Over the course of the last academic year, while on a Rome Prize Fellowship at the American Academy in Rome, Randolph Langenbach produced a 50-minute digital slide/video presentation called the *Piranesi Project: A Statigraphy of Views of Rome*. This video was inspired by the celebrated engravings that Giambattista Piranesi created between 1740 and 1778 of views of the ruins of ancient Rome, although it also includes the work of other artists. In the show, the Piranesi engravings are merged together with a series of documentary photographs taken by Langenbach from the same vantage points used by Piranesi for his engravings in his famous *Vedute di Roma* (Views of Rome). Langenbach applied the same technique to the paintings and engravings of other artists from the late eighteenth and early nineteenth centuries, and to a number of nineteenth century photographs.

Each image sequence in the show was created by assembling the modern photographs together with digital copies of the Piranesi and other historical views into a series of layers using Adobe Photoshop as a platform on which to assemble the paired images in a close registration. By fading from one to another layer in these overlays, a series of digital images could be exported in JPG format into PowerPoint. The PowerPoint show is then programmed to fade from one image to the next in rapid succession, showing each step in the transition from the early view (usually a black and white line drawing) to the color photograph of the present-day view.

The most important feature of the Piranesi Project, however, is not the asymmetrical transitions. It is the method used to create the underlying photographs of the present day views themselves. By assembling several photographs taken of a particular Vedute into a single flat-field view, Langenbach has utilized the new technology of digital photography to produce images that are impossible to create in a darkroom.

Piranesi frequently laid out his compositions with more than one vanishing point, and even sometimes combined the views from multiple viewpoints. While these are common graphic devices used in drawing and painting, photography does not easily lend itself to such manipulation except in stitched panorama views. Piranesi’s compositions are not panoramas. They are tightly composed flat-field, fully rectified, images that sometimes encompass as much as a full 180-degree view without apparent visual distortion.

Using digital photographic technology and the sophisticated programs that have recently become available to assemble and manipulate photographs, the compositional tools used by artists like Piranesi are now available to photographers. With these tools, Langenbach has succeeded in producing a series of composite photographs that document the same subjects as illustrated by Piranesi in a manner that closely matches his compositions—thus breaking free from the limits imposed by the optical geometry of each single image. This digital photographic project thus provided a remarkable opportunity to explore compositional methodologies as practiced by artists who have used the landscape of Rome as a source of inspiration in the years before photography. The theoretical significance of this project is explored in this article.
The History of a Ruin as a Ruin

A visitor arriving today at the site of the ancient Forum in the center of Rome looks out upon a city that stands as a veritable symbol of an entire civilization, established over 2,000 years earlier in time. What is seen is but a tiny fragment of what was constructed by the ancient Romans, yet the fragments that are visible in Rome, or likewise in Athens, Cairo or other sites of great ancient cities, form a complete visual and cultural artifact in their own right—in much the same way that the granite cliffs of the Sierra Nevada mountains, eroded by time, form a single image of sublime beauty where they face each other across the Yosemite Valley. One wonders, could the vandals and lime burners who pillaged the ancient temples of the Forum be said to have left behind a singular work of art? Does the Roman Forum’s value as a cultural artifact depend on keeping its ruins in as unchanged a state from their current condition as possible? Regardless of how one may answer these two questions, one cannot fail to recognize the symbolic and historical significance of the ruins of ancient Rome situated in their historic landscape.

For centuries the remains of classical Rome were not valued enough to prevent their being quarried for lime and building stone. This all changed in the eighteenth century, around the time that Giambattista Piranesi documented the ruins in his famous etchings. While other artists had also illustrated these ruins, it was the work of Piranesi that most profoundly influenced the elevation of these ruins into the consciousness of people throughout Europe, and led to their future conservation. His illustrations helped transform the views of the ruins in and around Rome into symbolic images that, even today, continue to influence the way that people look at and see the archeological sites themselves. For example, so accepted is the modern view of the science of archeology and the practice of conservation that few people are aware today that during the nineteenth century there was a very bitter debate over the removal of the vegetation and the accumulated debris that had half-buried many of the ruins, as can be seen in this 1853 quotation:

*Those who can remember the Forum as it was at the beginning of the present century, before the...excavations were made, are but few in number; but the changes...were liked upon, at the time, with no favour by artists [or]...by the common people in Rome. What was gained to knowledge, say they, was lost to beauty. ... The mantle of earth, which for centuries had been slowly gathering around the ruins, had become a graceful and appropriate garb. Trees and vines and green turf had concealed the rents and chasms of time; and a natural relation had been established between the youth of nature and the decay of art. But the antiquarians had come, and with their pickaxes and shovels, had hacked and mangled the touching landscape as surgeons dissect a dead body... The antiquarians had felled the tree that they might learn its age by counting the rings in the trunk. They had destroyed [so]...they might interrogate.*

