Middle States Geographer, 2002, 35:128-136

THE ART OF THE EXPEDITION: THOMAS MORAN AND THE DEVIL'S LANDSCAPE OF YELLOWSTONE

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ABSTRACT: *Landscape representations of the American West from the nineteenth century are commonly interpreted as affirming of creationist beliefs. This essay advances a contrary reading and argues that a mix of scientific, political and economic agendas positioned expeditionary artists in the field and that they therefore served as agents in the institutional acquisition of land and resources and the opening up of terrain to development. As such they were instrumental in destabilizing religious connotations that stood as obstacles to exploitation. More generally, the observations of artists helped loosen the grip of natural theology on landscape interpretation. Thomas Moran's work with the Hayden survey in the Yellowstone region in the early 1870s is an exemplar of how expeditionary images conformed to the project of capital-driven westward expansion.*

INTRODUCTION

Ferdinand Vandeveer Hayden's United States Geological Survey of the Territories (1871) carried two sextants, one artificial horizon, one sideral chronometer, one mean solar pocket chronometer, two mercurial cistern barometers, one thermo-barometer, two aneroids, two prismatic compasses, three pocket compasses, one clinometer, two odometers, one pair odometer wheels, a box of tools and Thomas Moran's painting and sketching equipment (Merrill 1999). It was, however, the less tangible aids to landscape measurement that determined the survey's results. I refer here to strategic obligations and the objectives of capital. I have investigated elsewhere the institutional underpinnings of expeditionary art and drawn attention to the strong structural constraints upon artists in terms of subject material and methods of depiction (Balm 2000). Recent work by Driver (2001) and others take us in further promising directions by characterizing exploration as a set of cultural practices organized around people, resources, equipment, publicity and authority, where agendas of acquisition and appropriation are deployed through geographic fieldwork.

Neglecting or undervaluing the force of institutional structures on artistic outcomes can results in distorted assessments of the cultural work that images perform. In terms of expeditionary images from the American West the coital stance between religion, scientific observation and documentary art in the American West has been well discussed (see, for example, Bedell 2001, Novak 1995, Morand 1990) with a consensus view that expeditionary artists had a fundamentally theological reading of the landscape. This line of thinking is most developed in Novak's work, going so far as to assert that artists operated in the American West as "artist-curates" within a "natural church" (1991, p. 151). Other researchers have built on this perspective by noting the cruciform iconography and other biblical references within selected images. In recent work that further engages with the issue of science and faith in landscape depictions, such as that by Bedell (2001), religion remains foregrounded with science mainly serving "as a conduit to the Creator" (p. 149).

Readings such as these overvalue the role of religion by undervaluing the other much more

powerful, and essentially secular, forces in play. It also strips the image of power by implying that the artists were mimics of tradition and that their work perpetuated an archaic interpretation of space and place. By contrast, I argue that the expeditionary work of artists, including that of Thomas Moran discussed in this essay, conjoined with modernizing forces to become a secularizing avant-garde; disentangling geology from religion, overwriting anecdote with Cartesian rationality and, in the case of the Yellowstone region specifically, converting the wilderness of divine order into commodity. The evidence of human reshaping of the western landscape in the second half of the nineteenth century suggests that the religious sentiment deployed in expeditionary work was trivial in its influence compared to the effect of politics and capital. Similarly, the exploitations of landscape during that time contradict the familiar argument (see Kinsey 1992) that artists' images of grandeur in the American landscape were intended as testaments to the overarching powers of God the geomorphologist.

IMAGES AND THE CONTROL OF SPACE

We refer to the structural constraints that determine how we see the world around us as scopic regimes (Rose 2001). Such regimes, assembled from sets of cultural permissions about what we are encouraged to see and take note of, provide a necessary visual ordering of the environment around us and also a way to encode significant features of that environment in order to communicate information about them. In effect, this work of visual ordering is a form of rhetoric, but one that employs images rather than words. In the context of the western surveys, scopic regimes of the time were inevitably folded into expeditionary priorities and products, causing those expeditions to re-invent the region by stripping it of myth and emotion. The principal myth-stripping agent were the expeditionary artists, the image-makers of exploration.

