RESTORING VIMY: THE CHALLENGES OF CONFRONTING EMERGING MODERNISM

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FIG. 1. DISMANTLING THE VIMY MEMORIAL: ROW AFTER ROW OF STONE BEING CUT AWAY FROM ITS CONCRETE BASE. | PHILIPPE FRUTIER, ALTIMAGE, FOR VETERANS AFFAIRS CANADA, JUNE 2005.

The restoration of the Vimy Memorial was completed in April 2007, in time for a ceremony of rededication ninety years to the day after the original Battle of Vimy Ridge. The project was completed on time and on schedule, and the finished product was greeted with favourable comments from both the popular and professional press. It would be reasonable to assume that this was a project that went pretty much according to expectations.

Such was not the case. The restoration process was considerably more intrusive and radical than originally envisioned. The entire monument was dismantled and rebuilt, except for the two pylons, and even on the pylons there was some significant dismantling on the west side. There was a time during the process when most of the monument lay scattered on the ground around the base, inventoried and sorted and awaiting treatment or disposal.

Why such a ruthless approach, bordering on reconstruction? The original project brief had outlined four possible levels of conservation activity.[1] In order of severity of intervention, they ranged from a *do nothing* option, through a *limited repair* option and a *limited repair and upgrade* option, to a *comprehensive repair and upgrade* option. But even this fourth option stopped short of extensive reconstruction, and the recommendation in the brief was to adopt an approach somewhere between options three and four.

A general rule of conservation is that intervention should be as minimal as

FIG. 2. A PHOTOGRAPH OF THE MONUMENT AT THE TIME OF ITS COMPLETION, 1936. LIGHT IS USED TO GIVE THE STRUCTURE ITS FORMAL QUALITY AS A SINGLE COMPOSITION OF SOLID AND VOID.

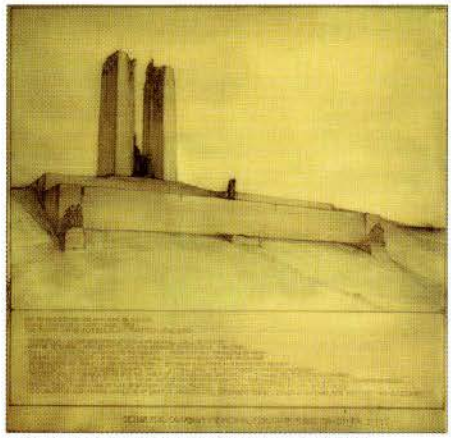

FIG. 3. ONE OF WALTER ALLWARD'S COMPETITION DRAWINGS. THE TEXTURE OF THE INDIVIDUAL MASONRY UNITS IS SECONDARY TO THE SHAPE OF THE WHOLE. IT IS A COMPOSITION THAT IN THEORY COULD HAVE BEEN MOULDED FROM A FEW GIANT BLOCKS, SUGGESTING THE TENDENCIES OF MODERNIST ABSTRACTION. | BORSTAD CATALOGUE # 253.

possible. And in fact the reason the first option, a *do nothing* option, was rejected in the brief was that the decay would be so severe that eventually the monument would have to be completely rebuilt. And yet here it was, being almost completely rebuilt anyway (fig. 1).

There are two reasons that shaped the final decision on how to proceed. The first was technical – the inherent causes of decay were so intrinsic to the way the monument had been constructed, that there was a requirement to redesign the fundamental structural underpinnings of the wall systems. The second, and more compelling reason, was philosophical – the integrity of the monument was threatened if the abstract purity of its form was compromised. It was an artifact that could not readily accept the patina of gradual decay and localized repair, that was designed to challenge traditional notions of materiality and the effects of time.[2]

Both the technical and philosophical reasons had to do with Walter Allward's embrace of emerging modernism. As the conservation field is increasingly faced with the conservation of modernist icons, it is worth reflecting on the implications of the style and the values that modernism embodies.

