CECI TUERA CELA

Cutting-out The Ontario Way

ALLAN KILLIN Architect Goldsmith Borgal & Company Architects (GBCA) 500-410 Adelaide Street West, Toronto, ON M5V 1S8 Canada allan@gbca.ca

Abstract. If God is in the details, tangible detail can inform and inspire intangible feeling. But if the detail is alien, or simply not present, in its current mythologized, eroded, or repaired form, nor in its well-studied mechanical behavior and chemistry, how can it contribute to spirit of place? Victor Hugo's argument "Ceci Tuera Cela", this kills that, is witnessed in restoration practice. This paper acknowledges a cultural dualism and argues for wholeness through literacy and craftsmanship. A examination of GBCA's recent experience - literally from the trenches and scaffold of masonry restoration - focuses on the culturally destructive capacity of restoration and repair projects and on hardlearned practical means to avoid loss and promote conservation of local traditional detail and feeling. A discussion of factors contributing to the disappearance of a common form of nineteenth century pointing, provides perspective on the larger restoration debate, using local examples before a line-up of the usual suspects, Notre Dames, Parthenons, Place Royale, The Toronto Dominion Centre, and the Vimy Monument.

Participation in this important conference, and looking together for *the spirit of place*, is a great priviledge and opportunity. Rather than a scholarly discourse, this passionate appeal of an ordinary craftsman for public awareness and improved understanding of traditional ways of building, and associated cultural benefits, as a means to help identify sources of the *spirit of place* and facilitate their transmission to future generations. At issue is a matter of taste, not technique, behind the threatened loss and potential means of protecting a traditional ruled ribbon, or relief, pointing technique common to nineteenth century limestone rubble and granite (field or squared) stone buildings in Southern Ontario, and parts of Quebec and the USA.

Traditional ribbon pointing has fallen through the cracks

Others have looked at changing perceptions and treatment of authenticity questions with regard to large heritage sites, competing heritage values, and national cultural identityⁱ. Our appeal here is for conscious selection of one heritage value over another so that we do not lose key details capable of transmitting significant value. In the case of our ribbon pointing example, the shape of stone units is almost irrelayent to the appearance of the building compared with the pattern. Authenticity, through traditional character, was applied by the hand of a single trade to dignify monuments and sheds alike. Our connectedness, through living with and maintaining these details, and shared feelings for the familiar patterns inspiring local pride of place, can contribute significantly to the protection and enhancement of its perceived 'spirit'. Once you are aware of the value of the detail, it is unlikely that you will proceed with cutting-out deteriorated joints unless you intend to replace them in kind, or change them to another acceptable detail.

If Ruskin and Hugo likened *restoration* to a form of desecration (ie.: the act of depriving something of its sacred character), Eug_ne Emmanuel Viollet-le-Duc must have seen it as the restoration of the sacred character, certainly in regard to his and Jean-Baptiste-Antoine Lassus' commencement in 1845 of a twenty-five year long project at Notre Dame (started 1163, completed 1345), restoring the building after three centuries of damage from rioting Huguenots in 1548, during the French Revolution in1793, when rededicated to the Cult of Reason, then the Cult of the Supreme Being, and when the building was used as a food storage warehouse.

One is tempted to compare the fate of Notre Dame de Paris cathedral to that of the Parthenon (started 447 BC, completed 438 BC, later sculpture by Phidias 432 BC, blown up 26 September 1687) also restored after three centuries of damage, but a hundred years later, with a different priority of heritage values, and a different outcome.

What do we learn from recent restoration projects?

With regard to "Our Lady" of Guelph, the writer found no evidence on the church exterior of the typical ribbon pointing, that is so obviously present on the adjacent Catholic Hill buildings, St.Agnes School and Loretto Convent. Perhaps *this* Notre Dame was also 'modernized' in the twentieth century as Hugo, correctly, feared his Notre Dame would be in the nineteenth. Loretto College (which may become Guelph Civic Museum) even has asphalt rolled cladding patterned after the adjacent original white ribbon pointing (figure 1). The same type of evidently non-denominational - ribbon pionting is well maintained (without white lime) on St. George's Anglican Church (figures 3 & 4).



Figure 1. Loretto relief pointing & asphalt pattern



Figure 2. Loretto east face



Figure 3. St. George's east face



Figure 4. Detail of relief joints

In Toronto, at Canada's National Ballet school, Jarvis street, we discovered and retained extant samples of brick tuck-pointing at Northfield House (in the north blind windows behind the shutters), and restored the buff sandstone and v-grouve ponting brick work at the former Havergal College, but were too late to find remnants of original ribbon pointing at the rubble stone foundations. This is in contrast to contemporary buildings by the same builders, Annesley Hall (Victorial

University, UofT (figure 5), and The Royal Conservatory of Music (RCM)'s MacMaster and Castel Halls that had good samples to replicate (figures 3 -6). This joint was an *overhung ridge* and was originally applied as a separate fillet over stone-coloured pointing mortar at RCM, but we managed to form the fillet during a repointing process to improve joint integrity and drying capacity.



