

## **Radar Sights: New Paintings by Peter Dykhuis**

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Published in exhibition brochure, January 2003, The Owens Gallery, Sackville, New Brunswick

### **1**

Central to Peter Dykhuis's paintings since the mid 1990s— encaustic on panel works of unconventional shapes and cartographic persuasion—have been satellite images of North America and the artefacts of that remote sensing technology: false colour imaging and the near-abstract motifs of weather patterns. More recently, he has superstructurally incorporated one of the technologies of the Cold War: the Internet (originally created for the American military as a decentralized computer communications systems less susceptible to disruption in the event of war). In newer work, Dykhuis has used the Internet as a primary source, downloading radar images of storm fronts and precipitation patterns over the province of Nova Scotia issued hourly out of the Environment Canada Doppler radar site located at the Halifax International Airport, and employing them as a kind of armature upon which the logic of his paintings are based.

These paintings of his inhabit a zone where the traditions of landscape painting and cartography run headlong into the contemporary technologies of remote sensing. Their very architecture — each comprised of discrete square panels assembled together to form a whole — exhibits a central concern with the formal conventions of landscape painting part and parcel of his pursuit of a technologically mediated re-reading of the genre that has pushed his painting increasingly toward the abstract end of the painterly spectrum. All because of radar.

### **2**

As with so many other technologies, the radar systems used for weather forecasting have a military pedigree. Though the idea that radio frequency energy could be bounced off objects and then detected was first theorized in the nineteenth century, radar as we know it was developed in the late 1930s by British scientists working to create an early-warning system as a defense against Nazi Germany. Unable to fully develop the technology alone, the British transferred the secrets of their nascent technology to the United States where, at a facility that came to be known as the Rad Lab, they were transformed into a variety of devices with vital military applications — Loran navigation beacons, antiaircraft gunlaying systems, aircraft interception and bombing radars, proximity fuzes, etc. — that altered the very course of World War Two. Along the way and quite by accident, someone discovered something interesting:

In 1942 the Rad Lab's Propagation Group had noticed that radar could spot storms: their fuzzy appearance contrasted sharply with the stark outlines from stationary objects like mountains. It turned out water droplets in clouds scattered more radar beam energy at shorter wavelengths, rendering storms most visible in the microwave region.<sup>1</sup>

In the 1950s after radar's secrets had been declassified and made available to the civilian sector, the U.S. weather service adapted the technology for limited use in studying tornadoes. But in a kind of domino effect, the invention of the transistor in the late 1940s and its general availability in the early 1950s led to the rise of fast and powerful computers, setting the technological stage for the widespread adoption of Doppler radar detection as a key weather forecasting tool.

The impact and use of all these remote sensing technologies are at the root of the sequences of paintings that make up Dykhuis's *Radar Paintings*. In the work, images of weather patterns originally recorded by radar at the Halifax International Airport ("YHZ" in the international system of designations for airports) are reworked to address issues related to the status of both landscape and non-representational painting at a time when advances in imaging technologies are radically transforming our visual relationships with the world. It begins with maps.

Dykhuis's paintings reflect his interest in and concern for cartography — the science of mapmaking. There is a master plan (in its most literal sense) at work, here, for his paintings since his *Cross Words* works of the late 1990s have been based upon a single image of North America he has divided into an eight high by nine wide grid from which individual paintings were generated.<sup>2</sup> That grid of course reflects lines of latitude and longitude, those geographical coordinates first introduced by the 2nd century mathematician Ptolemy so as to make the surface of the planet mappable. But at an aesthetic level, they echo modernist art's fascination with the grid that features so exclusively in work by artists like Agnes Martin, and in a less rigidly ascetic way in the work of countless other artists. In Dykhuis's work, however, the grid functions metaphorically, encompassing a host of potential allusions that range from the lines and squares of the cartographic realm, the individual pixels of information that comprise the analog world of television and video, and even the discrete bits of information — the zeroes and ones — that power the digital world<sup>3</sup>.

In the *YHZ Series #1* (1999-2000), Dykhuis's cartographic gaze narrows. A grid that in previous work divided the North American continent into large, discrete blocks, now tightens down to focus on a smaller part of that whole: the province of Nova Scotia, jutting out, as it does, into the North Atlantic Ocean that shapes its climate and, in this particular instance, its precipitation patterns. In the painting *YHZ Series #1: Apr 28 14: 55Z*<sup>4</sup> (1999) the landmass of the province is encompassed within a complex shape of 15 conjoining panels. Concentric circles radiate outward from what would be the Doppler radar site outside of Halifax, situated within the work at the junction point of four panels. Dykhuis's use of the kind of false colour imaging typically employed to highlight (in this instance) areas of heavy precipitation, shows the province (in varying shades of green) and the Atlantic Ocean (in blues and whites) blotched by regions of heavy rain (in reds, oranges, pinks and yellows).

False colour imaging—the techniques of using different colours to demarcate regions or areas of, say, different temperature, light intensity, or water vapour density —dates back to the early days of remote sensing technologies. By using a specific colour to denote an area in which the data were of equal value, visually meaningful imagery could be built. The concept spread to every area where imaging technologies were put to use.<sup>5</sup> But the reasoning for the choice of those colours was always somewhat arbitrary. By the time of *YHZ Series #3* (2001) Dykhuis has begun to experiment with his use of false colours, finding another rationale for his colour scheme: geopolitics.