In the case of the Vimy Memorial, the project emerged out of the cultural upheaval created by the Great War, the crucible within with the key principles of modernism were forged. There was a desperate search for a new and more universal design idiom; an idiom free of the kind of national and ethnic identities that were seen to have led to the immoralities and atrocities of the war. And Allward, designer of the Vimy monument and overseer of its construction, was well placed to understand this angst and to help find a way out of the morass. He had already been exploring a modernist aesthetic in his sculptural work and in his drawings, as shown in the articles contributed to this issue by Jacqueline Hucker and Lane Borstad. The Vimy commission was the perfect opportunity for Allward to push the limits of these tendencies (fig. 2).

The importance of Allward's work can be understood by placing the Vimy Memorial alongside other World War I memorials such as those discussed by Gavin Stamp's article in this issue. Most of them exhibit a more traditional design approach, firmly rooted in Victorian and Edwardian stylistic devices and conventions. The Vimy Memorial stands out in the simplicity of its conception and the unremitting rigour of its execution. Many projects, during the process of detailing the design and then implementing the construction, move from a relatively simple underlying concept to a more complex composition of colour, texture and form. Allward became obsessed with maintaining, throughout the project, the purity and the formal simplicity of his original concept. What we see at Vimy is the impulse that becomes a hallmark of modernism – the use of spareness and formal purity to get out from under the weight of historical precedent and to avoid the specificity of traditional materials, stylistic details, and methods of assembly.

Most telling, at Vimy, was Allward's treatment of surface. His conceptual drawings, not only for Vimy but for earlier explorations of memorial architecture, reveal an interest in the whole as something quite different from the sum of the parts. He always drew his designs, no matter what the scale, as simple volumes with unbroken surfaces that appear to be carved from single blocks of material. And the material itself is not important. It is simply a continuous surface that plays out the three-dimensional geometry of his design. The power of these images is in the subtlety of the forms, particularly

the almost imperceptible curves that help create the sense of a sculptor working his single block of clay (fig. 3).

During the process of translating Vimy from drawing board into physical reality, Allward never let go of his commitment to surface and volume. For three years he searched for a stone to meet his requirements – smooth, homogeneous, white, luminous – and then he designed a system where the blocks were so large, and the joints so fine, that there was almost nothing but stone visible to the eye. The mortar in the joints was coloured to match the stone, and tooled flush with the surface to eliminate even the hint of a shadow line. And in one of the more impressive and subtle gestures in his design, the vertical joints were staggered randomly up and down the walls and pylons, to avoid even a subconscious reading of a joint pattern.

Only once the stone was embedded into the walls, did the final tooling of the surface take place. This technique allowed the very subtle texture to carry over seamlessly from one stone to the next. It also allowed the subtle curves, both horizontal and vertical, to become perfectly continuous over enormous distances. As part of the construction process, stones that displayed an unacceptable variation in colour or texture were weeded out and replaced. The precision of the assembly and the finishing was extraordinary.

A final gesture that seems to confirm Allward's modernist tendencies was his treatment of the names. His design of the monument was virtually complete when he was required to add to it the names of 11,285 Canadian soldiers who had died in World War I but whose bodies had never been found. Allward was not pleased – unlike his fellow architects and designers employed by the Imperial War Graves Commission, he was working with the idea of the surface as a two-dimensional plane, not a three-dimensional texture. He was not looking to enrich the surface with carved regimental or other insignia, or to emphasize the individual stones by treating each of them as a name panel. He protested the last minute decision at first, and, in an effort perhaps to force a re-evaluation, proposed carving names into the floor of the platform area – a most impractical idea. The authorities, however, insisted on adding them to the vertical wall surfaces.