But why was this re-invention and this stripping away of myth necessary? To answer that, we need to consider how scopic regimes operate relative to what is already known and expected regarding the world around us. Visual ordering brings the strange and the unfamiliar within the compass of the expected. The western surveys were underpinned by institutional supports built from political, military and financial interests. This meant that the image-makers of the American West, whether surveyors or artists, were expected to deliver products that advanced the interests of those that provided the institutional support. The "Devil's landscape" of Yellowstone referred to in the title of this essay is a seismic area in the present-day state of Wyoming noted for its geysers, sulfurous hot springs and mud pools. To the eastern gaze, these would have been strange features indeed when first encountered. It was not appropriate, however, for expeditions to perpetuate either ideas of divine creation or ideas of wilderness that framed wild terrain as unsuitable for human use and exploitation. In the case of the Yellowstone region it was expected that well-entrenched myths about bizarre, repellent and threatening scenes where "the fires of hell" burned (Kinsey 1992, p. 28) be expunged. It was expected that expeditions would help domesticate the region by expelling both devil and deity, heaven and hell, so that terrain could be put to productive and profitable use. Whether entrepreneurial or springing from government deliberation, commercial appropriation of western wilderness was considered a just cause for most of the nineteenth century. The relationship with the Devil's landscape, then, was not based on confrontation with the cross, but on amalgamation with capital.

What evidence do we have regarding this appropriation of space for productive and profitable use? Consider that nineteenth-century enema of capital flow, the railroad. In 1867, four years before Thomas Moran would pass through the Yellowstone region as a member of the Hayden party, a contributor to the publication *Frontier Index* predicted that

> "[a] few years more and the...railroad will bring thousands of pleasure-seekers, sight-seers, and invalids from

Figure 1: Northern Pacific Railroad Publicity Poster, c. 1915

> every part of the globe to see this land of surpassing wonders" (in Haines 1974, pp. 37-38).

The prediction proved correct. Railroad interests, sensing a new tourist destination in the making, lobbied strongly for legislation setting aside a portion of the Yellowstone region as a national park and none more strongly than William Darrah Kelley, a supporter of iron and steel interests, and Jay Cooke, financier of the Northern Pacific Railroad and part underwriter of Moran's first trip to Yellowstone (Kinsey 1992). The NPRR railroad route known as the "Yellowstone Park Line" eventually linked the region to the transcontinental rail network (Figure 1). The Moran paintings are consonant with the idea of the American West as commodity, as were the photographs of his expedition co-member William Henry Jackson. Indeed, a selection of Moran's sketches and paintings were examined in the U.S. congress as part of the deliberations, vigorously championed by Hayden, that preceded the designation of the Yellowstone region as the nation's first national park in 1872. Before turning to the images, we need to examine the context of the Hayden survey.

THE HAYDEN SURVEY

The period from the 1840s to the 1870s was one of energetic mapping and inventorying of the American West. All these expeditions were outcomes of broad social, political, economic and intellectual forces then in play. Surveys were under the direction of the Army Corps of Topographical Engineers (founded in 1838) and the Corps helped orchestrate a "great reconnaissance" to examine and document plants, animals, native peoples and geological conditions (Goetzmann 1966). Within the expeditionary context art and science blended with military organization and governmental oversight making expeditions to the West notable for their exquisite blend of Cartesian ordering (to delineate terrain by survey technique) and sudden violence (using military force to subdue any resistance from occupants of that terrain).

Geological issues were a particularly important focus for the Hayden survey. Huttonian and Lyellian views of evolutionary and geological process based on uniformitarianism had begun to displace notions of divine creation and associated catastrophist theories since the first quarter of the nineteenth century. These revisions were occurring at the same time as the major surveying projects were occurring in the American West and they became increasingly a part of the interpretation of new terrain, particularly visual interpretation. This was especially so in the case of the Hayden survey, which was the first to comprehensively document the Yellowstone region. Ferdinand Hayden was well qualified in this regard, serving as Professor of Geology at the University of Pennsylvania, publishing his *On the Geology and Natural History of the Upper Missouri* in 1862 (Hayden 1862) and going on to become a founder member of the United States Geological Service (USGS).

The role of the Hayden survey, as with the intentions of many earlier expeditions to the American West, can easily be misread if explicit objectives, such as geological observations, are taken simply at face value in disregard of the structural underpinnings and the implicit values associated with them. The observations of both Moran and Hayden represented an elite discourse linking aesthetic appreciation, governmental underwriting and pursuit of profit. Hayden was a man of finely tuned visual sensibilities and remarkably modern in his realization that expeditionary accounts were made meaningful through visual documentation; he devoted a substantial portion of his government appropriations to retaining field photographers and artists. The Department of the Interior was clearly on board with Hayden's line of thinking by 1870 when it issued instructions to him to "secure as full material as possible for the illustration of your final report, such as sketches, photographs, etc..." (in Kinsey 1992, p. 49). In sum, the most appropriate conclusion we can draw is that the work of the Hayden survey "lay between serious, accurate science and boosterism" (Hales 1988, p. 72).