Figure 5. Annesley Hall, exist. joint



Figure 6. RCM, early mock-ups pointing



Figure 7. RCM, new overhung ridge joints



Figure 8. RCM, various new pointing

In most of GBCA's masonry restoration work we find deferred maintenance has preserved substantial areas of significantly eroded, but sound original mortar and even limited number of remnants – in protected areas - of original artisanal decorative coloured ribbon or relief pointing. Unfortunately, those buildings that had significant repair or repointing carried out from the 1940's to the present often have little or no evidence of the original ribbon pointing. The historic Guelph City Halli presents an example of such 'corrected pointing' from the 1980's. GBCA's and Clifford Restoration's completed work on existing rubble stone walls (figure 9), west of the existing City Hall,

includes the *relief joint* (a 'weathered', cheaper, form of the original white joint). The Gate House, to the south, is intended to be restored complete with the white relief joint (fragments of which remain) that was original to all of these buildings according to archival photos.





Figure 9. GCAC, restored North Wall

Figure 10. Tuck-pointed house near Guelph

Understandably, it is in Guelph that we find full elevations of mid 19th century ribbon pointing extant in commercial buildings and homes. The last good replacement (maintenance) pointing, and fair approximation of the original detail, likely date from the 1930's when there was ample skill, affordable labor, and no interest in simplified or 'bastard' pointing, as it is sometimes called.

The essence of the work of the mason is not just in the laying up of stone or brick, but also in the perfecting of the appropriate appearance via a skilled craft of pointing. This is true in some form for all classes of construction and architecture, from farm buildings (numerous local examples built by families of German background), through stone foundations of houses (including the writer's home in Tornto), commercial blocks of stone buildings, to monumental institutional structures.

This rectalinear *relief joint*, with flat white lime putty ribbon, is sometimes dismissed in history as a pretense and imitation of fine ashlar joints, just as the tuck-pointed brick was compared with finer *guaged* brick work; however, the stone relief joint commonly exists side by side with ashlar masonry, often as the reverse of a rusticated or recessed ashlar. It may be more accurate to state that it is one of the ways, for appropriate weather tightness and appearance, of finishing rougher stone or brick walling. This *way* is common to both local *vernacular* construction and *architecture* of the nineteenth century.

One of the few investigations of Ontario pointing techniques is Gordon Couling's *Our Heritage in Stone* iii (kindly provided by Ian Panabaker, City of Guelph heritage planner). It is indeed a helpful guide, showing many examples of ruled white *relief* pointing on fieldstone, squared granite, and limestone rubble walls. The author describes the 19th century Ontario pointing tools (level, plumb-bob, and straight edge) and strictly rectilinear visual pattern and advises that "in the twentieth century some repointing has been done, more rapidly, with a free-hand curvilinear pattern, following the variable contours of the individual stones. This is, more often, a technique of European origin and is, generally, alien to the original Ontario tradition."

In contrast to dressed limestone joints, he shows examples of five types of joints, increasing respectively in the projection of overpointing the stone edges or arris: *tuck or tape-pointed joints, relief joint* with a flat smooth finish, *roded joints, relief joints with incised edges*, and *highrelief or 'padded' joints*. In our Guelph projects GBCA encounters the first two types above and is working on methods for the *tuck or tape-pointed joints*, acurately described by Couling as "a flat-surfaced relief joint finished with a white line, _ to _ inch wide, with a surface ribbon of white lime paste, giving a strong pattern to the surface of the masonry wall". To this set of forms, GBCA would add the *overhanging ridge joint* (DeGrunchy's naming) that we have encountered and restored in some Toronto projects.

Today the cost of such hand-crafted ribbon pointing may exceed that of the fine ashlar it is said to imitate. The hand work has even greater value today in maintaining the spirit of the traditional masonry, by preserving the skills and public appreciation sufficient to sustain the craft and the character, and maintain the many walls over time.