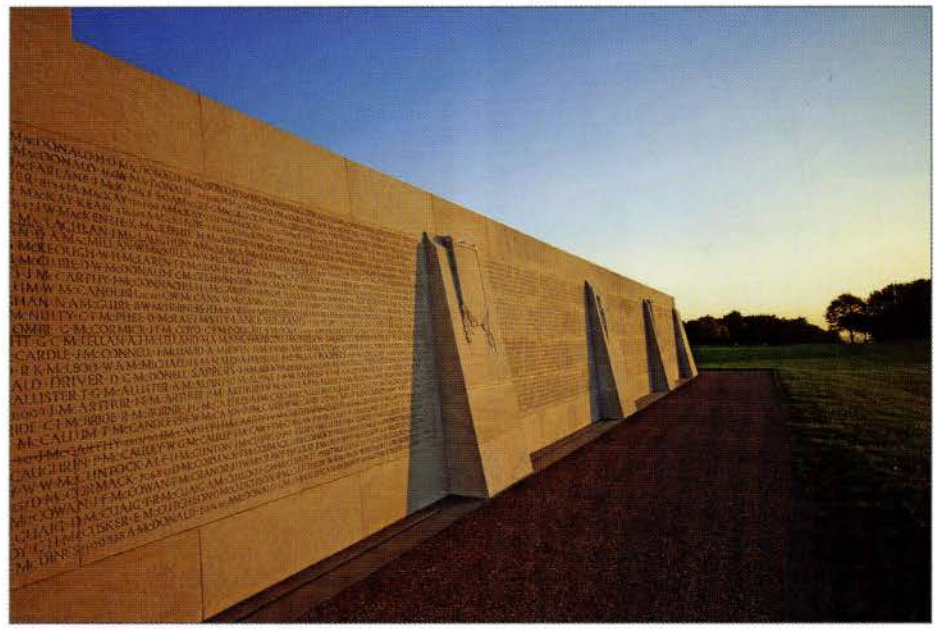

FIG. 4. ALLWARD WAS ABLE TO ADD ELEVEN AND A HALF THOUSAND NAMES TO HIS MONUMENT WITHOUT DISTURBING THE CONTINUITY OF SURFACE. THE NAMES RUN CONTINUOUSLY AS A KIND OF LIGHT TRACERY RIGHT ACROSS THE VERTICAL AND HORIZONTAL JOINTS. | BLAIR KETCHESON, FOR PHILLIPS FAREVAAG SMALLENBERG, JULY 2007.

His solution, in the end, was a brilliant effort to turn a challenge into an opportunity. In a complete break with 2000 years of tradition, he carved the names in continuous bands, running the letters without interruption from stone to stone to stone, ignoring the mortar joints and simply treating the mortar as part of the surface. No one had ever carved letters or parts of letters into exposed mortar joints before, and as if to emphasize what he was doing, he not only ran them across the vertical joints, but ran them along some of the horizontal joints as well.

The result of the lettering of the names was to completely liberate the texture of the surface from the pattern of the stones. Rather than the names highlighting the geometry of the individual stone blocks, they became an almost disembodied screen sitting proud of the surface, free of the material reality of stone and mortar. The method of inscribing the names had to be innovative as well, and he developed a method of sandblasting the letters through hard rubber stencils, allowing them to be embedded in the mortar and across the fragile edge conditions of the stone without causing cracking and failure (fig. 4).

Just before the opening ceremony in 1936, Allward decided to lightly sandblast the entire monument. This cleaning of the surface was intended to

FIG. 5. DETERIORATION OF THE MONUMENT BEFORE RESTORATION. THE CONTINUITY OF THE SURFACE IS DISRUPTED BY BOTH SURFACE DECAY AND DISCOLOURATION OF THE MORTAR JOINTS. CRACKING AND SPALLING ERODE THE SIMPLICITY OF THE DESIGN. THE LATER WHITE LIMESTONE PAVING UNDERMINES ALLWARD'S JUXTAPOSITION OF THE FORMAL PURITY OF THE MONUMENT WITH HAUNTING SIMPLICITY AND INFORMALITY OF A DARKER LANDSCAPE. | CABINET LEFÈVRE, MAY 2003.

