is color theory worth holding onto.

## Making Color Choices to Fit Your Concept of Space

To examine the color factors that an artist can use to negotiate space in a painting let us compare and contrast *Route 80 at Bull*

*River, July Morning*, a painting by contemporary artist Roger Mark Walton, with one of my paintings, *Vastus Maximus*, and Neil Welliver's *Drowned Cedars*.

**Employing a Realism that Makes the Ordinary, Extraordinary.** In *Route 80 at Bull River, July Morning*, Walton delivers his subject matter with a frank realism in subject matter. He paints what he sees directly, and does not wince at including the abandoned concrete and the power poles that blot the pristine marsh. The world he shows us is familiar yet memorable, imperfect but still worthy of our attention.

Walton's realism concerning space harkens back to company as diverse as Van Eyck, early Corot, and the Hudson River School painters, all of whom celebrated deep illusionary space. Walton's type of painting displays a drama that is not conjured up; rather it is already in front of us if we could only slow down and see it in the natural world. *Route 80 at Bull River, July Morning* recognizes a view dropping off into infinity as relevant as ever as technology takes us deeper into unfathomable space.

It is not uncommon to have misconceptions about atmospheric perspective. Let's take a close look at a straightforward definition of atmospheric perspective: **As objects recede in space, hues and values merge, and, in some atmospheric conditions, the average lightness and coolness increases and resolution decreases**. It is worth a second look at the words: "hues and values merge."

A significant misconception is to think that an entire entity's color gets lighter the

further it moves back in the atmosphere in daylight. On the contrary, if values are merging then the lightest areas get darker and the darkest areas get lighter. Everything does not get lighter overall; only the average of the values gets lighter.

*Route 80 at Bull River, July Morning* is a good example of this. In the Walton painting, note the light white specks on the abandoned bridge support in the foreground. If you move your eye upward to the very next support receding back, the white specks have darkened to a light gray and the black of the barnacle zone has lightened to a dark gray. A clear reduction in value contrast has occurred by virtue of this merging. To see other examples of Walton's artwork, visit his Web site, www.rogerwalton.com.

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**Using Multiple Dimensions to Create Intensity.** In my painting, *Vastus Maximus*, the illusionary third dimension is negotiated in a much different manner from Walton. Here, there is a ploy for democracy between the two-dimensional and the three-dimensional. *Vastus Maximus* does not employ the strict Realism in subject matter as the Walton work.

In *Vastus Maximus*, the atmospheric perspective that might be in nature is reduced. Look at the foreground trees compared to the mid-ground trees. Here there is little merging of values and hues as linear

perspective takes us back. Reduced atmospheric perspective renders the landscape as a flat shapes rising up on the surface of the canvas. But as easily as the trees read as flat entities, they also can recede via the linear perspective. Only a hint of atmospheric perspective in the slightly merged trees in the mid-ground, provides enough atmospheric perspective to let the brain fill in what is missing to perceive space.

There is another reason for the spatial push/pull in *Vastus Maximus*. A further flattening effect over the whole work occurs by virtue of thick slabs of paint that rise to the surface. The mass of small trees in the mid-ground also acts as a screen obscuring a mountain seen through a small opening in the upper picture. This one small escape sends the viewer back temporarily but the flattening of the rest of the picture then takes over again, bringing one's vision to the surface. Though the gradient of the sky merges with the values of the top of the mountain in logical atmospheric perspective, the value contrast and hue contrast within the mountain is as high as those in the foreground trees. Color factors contradict one another in another departure from natural phenomena. The paradox brings vitality as *Vastus Maximus* invites one to visually scan the painted flatness and yet creates movement beyond the large surface of the painting.

**Making a Statement with Deliberate Flatness.** My work owes a great debt to earlier artists such as the American painter Neil Welliver (1929-2005). Omission of a majority of the atmospheric perspective in Welliver's landscapes helped connect him to abstract expressionism as well as a landscape tradition. See Welliver's, *Drowned Cedars* (right). Referring to Welliver's use of space and bold marks, Robert Hughes made the memorable observation in his text *American Visions*: "If a Pollock can be a Bramble then a Bramble can be a Pollock."

Much of the vitality in this painting comes from the intentional negation of most of the atmospheric perspective, making the linear perspective and our shifting perceptions of the work paradoxical. Note for instance how there is less than natural change in the contrasts, saturations and hues in the front logjam/water to the log-

**COLOR FACTORS
OF ADVANCEMENT\***
- High value contrast (greater differences in darkness/lightness)
- High hue contrast
- High saturation (vividness)
- Warms (red, orange, and yellow)
- Darks (when considering an average of all values present)
- High resolution
- Opaque objects that retain opacity
- Flat, homogeneous field

**COLOR FACTORS
OF RECESSION\***
- Low value contrast (less differences in darkness/lightness)
- Low hue contrast
- Low saturation (vividness)
- Cools (blue, green and violet)
- Lights (when considering an average of all values present)
- Low resolution
- Opaque objects that shift toward translucency
- Slightly modulated atmospheric
- Fields

**Note:** Color factors affecting the perception of space are listed in a loose hierarchy from strongest to weakest.

Whether your decision is to create space, negate it or to do a bit of both, an understanding of the many color factors that negotiate space is color theory worth holding onto.

*Drowned Cedars*, 1977, by Neil Welliver. Oil on canvas, 96" x 120".

jams/water in the middle and background. There is a more extreme negation of atmospheric perspective here than in *Vastus Maximus*. The only real hint of atmospheric perspective is the gradient in the sky and merged trees in the back mountain. This one color catalyst gets the brain to fill in the rest of the missing atmospheric perspective to shif into a mode of full spatial perception. This color language can also easily shift the viewer into a focus on strokes and shapes on the large surface. The push/pull ultimately resonates and engages.

Sometimes the act of painting a landscape is like a walk in pristine wilds where the colors seem to have just appeared with great complexity and yet great ease. Hopefully a good work will, like nature, induce shifting sensations and perceptions in the psyche. A fully mimetic approach can work as well as a collapsed field approach to the landscape. The color theory will serve well at both extremes and any sensibility in between. **PA**

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*Stephen Knudsen has taught painting for the past 19 years at Savannah College of Art and Design and is a painter with an international exhibition record. He also recently led the development of an image comparison tool that incorporates practical aesthetics for The Artstory. To see more of his examples on this topic, visit theartstory.org. Stephen is a frequent writer for* Professional Artist *and and has published groundbreaking color theory and developed the Knudsen Dual Color Wheel, used in universities across the country. He will lecture on his revision of Monroe Beardsley's aesthetics at the 2010 SECAC conference. E-mail: skn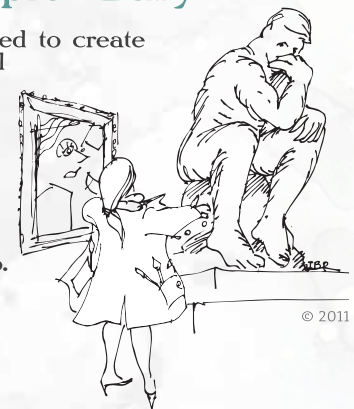udsen@scad.edu. Website: www.steveknudsen.com.*