IMAGES FROM THE FIELD

Trapper lore and Anglo accounts of early reconnoiters through the Yellowstone region date back to the 1806 observations of John Colter, one-time member of the Lewis and Clark expedition. These accounts stress the otherworldly, indeed underworldly, appearance of the geyser fields. These characterizations proved durable and as late as 1871 an expeditionary account by Nathaniel Langford published in *Scribner's Monthly* would reiterate them:

> One of our companions gave to these rocks the name of the "Devil's Slide."...[W]e frequently had occasion to appropriate other portions of the person of his Satanic Majesty, or of his dominion, in signification of the marvels we met with... [T]he trappers who preceded us had been particularly lavish in the use of the infernal vocabulary...to designate portions of its physical features as "Fire Hole Prairie"--the "Devil's Glen," "Hell Roaring River," etc. (Langford 1871).

Although occasionally emerging in print, accounts of the region prior to the Hayden survey are best considered informal on account of their sources (Allen 1992). The observational project of the Hayden survey, commissioned and underwritten by the US Government and strongly supported by industrialists, represented a formal overwriting of prior observations. The *New York Times*, for example, saw Hayden's explorations and reports as a watershed:

> Hitherto the reports that have reached us, have been mainly those of popular as distinguished from scientific observers. Those now to be furnished...will be trustworthy, exact and comprehensive... (in Hales 1988, p. 106).

The dividing line between scientific observation and whimsical illustrations is not a clear one, however. Hayden himself was motivated to explore the region based upon colorful stories from trappers and traders and the government itself may have been motivated by Langford's published accounts (see Morand 1990). Also, it was none other than Thomas Moran who provided *Scribner's Monthly* with an engraving of Castle Geyser to accompany Langford's June, 1871 installment of "The Wonders of Yellowstone." The Hayden link, however, made the Moran paintings authoritative by association.

There is a large suite of paintings by Moran that feature thermal landscapes in the Yellowstone region, but many of these were completed in his studio in subsequent years. Of importance here are only those produced in the field or within a year of the expedition's return in the winter of 1871-72. He spent several days in July, 1871 in the vicinity of Gardiner's River and Tower Falls, a considerable portion of which time was spent helping William Henry Jackson with his photography, making only provisional studies himself. Notable color studies produced either on the spot or later from recollection are mostly small paintings worked in watercolor and pencil, such as *Upper Pools at the Hot Springs of Gardiner's River, Yellowstone Valley, Wyoming Territory,* 1871 (Figure 2); *The Grotto Geyser, Fire Hole Basin (Liberty Gap Mammoth Hot Springs)*, 1872 (Figure 3); *The Main Springs at Gardiner's River, Yellowstone Valley*, 1872 (Figure 4) and *The Castle Geyser, Fire Hole River, Yellowstone, Wyoming*, 1872 (Figure 5). These watercolors, some of which were commissioned by the English industrialist William Blackmore, were part of the visual package reviewed in congress as part of the Yellowstone National Park deliberations (Bryan 1991).

In the original paintings we see a caustic coloration of the landscape; its sulfurous palette of yellows, reds and blues discernible through a gauze of steam that suggest massive processes of sintering from which the landscape seems freshly emergent. Some features seem implausible. Yet the images conform to reality in essential respects. We know from modern investigations that these geyser fields are notable for their mineraliferous depositional features. The springs around Firehole Lake, for example, present craters heavily coated with black manganese oxide and the lake itself contains the only geyser group within Yellowstone where travertine (a form of calcite) is actively deposited together with siliceous sinter. The temperature of the lake is about 70 degrees celsius generating a pervasive mist upon contact with the cooler air, while the pools themselves, due to the presence of cyanobacteria (algae), range in color from deep blue or green to orange. Early travelers through the region believed the blue indicated not the presence of blue-green algae but dissolved copper and thus promised a bonanza (Bryan 1991).