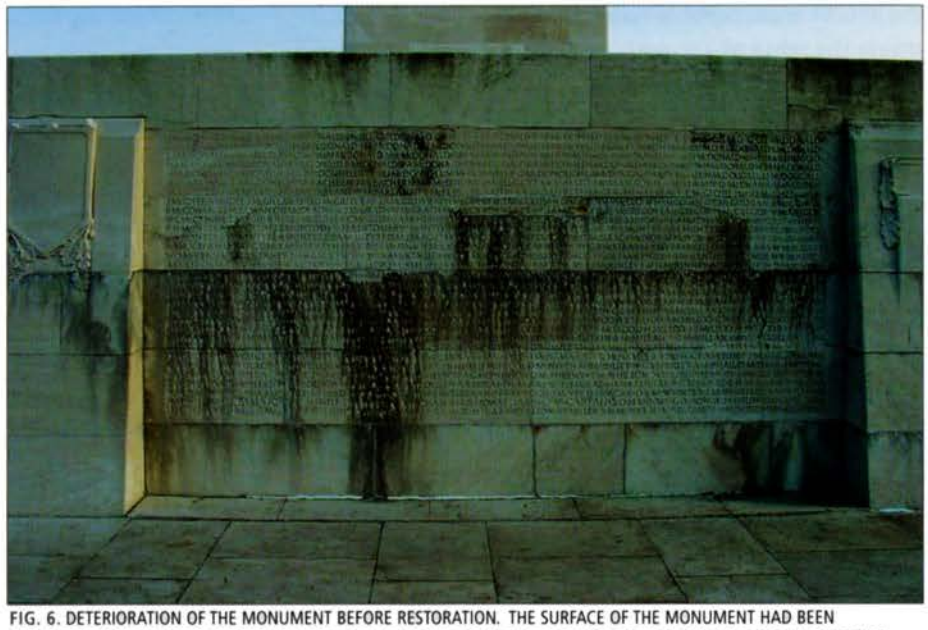

FIG. 6. DETERIORATION OF THE MONUMENT BEFORE RESTORATION. THE SURFACE OF THE MONUMENT HAD BEEN BROKEN UP BY A PATCHWORK OF DIFFERENT STONE TYPES, TYPOGRAPHICAL STYLES, CALCITE DEPOSITS, SURFACE DISCOLOURATIONS, AND SPALLING. | CABINET LEFÈVRE, MAY 2003.

remove, as much as possible, the slight discolorations which had begun to create local variations and to distinguish individual stones within the larger composition. His obsession with the formal purity of the monument was thus carried through right to the time of dedication. The many thousands of visitors who assembled for the opening found a monument of enormous beauty and emotional power, and it seems that Allward had succeeded in his mission.

Time was not kind to Allward, however, or to his monument. By the end of the century, the monument was self-destructing and a long history of repairs had left a patchwork of materials, colours and textures, and a disconcerting pattern of joints and inserts (figs. 5, 6). The challenge, in terms of restoring the monument, was to find an approach that would respect Allward's intentions, and would return some kind of integrity to the monument. The answers could not be found by simply intensifying the technical research. Although deterioration is usually a technical issue, appropriate conservation solutions first have to be defined philosophically.

In the case of Vimy, its situation within the larger context of post-war cultural upheaval had not been studied when the project brief was issued. It was Jacqueline Hucker who provided the restoration team with the first careful study of Allward's work in the context of the early twentieth century, and who was able to provide a framework for understanding the observable physical reality. The research findings allowed the monument to be appreciated as the representation of an idea. The conservation options could then be discussed in terms of their appropriateness to that idea. How best could one conserve the ideas intrinsic to the values of the site?

This issue of representation is central to the activity of conservation, and yet is not well understood as a framework for decision making. The photograph, for example, has become a document frequently used in conservation to establish historical fact and to guide restoration activity. It is assumed that a photograph provides an unbiased perspective on what existed at some point in time, or what survives today. Similarly, detailed measured drawings are used as value-free documents representing the reality of what exists. They become the basis for the working drawings of conservation activity.