Coming as he did at the end of the Baroque era, Piranesi’s art presages the Romantic era in the way that he captured the sense of time and decay in his engravings. At the time that Giambattista Piranesi worked, the ruins had been pillaged for centuries and then largely neglected after the use of them as convenient quarries gradually ceased. The ruins then became overgrown, and in Piranesi’s images this overgrowth, along with his remarkably expressive figures, took on a life of its own, During the 19th century, the importance of this is expressed well by Gustave Flaubert, when he observed in an 1846 letter to a friend:

*I love above all the sight of vegetation resting upon old ruins. This embrace of nature, coming swiftly to bury the work of man the moment his hand is no longer there to defend it, fills me with deep and ample joy.*

If integrated into the preservation and interpretation of a site, this tension can add richness to a site, simply because of the many layers of meaning that are revealed. In the case of the Roman ruins, these sites have been ruinous for a considerably longer time than they ever existed as complete buildings. Thus, it is in their condition as ruins that they became symbols in history, literature, and art for the classical Roman civilization. It is therefore important to recognize the history of a ruin as a ruin. This is a vital aspect of the power of the images created by Piranesi and his contemporaries and is part of the reason why the fragmentary remains of the ancient ruins became the basis for their recognition in the 18th century as the icons of a great past civilization.
Giambattista Piranesi (1720–1778) and the Vedute Di Roma

Piranesi was born and raised in Venice, which at that time was a center of artistic ferment, and his early work reflects the influence of the theatrical and scenographic imagery for which Venice was famous. Over the past two centuries, as the work and fame of Piranesi spread throughout Europe, people who came on the "grand tour" to Rome sometimes expressed disappointment when it seemed to them that Piranesi’s interpretation of the Roman ruins had embellished what they found on the ground. Goethe, in his Italian Journey said, “the actual appearance of the ruined baths of...Caracalla, of which Piranesi has given us so many a rich imaginary impression, could hardly satisfy even our artistically trained eye.” Even some of the photographers who have attempted to follow in his footsteps would not disagree with this opinion, frequently finding that his compositions did not lend themselves to easy replication with a camera. Rarely have their photographic juxtapositions succeeded in capturing the Piranesi views in their entirety, and the rest often lack the kind of taut energy that characterizes the Piranesi prints. Their attempts at capturing the Piranesi views with a camera were frustrated not only by the modern changes to the landscape, but more profoundly by the inability of the camera to encompass the subject that Piranesi had mastered in his compositions.

During the academic year 2002–03, I was inspired to follow in the footsteps of these photographers to again photograph the views that Piranesi had etched on copper in the middle of the eighteenth Century. The recent progress of photographic technology made a different approach possible. Digital photography and computer software, most notably Adobe Photoshop, have enabled a degree of manipulation that would have been difficult or impossible with silver halide photography in a photo lab. The use of these technologies inspired a different approach to the subject of this documentary project, but it was not until well after I began the work on a number of the photographic overlays on the engravings that the full import of this work began to be revealed.

Over the course of my six months of work on this project, historians, archeologists, and architects at the American Academy and in Rome repeatedly commented that they had come to believe that Piranesi had made up a great deal of what he had drawn in...
his Vedute di Roma series. While the principle subject matter illustrated in the prints—namely the ancient ruins and monuments in Rome—was identifiable, Piranesi’s images of them were often considered to be abstracted to achieve the dramatic intensity that characterized so much of his work. As I worked on the photographic overlays to his remarkable engravings, I became aware that much of what had been criticized as having been invented or distorted was as much a legitimate documentation of reality as that produced by a camera lens. It was simply different. This difference has opened up an avenue of artistic analysis that not only explores the methodologies used by Piranesi in composing his prints, but also that of the camera lens itself. While a photograph may be the result of the refraction of light projected onto the film plane of a camera, and thus an objective rendition of reality at a given moment in time, it is as much a two-dimensional abstraction of the three-dimensional subject being photographed as is the copper plate under an artist’s hand. In fact, this seeming objectivity can on occasion be a handicap.