It is significant that the first-hand accounts from the Hayden survey are rich not in references to the infernal but more often dispassionate accounting of surroundings and presumptions about process derived from those surroundings, as here in an extract from the journal of Albert Peale (survey mineralogist) describing the Mammoth Hot Springs:

> A little further on and we were greeted with one of the grandest sights imaginable. Before us rose about 600 feet a mass of white sediment arranged in separate

Figure 2: Thomas Moran, 1871. Upper Pools at the Hot Springs of Gardiner's River, Yellowstone Valley, Wyoming. (Gilcrease Institute of American History and Art)

Figure 3: Thomas Moran, 1872. The Grotto Geyser, Fire Hole Basin (Liberty Gap, Mammoth Hot Springs) (Gilcrease Institute of American History and Art)

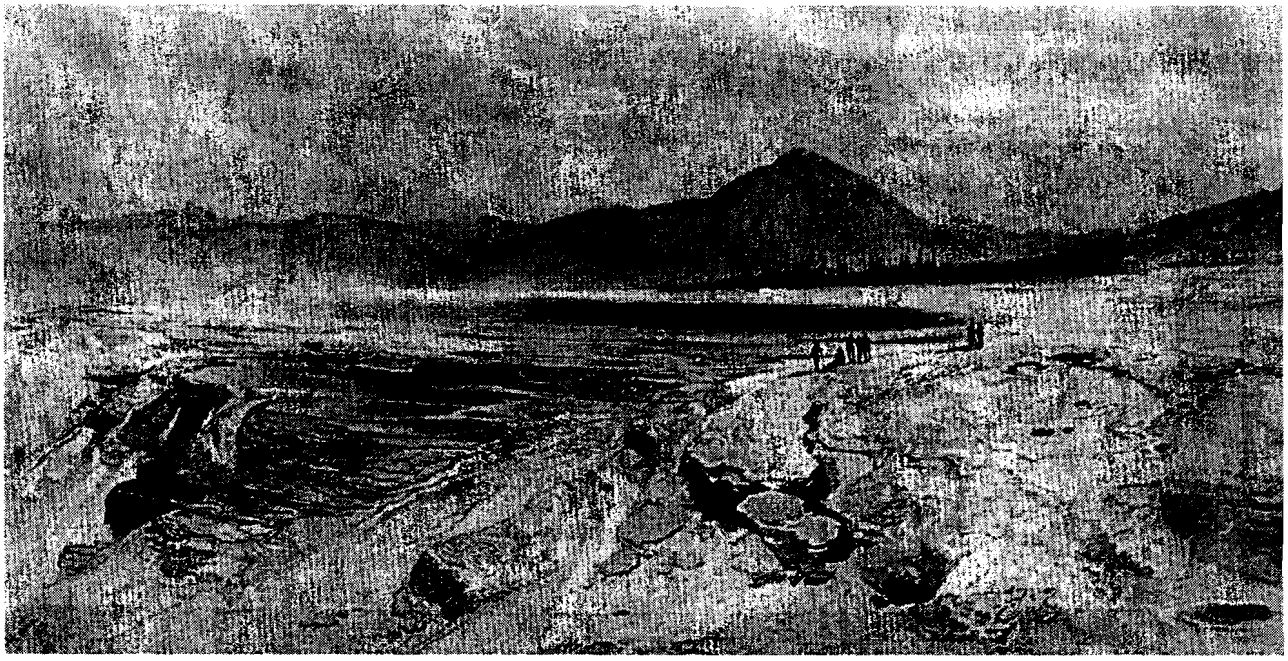

Figure 4: Thomas Moran, 1872. The Main Springs at Gardiner's River, Yellowstone Valley (Gilcrease Institute of History and Art)