The problem is that restoration is a process that plays around with cultural value, and that makes decisions about cultural continuity and cultural disruption. People react viscerally to restoration projects because their own values are often embedded in the object in question, and they can easily sense whether those values are being celebrated, ignored, or even trampled on. Photographs and measured drawings may be unbiased, but often bias

is what one is after. What were the original design intentions? How successfully were they achieved? How did people perceive the result, both initially and in succeeding years? These questions are sometimes better answered by drawings and paintings and other modes of representation, or by looking not only at the content of photographs but at their composition and framing. For this reason, Hucker's illustrations in this issue and my fig. 2 deliberately reproduce period photographs of the Vimy Memorial taken around the time of its inauguration.

In the case of Vimy, Allward's initial drawings show a monument with unbroken surfaces, without material identifiers, without joint patterns. Only the overall form of the monument is delineated, its volumetric composition enhanced by renderings of light and shadow. By contrast, the measured drawings forming part of the project brief showed a monument with every single stone identified, each joint carefully delineated (fig. 7). And with good reason. By the end of the twentieth century, not only was the monument crumbling but so was Allward's vision. He had not been interested in a graceful aging process. He had not created a monument that would embrace the gradual texturing of the surface from wind and rain and sun. He had certainly not designed a monument that could accept replacement materials of similar but slightly different texture, or colour, or dimension. He had designed a monument that had everything to do with formal abstraction, and the quality of abstraction could not be easily sustained if there were years of patchwork repair.

To respect Allward's vision, therefore, seemed to require a restoration approach that would begin to dissolve the importance of the mortar joints and the localized stone detailing and the variations in material and texture, and that would re-establish a monument appreciated for its pure form, its seamless surface qualities, its patterns of light and shade. Individual components had to be subjected to the importance of the whole. This approach would require a removal of all the foreign materials and textures that had crept into the monument over a period of seventy years, and their replacement with stone from the same quarry in Croatia that had supplied the original material, shaped and dressed exactly as before. It also meant correcting even the most minor displacements of the original stone, due to freeze-thaw activity or other internal pressures. To sustain such considerable investment over the long term meant correcting some of the underlying structural flaws to limit future deterioration or movement.

The idea was that future generations could draw or photograph Vimy as Allward had envisioned it; as an object in the landscape simple and powerful in both concept and execution. This goal shaped both small-scale and larger-scale decisions throughout the restoration process, and resulted in the massive scale of the intervention. There was general agreement at the end of the project on the success of this approach (fig. 8).

A nagging question remains, however. What are the consequences of dealing with modernism if we decide that the abstract idea, and its formal representation, justify a continual cycle of reconstruction? Does the importance not only of materiality, but of the original craftsmanship associated with it, disappear from the discussion? The Barcelona Pavilion, of Mies van der Rohe, exists today as a complete reconstruction of the lost masterpiece (figs. 9, 10). The

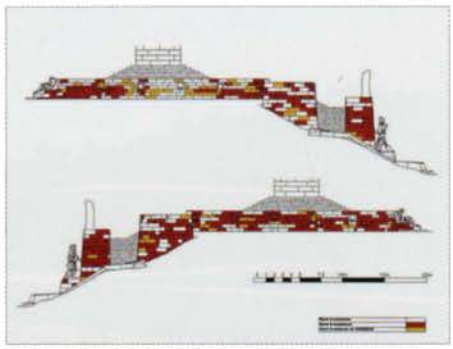

FIG. 7. DRAWING PREPARED BY THE CONSULTANT TEAM AS PART OF DEVELOPING BOTH AN OVERALL RESTORATION PHILOSOPHY AND THE DETAILED CONSTRUCTION REQUIREMENTS. IT SHOWS THE UNEVENNESS OF SURFACE CONDITIONS AND THE CHALLENGE OF RECOVERING THE SIMPLICITY OF ALLWARD'S CONCEPTION. | CABINET LEFÈVRE.