Before the age of photography, it fell to painters and engravers to provide realistic views of the built and natural environment. Because of the documentary nature of the arts at the time, before the invention of photography, the images that artists produced often had to encompass an entire view of a subject into a single work. Artists would compose their images so as to best represent within the confines of the single flat image their interpretation of the experience or meaning of the place. While some artists before the advent of photo-sensitive materials used a “camera obscura” to compose their views, even those, such as Vanvitelli, who are known to have used the device, did not necessarily feel entirely bound by the results.

Today, the demand for illustrations of the environment is largely fulfilled by photography. The ease and speed of photography allows for the use of several views to illustrate a site that historically would have been compressed into a single painting or drawing. While photography can be very effective at illustrating a complex site with a series of images taken from different vantage points, the camera can prove to be limiting when called on to illustrate a place with a single image. Yet the public has come to believe in the comparative “truth” of photographs, when compared to paintings and drawings by artists. This is especially the case where the composition of the painting deviates from that which could be produced by photographic means.

Piranesi designed his images to capture the entirety of complex environments of architectural ruins and represent the experience of the Roman landscape to people who more than likely would not have a chance to come to Rome.
at all. He produced images of large-scale artifacts that could capture the entirety of the ruin, and thus could become symbolic of those artifacts in their entirety, and not just of one view of the artifact. Thus, not only did he frequently have more than one vanishing point, but he also sometimes combined views from more than one viewpoint in a single plate.

**Photography in the Footsteps of Piranesi**

The Piranesi Project was first inspired by Piranesi’s view of the Terme Grande at Hadrian’s Villa, which is one of the most powerful of his images of archeological ruins. When I took a copy of his masterpiece to the actual site, I discovered that the subject of his view has survived the additional quarter of a millennium essentially the same as he saw it, except that it has been stripped of its picturesque cloak of vines and shrubs and layers of accumulated debris.

It also quickly became apparent to me that the view that he documented cannot be taken in a single photograph. His view encompasses a full 180-degree sweep of vision which captures very well the drama of the fragmentary remains that one experiences while standing there, but that no flat-field lens can capture within a single photograph. Piranesi’s compression of such a wide field of vision into the frame of the etched image is so subtle and convincing that the viewer is unaware of any distortion. His *vedute* takes an environmental experience that surrounds the viewer and compresses it onto a flat rectangular sheet of paper while still preserving the sense of the encompassing image.

In order to capture with photography all of the view of the Terme Grande that Piranesi captured, six photographs were necessary, each taken with a very wide 19mm lens. While that provided the raw data, the construction of the single photographic image was not a simple task. Each of the images had to be rectified, so that the vertical lines of the subject would be parallel. The challenge was to merge them into a single image. Piranesi had modified the wide-angle view by compressing the extreme edges of the scene so that they would not look distorted in the print. He had compressed the wide-angle view as if it had been viewed from further away, while maintaining the sense of being in the space. With photography, this manipulation had to be done by “building” a composite image from six raw photographs. This would not have been possible in a darkroom, but after a number of tries, it became possible on the computer.

*The companion photographs for each subsequent Piranesi image for which the original viewpoints could be located required at least some degree of similar composite construction. Piranesi had his own individual way of interpreting each scene that was different for each of his*
engravings. Some, like the Augustinian Firewall, were composed of images from more than one viewpoint, yet the results conveyed a sense of the reality of the place that no single raw photograph of the site can convey. In my opinion, the composite photograph captured the essence of the place, despite the fact that to experience the site itself requires walking along a path of over 100 meters.

Piranesi also achieved his artistic effect often by presenting a wide-angle view, as if the image had been composed with a lens with a shorter focal length. In a wide-angle view, foreground objects are large in relation to background objects. In an extreme wide-angle view, even if a flat-field lens is used, the visual recession is very extreme: the subject in the center of the view (if the photo is of a building or a space in a building) is very small in relationship, say, to the road or sidewalk or other foreground objects. Piranesi overcame this problem by bringing the distant subjects forward by compressing the view as if, to use a photographic
comparison, it had been taken with a shorter lens.

When one goes to find the ruins that Piranesi drew, a remarkable number of them can still be found intact today, except for the changes in the archeological excavations and removal of the vegetation. However, it is not possible to gain the composition and perspective that Piranesi used by simply stepping backwards. To bring the modern-day photographic images together with his eighteenth century views necessitated an elaborate disassembly of the images in Photoshop and a reassembly of them from sometimes as many as nine separate photographs so that the compression of the space would be subtle but effective, and the resulting image would cover the breadth of Piranesi’s view. In the multi-photograph assemblies, this meant that the images on the sides would not be fully rectified in relation to those in the center. The vertical lines would be rectified, but the perspective recession would be remain slightly splayed, resulting in images with more than one vanishing point. The results allow for the expanse of the wide view without its distortion, which is, in fact, often how the eye reads the real three-dimensional space itself.