The painting *September 22 09:50 Z* (2001) is four panels high along its left edge, and four panels wide along its top. From that top four, the painting steps inward and down in discrete steps along its right side, to three panels in the next row, to two, and finally one at the bottom. Within the confines of this shape we again see a representation of Nova Scotia, and concentric circles radiating away from the point zero of the Halifax Airport radar site. And again we see what appears to be a heavy precipitation pattern obscuring much of the landmass to the north and west. And the false colour scheme at first glance seems to make sense to us: water is (of course) blue, the landmass is black (okay, why not), the weather system itself is white (for clouds and rain) — but then a small area of red near the top of the image and which appears to be part of the same weather system throws everything out of kilter.

What Dykhuis has actually used, in this series of paintings, to replace traditional false colour schemes, are the colours—blue, black, white, red—found in the logo and on corporate website of a major international military manufacturer: Northrop Grumman, headquartered in the United States. We tend to credit the nation state with the development of military hardware, but in reality it is for-profit corporations like Northrop Grumman which generates the sophisticated technologies and *matériel* of war that are sold under contract to international clients. The machinations of geopolitics — the intersections between the military desires of regimes (civilian or otherwise) in various countries of the world, and the business pursuits of corporations prepared to meet those needs — proverbially colour our world. Working in the *YHZ Series #3* with the corporate colours and logos of two major military suppliers — Northrop Grumman and Raytheon — Dykhuis literalizes an otherwise virtually invisible geopolitical reality. In doing so, he initiates an aesthetic shift: a move away from an overt representation and toward a coded abstraction.

## 4

Representation of the landscape has always been inextricably bound up within paradigmatic technologies: linear perspective, the camera obscura, the photograph, and, more recently, the remote sensing of radar and satellites. Technology always mediates our seeing, and in Dykhuis's paintings, that fact is not permitted to sink below the level of aesthetic self-consciousness. The desire to make conspicuous our relationships with the mechanisms we construct to aid (or even replace) our seeing distinguishes his work in the larger sense. But within the paintings themselves, it has had kinetic consequences. With the introduction of colours drawn from corporate logos into the work of the *YHZ Series #3* — with his addition of a political dimension — Dykhuis eludes the strictures of the representational impetus necessarily built around remote sensing technologies. We don't know *a priori* that Dykhuis's use of specific colours in his paintings is political in intent, only that our expectation of what false colour schemes should look like (based on past encounters) no longer works.

So we adjust, and embrace the possibilities of abstraction. As we must, for by the works of the *YHZ Series #4* (2002—), the representational has been (ostensibly) absented. Cartographic Nova Scotia is (apparently) no longer. What is left in these paintings of a post 9/11 world is the artefactual residue of remote sensing. The twelve panels making up *16 Feb 18:55Z* (2002) comprise a field of black into which are set several shapes — a large central mass bordered by smaller, narrow bands and speckled all around with tiny isolated spots — which are easily likened to the shapes of precipitation patterns in other works. However, something is very different, for cutting across those masses are horizontal stripes of colour — blue, white and red — which by the evidence of their razor-straight edges alone are obviously utterly unrelated to anything meteorological. They are, in fact, the corporate colours of Irving Oil, the New Brunswick-based oil and gas company which economically dominates much of Eastern Canada (and the northeastern US), exercising geopolitical power by other means. In other works of the series, Dykhuis works with the colours from the corporate logos of Shell Oil, Petro Canada, Esso, and Ultramar. All politics are local, the saying goes, and for Dykhuis it occurs just down the street at his local gas stations.

## 5

Aesthetics, too, are ultimately local. So in the apparent cartographic void we encounter in Peter Dykhuis's most recent paintings, in the ostensible absence of the geographically representational, we may take aesthetic recourse of some consequence in abstraction. But this is a politically fueled and meaningfully coded abstraction he proffers; lurking just under its surface — beneath the veneer of painterly non-representationality — lies a conceptual reservoir containing ideological and geopolitical metaphors of that which colours both our planet and the very maps that claim to represent it. It is, in fact, the representational exercised by other means.

### Notes

<sup>1</sup> Robert Buderl. *The Invention that Changed the World*. New York: Simon & Schuster, 1996. p. 253.

<sup>2</sup> It is a map based upon J. Paul Goode's *Interrupted Homolosine Projection* (1925), a cartographic alternative to Mercator Projection which attempts to avoid some of the distortions that arise when the three-dimensional surface of the planet is mapped two-dimensionally.

<sup>3</sup> Dykhuis's use of encaustic permits him to paint lozenge-shape brush strokes that repeat the discrete structure of his works at a minuter, painterly level, and also to echo the world of pixellated visual information.

<sup>4</sup> In the title of each of the works, the date is followed by the time the image was originally recorded by the Doppler radar at the Halifax International Airport. The "Z" refers to "Zulu," a phonetic designation used in place of "Greenwich Mean Time."

<sup>5</sup> As recently as the 1970s debate raged in medical circles over the value of images versus numerical data in analysis of information drawn from such imaging technologies as CAT (or CT) scans. It was argued that images might mislead or misinform and so lead to misdiagnosis, and that numerical data could be better trusted. Images (and the use of false colours) eventually won the day.