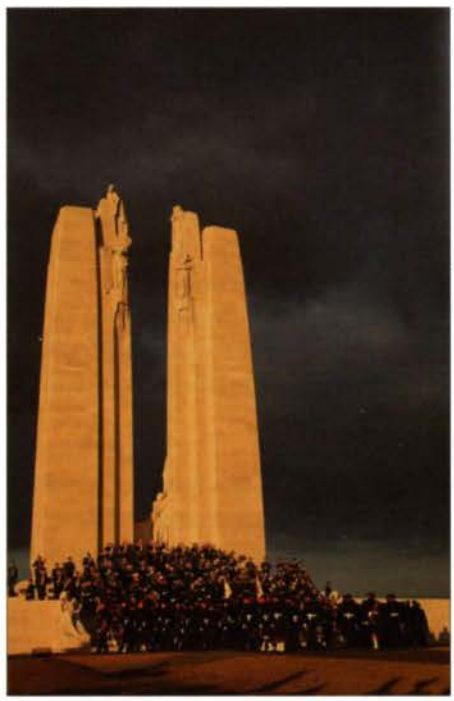

FIG. 8. THE VIMY MEMORIAL DURING REDEDICATION CEREMONIES. THE RESTORED MONUMENT CAN ONCE AGAIN BE UNDERSTOOD AS A SIMPLE, UNIFIED COMPOSITION. SURFACE TEXTURE IS NOT AS IMPORTANT AS THE OVERALL PLAY OF LIGHT AND SHADOW. | PHILIPPE FRUTIER, ALTIMAGE, FOR VETERANS AFFAIRS CANADA, 7 APRIL, 2007.

Villa Savoye, an equally iconic marker of the modernist period, exists as a heavily-restored, perfect formal and visual representation of Le Corbusier's idea, but hardly a single original surface remains

FIG. 9. BARCELONA PAVILION, MIES VAN DER ROHE, RECONSTRUCTION. | PIERRE DU PREY 1987.

FIG. 10. BARCELONA PAVILION, MIES VAN DER ROHE, RECONSTRUCTION. | PIERRE DU PREY 1987.

intact (fig. 11). Frank Lloyd Wright's Falling Water has been restored with coatings on the concrete that are not the same as he used but recreate the intended formal qualities of the composition. And in each case, the reconstruction is designed to last indefinitely; to ignore the effects of aging by using the latest available technology. The recent restoration of Vimy is designed to last for a hundred years. This hubris is not so different from that of the original creators, and involves the restorers in the same modernist conceits.

There was, in fact, one other conservation option for Vimy. It was raised early on in the process, but had been ruled out *a priori* in the project brief and was never seriously discussed. The option was to allow the monument to decay; in other words, the *do nothing* approach. According to this scenario, all the various repair insertions would have been removed, and the honesty of the decay process revealed for all the world to see. The surviving original material, damaged or not, would have been stabilized but not replaced. This approach would have led to a more and more ruinous state, over time, but at least the integrity of Allward's vision would not have been compromised by half-hearted attempts to maintain an approximation of the original. A few centuries from now, one can imagine Percy Bysshe Shelley's "traveller from an antique land" reporting about Vimy:

> ... on the pedestal, these words appear:
> "My name is Ozymandias, King of Kings,
> Look on my Works, ye Mighty, and despair!"
> Nothing beside remains. Round the decay
> Of that colossal Wreck, boundless and bare
> The lone and level sands stretch far away.

In the case of the Vimy Memorial, decay is also of broader philosophical interest. Our monuments, however designed and conceived, are doomed to decay with time. Our memories also decay, and in some ways the healing process of the reforestation at Vimy and elsewhere is about a deliberate decaying of memory, about a letting go of the terror embedded in the war landscape.

In this approach, the formal purity of the original conception would be recreated in the imagination of the visitor. And this brings back the question of representation. One of the reasons decay does not seem to be an acceptable option when dealing with modernism is that the physical object seems the only testimony to the ideas it embodies. The use of the photograph and the measured drawing have convinced us that the physical reality is the only thing we are working with. We direct all our energies at physical repair. We have not explored adequately the possibility for representing these ideas in virtual forms; forms that can stimulate the imagination and keep the ideal alive even as the embodiment decays.