The act of disassembling and reassembling the digital photographs on a computer breaks through the constraints of the manipulations that are possible in a darkroom. In my experience, the effort combining several photographs into one often produced an image that captured special qualities of the place as I had experienced it that could not be captured in any single photograph, regardless of the length of the lens. The compression of the perspective of the extreme sides of the views that was necessary to bring the composite image into register with the 18th-century art proved in the end to be a correction of what otherwise would be a wide-angle distortion if the image, had it been taken with a single lens.

Piranesi was not creating images for a tourist brochure. In his writings, Piranesi described a very different didactic purpose for his work: “When I first saw the remains of the ancient buildings of Rome lying as they do in cultivated fields or gardens and wasting away under the ravages of time, or being destroyed by greedy owners who sell them as materials for modern buildings, I determined to preserve them forever by means of my engravings.” In this endeavor, Piranesi succeeded to a remarkable extent. When his views became famous throughout Europe, they helped to stimulate the “grand tour” of people from Northern Europe who came to Rome to see the ruins in the urban landscape under the Italian sun. As the number of visitors to Rome grew, the systematic pillaging of the monuments declined. The publicity that Piranesi and his con-
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temporaries brought to Rome and its ancient monuments can be classified as one of the most successful examples of preservation activism advanced by the creation and publication of images in the history of Europe.

The Meaning of “Truth” in Art and Photography

The question that can then be raised is, Are these composite photographs false? This then leads to the question of, What is “truth” in representational art? With the advent of photography, what is perceived as “truth” has shifted because the camera’s lens imprints the three-dimensional scene onto the film with an optical geometric accuracy. This type of accuracy, however, rarely has been the objective of the pictorial or topographical artist. A more important goal for the artist than optical accuracy is the ability to capture the spirit of the place—to capture its symbolic image so that the meaning that the artist has found in the subject is conveyed through the art to the viewer. Piranesi touched upon this when he wrote:
These ruins have filled my spirit with images that accurate [architectural] drawings...could never have succeeded in conveying. Therefore, having the idea of presenting to the world some of these images, but have little hope that an architect of these times could effectively execute some of them...there seems to be no recourse than for me...to explain [my] ideas through [my] drawings and so to take away from sculpture and painting the advantage...they now have over architecture.

The question of what is “truth” in artistic documentation is one of the most interesting issues to emerge during the creation of the Piranesi Project. The experience of working with the multiple photographs to “build” single images itself raises the question of whether the resulting images that are constructed atop the Piranesi views of the same scene are “false.”

In response to this question, over my years of work as a documentary photographer, I have learned that photographs themselves are an abstraction. The camera’s rendition of the three-dimensional scene into the two-dimensional photograph framed by the limits of the image onto the surface of the media is no less a transformation than are the further transformations that one can do either in the darkroom on in the computer.

In the end, what makes Piranesi’s topographical art so compelling is that, in some of his most expressive prints, he has managed to capture the enveloping space of the subjects that he has documented. No longer are these simply artifacts on display. The spaces have become the subject — challenging the viewer to seek them out on the ground in order to complete the experience. It was that very quality that attracted me to do just that: to look for what he had seen 250 years before. When I took his view of the Terme Grande at Hadrian’s Villa into the space, my reaction was the same as others who had followed in Piranesi’s footsteps with a camera: photography cannot capture the spatial effects that he had drawn. After “building” the composite images using the computer, I learned a great deal about the relationship between the imagery of a space and the space itself. Thus, photography provides us with a documentary tool. At the same time, the science of what makes images of artifacts expressive of their historical and artistic significance is a window into how the human eye sees and interprets space, rather than simply how the camera lens dispassionately directs light to form an image on film.

Notes
3. Two books in English can be cited as examples where accomplished photographers have specifically published photographs of the views that Piranesi had drawn. Herschel Levit, *Views of Rome Then and Now*, (New York: Dover, 1976) and Steven Brooke, *Views of Rome*, (New York: Rizzoli, 1995). (Steven Brooke also undertook his documentary project while on a Rome Prize Fellowship, in 1991.)
4. 35mm equivalent on a digital camera (Nikon 5000).
5. The principle software used was Adobe Photoshop.
6. As opposed to a fisheye lens which distorts the parallel lines in the image.