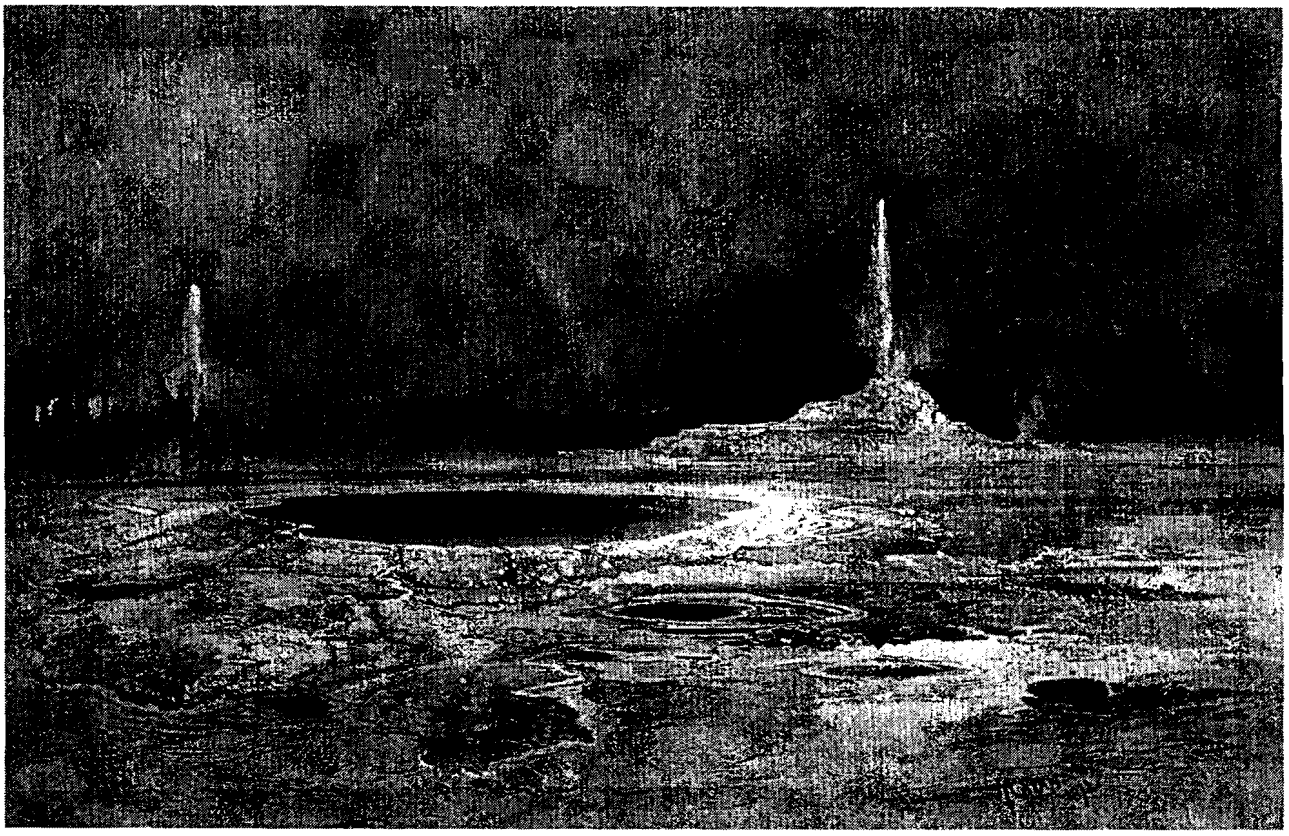

Figure 5: Thomas Moran, 1872. The Castle Geyser, Fire Hole River, Yellowstone, Wyoming (Gilrease Institute of History and Art)

> terraces looking like a vast frozen cascade. Each one of the terraces has a number of hot springs, while in beautiful basins (formed of the deposit)--some of them white, others red, others of a delicate pink tint--rising one above the other innumerable pools of water, some hot and others still cold...In many places there are holes from which there issues out hot air and steam. In some places there is a very slight deposit of sulphur. Looking into the chasms in places crystals of sulphur can be seen encrusting the sides. In other places, again where water has bubbled up, there are tubes of the crust with delicate fringes on the outside. (In Merrill 1999, p. 128.)

It is worthwhile to compare this written account with the painted account of the same site provided by Moran (Figure 3) for the image is similarly informative. Generally, the survey's accounts, visual and verbal, strip away the informal observations, built up over time, that were suggestive of the conditions of hell, and substituted others of a more objective and investigative kind. New visual and verbal signifiers were applied that had a broadly national frame of reference: "Liberty Gap," for example, replaced "Devil's Thumb." What then, we may ask, was the fate of the "Devil's breath" and the "heat of hell bubbling up"? It was all still there but in a domesticated form. The institutional and cultural determinants of Moran's work rendered the Devil's landscape into a mere curiosity and facilitated the landscape's move into a visual petting zoo of the bizarre. Viewers of the pained scene might now wish to go and visit to see for themselves. The curious were beckoned and the train awaited.

CONCLUSION

The reading in of religious references into the visual construction of the American west is a familiar one and continues to support a view of artistic endeavor as separate from empirical science and maintaining safe distance from the influence of commerce and politics. The persistence of these views suggests inattention both to the scientific accuracies of artists' work in the field, and an undervaluing of the cultural imperatives working powerfully within the expeditionary milieu and in American elite culture in the later nineteenth century.

Expeditionary images are underpinned by processes of commerce and commodification and work as extensions of capital in pursuing control of space. In the case of Moran's work this served to advance shifts in thought about geologic processes by integrating the thermal landscape of Yellowstone with the worldly familiar rather than the otherworldly (or underworldly) strange. It advanced vested industrial interests by the same means. The power of institutional forces required that notions of heaven, and its infernal other, could not be allowed to prevail and obstruct the advance of capitalist purpose. Moran's paintings enfolded the landscape with post-creationist spheres of knowledge and effectively domesticated the Devil.

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