For the sake of comparison, consider the Parthenon in Athens. This monument had become a ruin; decay had been allowed to run its course for centuries. The monument occupied a landscape of ruins, part of an assemblage of fragments of classical civilization. Then, in the late eighteenth century, Stuart and Revett produced an extraordinary book, *The Antiquities of Athens*, which provided two powerful and contrasting views of the Parthenon: one a perspective showing a romantic vision of the overgrown site with its seductive hints at former greatness (fig. 12); the other a magnificent elevation of a restored Parthenon in all its pristine purity (fig. 13). Both are copper plate etchings, but the approach in each was very different – the second is not placed within a landscape setting, but simply engraved with meticulous care as a free-standing image. The absolute symmetry of the forms was reflected in the design of the book itself,

FIG. 11. VILLA SAVOYE, LE CORBUSIER, RESTORED. | PIERRE DU PREY 1987.

which arranged the plates in careful sequence starting with the perfect whole and then exploring the parts. The impact of Stuart and Revett's work was significant. It helped create an appreciation for Greek architecture, and more broadly for Greek civilization, as epitomizing purity of form and conception. It created a Greek architecture of the imagination that has become, over time, as significant in later interpretations of the classical as the monuments themselves.

Like the Parthenon,Vimy exists as a formal abstraction and as an evocative element within the surrounding battlefield landscape. The retention of a pockmarked terrain of suffering and terror, as a setting for the monument, strongly differentiates Vimy from its other World War I counterparts. The juxtaposition works when we see the whiteness and perfection of the monument against this dark and messy landscape. Were the monument to decay, would the power of this juxtaposition be reduced? If we had to rely only on photographic images of the site, the answer to this question would have to be yes. The stark contrast would fade over time. On the other hand, if the perfection of the monument lived on in our imagination, reinforced by appropriate representation, it is possible that we could accept decay and still sense the power of the site as Allward envisioned it.

Retention of value through modes of representation is a complex subject, and not well developed as part of the discussion of conservation options. It is not surprising that the option chosen for Vimy was full physical restoration of the monument. It was one of two valid options, and it was the one most consistent with expectations. There was also the more specific issue of the names. These names, engraved on the walls, are the only surviving vestige of so many lives sacrificed for the greater good. Since these are the soldiers whose bodies were never recovered or identified, there is no tomb at which to lay a wreath, no other place at which to honour their memory. The importance of the names was one of the reasons a full and careful restoration was chosen. The decay of the walls had become so severe that some of the names were no longer legible, and this translates into a loss of tangible fabric and intangible memory at the same time.

We will perhaps never know, however, whether Vimy could have survived as a monument in decay, a monument with an imagined reality and a physical reality that were both separate and intertwined. And it may be that we in the restoration community need to explore the issue of representation much more extensively before we can make wise decisions about complex sites, particularly sites of memory.

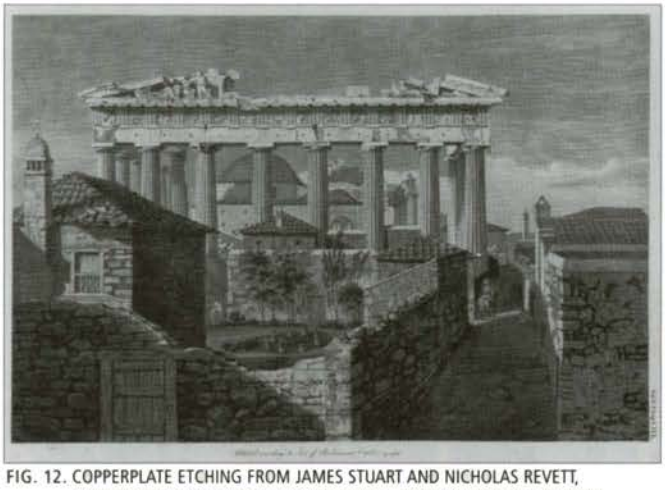

FIG. 12. COPPERPLATE ETCHING FROM JAMES STUART AND NICHOLAS REVETT, *ANTIQUITIES OF ATHENS*, VOL. II, CHAPTER 1, PLATE IV, FIGURE 1, 'A VIEW OF THE EASTERN PORTICO OF THE PARTHENON'.

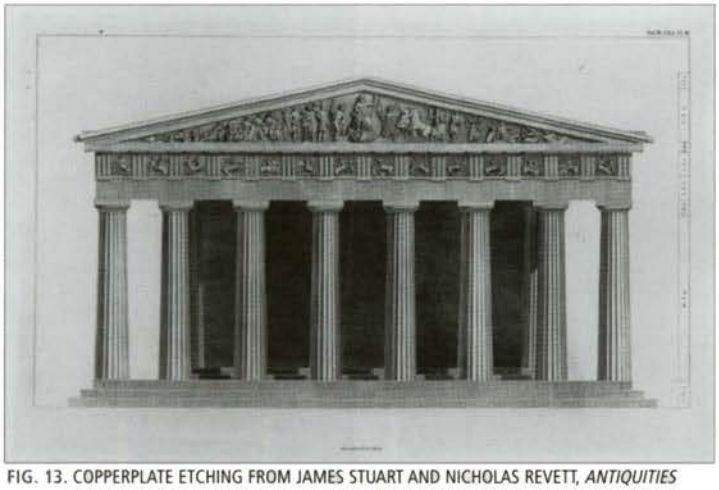

FIG. 13. COPPERPLATE ETCHING FROM JAMES STUART AND NICHOLAS REVETT, *ANTIQUITIES OF ATHENS*, VOL. II, CHAPTER 1, PLATE VI, 'ELEVATION OF THE EASTERN PORTICO OF THE PARTHENON'.

In conclusion I return to the challenge of dealing with emerging modernism. Our principles for conservation come out of a nineteenth-century preoccupation with monuments from the preindustrial age. Medieval cathedrals and Renaissance palaces were built by hand, with an obvious exploration of the material qualities and textures involved. There is an authorship that has to do with craftsmanship, and that therefore defines authenticity in material terms. The fundamental principle in such cases is retention of original material and differentiating it from contemporary interventions. When John Ruskin and William Morris were developing conservation theory and practice through the Society for the Protection of Ancient Buildings, they were taking preindustrial monuments as their point of reference.

In this context, a *limited repair and upgrade* option would be a reasonable approach. The repair itself would be part of an ongoing evolution, with the goal being to arrest or slow down the processes of decay but not deny their reality.

In the case of emerging modernism, the application of the principles becomes more complicated. If formal abstraction and purity of form become fundamental, it is not clear how one incorporates repair in the same way. We tend to return examples of modernism to an abstract ideal that is considered appropriate to their underlying value. The conservation principles that apply to modernist architecture are not well understood or enunciated.

The Vimy Memorial is not fully part of the modernist tradition. The cladding was still stone, hand-tooled and finished. The sculptural work relied on traditional stone carving techniques, although Allward did use pantographs to transfer the design and left the marks of this technology on the surface perhaps as subtle reminders of this application. But he also used reinforced concrete, then in its infancy, as the underlying structural system. In fact, his combination of stone and concrete in a new and untested way partly led to the gradual degradation of the monument and necessitated a severe intervention approach. Similar to Allward's own mixture of new and age-old techniques, the restoration at Vimy was a subtle blend. It involved a strong commitment to preserving every single original stone that was salvageable either as is or through any one of a variety of sophisticated repair techniques; at the same time the introduction of new elements was done seamlessly, without the usual regard for distinguishing old and new. The surfaces were cleaned, as in Allward's time, to create a uniform surface. The tooling and the relettering were carried across the joints as before. Each small scale decision was part of a larger philosophical commitment – to respect the intellectual intent as much as the physical manifestation of Allward's work. The conditions of emerging modernism that had shaped the original were used to shape the restoration.

NOTES

1. Section 9.0, "Options Analysis and Recommended Option", in *Vimy Monument Historic Structures Report*, Heritage Conservation Program, Public Works and Government Services Canada, 2002.
2. For a detailed discussion of the full restoration process, see Wertheimer, Ève, 2007, *Documentation of the Vimy Monument Restoration*, Heritage Conservation Directorate, Public Works and Government Services Canad.