A challenge for conservation professionals today is to provide early notice to clients that this way of pointing is not superfluous but integral to the original design, and appropriate restoration and maintenance, of a great many 19th century stone buildings. Even where modifications are governed by a heritage easement agreement and an authority such as the Ontario Heritage Foundation, owners and authorities may be reluctant to require project spending on such 'decorative' treatment, especially once the treatment is no longer part of main-stream taste and practice and its performance under the new conditions of interior-insulated rubble stone wall has not been specifically examined by a reputable testing authority such as NRC/IRC. It should be noted, for the information of such owners, that

through applicable studies from 1964 through 2003, NRC found some added risk, such as increased freeze-thaw cycles, related to adding insulation and resulting wall temperatures, but indicated no significantly accelerated deterioration of existing masonry walls and pointing once insulated on the interior, if proper measures were taken to control interior air leakage into the cold masonry.

What do we learn from a ruin?

How can correct pointing, and attitude toward pointing, inform our attitude toward restoration of great historic monuments and sites? What does original pointing contribute to the Spririt of our related places? Just as contemporary tastes or ignorance may lead to unsympathetic transformation and rustication of local traditional masonry in a small Ontario City, longstanding European romantic taste for picturesque ruins and follies in pastoral landscapes affect our attitude to the major monuments of western culture. Rather than promote opportunities for citizens to acquire knowledge and improved taste through exposure to the beauty, or otherness, of work from a golden age (as the ancient Greeks themselves strove to do through art and architecture), we 'moderns' in our arrogance see ourselves at the end of history as interpetors of our past selections of period and level of restoration, rather than the faithful custodians of our children's inheritance. The Natural Step System Conditions and Bruntland Charter are as applicable as the Venice or Bura Charters to the conservation of the spirit of place.

Sources of public and professional opinion ... and mass amnesia

Threat 1 - Conservation Experts and Related Technical Publications

There is much technical research and support for practitioners regarding traditional pointing mortar formulae and their respective chemical and mechanical properties (in Ontario 1:1:6 is becoming the rule due to risk management and contemporary efficiencies to accommodate General Requirements), but precious little reliable history or science pertaining to appropriate local pointing joint profiles.

Some conservation literature is simply taken out of context. For example, Michael Thonton's admonition against use of [19th century]

ribbon pointing on 16th century buildings, called "Pointing the right way", is taken to be a global statement against ribbon pointing that is said to be visually destroying beautiful natural stone walling in England." Robert Mack's *Preservation Brief 2* reminds us that pointing (even after 100 years) is a sacrificial element and while technically correct, his description of tuck-pointing seems to present a European bias against local *purely* decorative pointing: "Tuckpointing is not true repointing but the application of a raised joint or lime putty joint on top of flush mortar joints. Penciling is a purely decorative, painted surface treatment over a mortar joint, often in a contrasting color."

Threat 2 - Excellent Performance and Longevity of Relief Pointing

If the maintenance culture helps to preserve the building and the knowledge of the related culture, with regard to our paper's subject techniques, part of their problem was their success. Much of the pointing work, with little maintenance, outlived the culture capable of repairing it. The "Enterprise" oven effect long used by "Maytag" advertising (Enterprise gas stove & range manufacturer essentially put itself out of business by building an extremely durable and serviceable product). In most of our masonry restoration work, as noted above, we find that deferred maintenance has preserved substantial areas of sound original mortar joints. In rare instances, more common in Guelph, full elevations of mid 19th century ribbon pointing remain. The Albion Hotel, 49 Norfolk Street, is an excellant example of our white lime *relief joint* (figure 11).



Figure 11. The Albion Hotel, c. 1856, and existing white relief joints

Visible from the new city hall (GCAC), the Albion Hotel also has a rich history of ghosts, bootleg liquor and colourful owners (according to the current owner). Built c. 1856 of local limestone, the hotel reportedly has the second-oldest liquor license in Ontario. Visitors can view the tunnel (another built by german Freemasons according to legend?) whence spring water came down from Catholic Hill to brew beer.

Threat 4 - Cultural Chaos

The current crisis in vernacular building and high architecture, whether due to modernist taste, globalization, or mass amnesia, forms the context of the present argument and the enemy of the familiar faces of our masonry tradition. This cultural crisis is more insidious, pervasive, and culturally destructive – if less mortally destructive – than the famine (1845-50), evictions, and political oppression in their homelands from the mid 1800's that brought the Irish and Scottish masons traditions to Canada. The current dramatic decline in numbers and competency of skilled tradesmen should be regarded with alarm.

Besides a tyranny of popular taste (for ruins rather than tradition) for a cheaper, stripped down, exposed stone, rugged rather than refined appearance, mis-information in regulatory guidelines, standard specifications, and commercial offerings threaten the continuation of

our rich local traditional masonry treatments in favour of anachronistic (medieval, 17th or 18thc. feeling) restoration of 19th century buildings. Further threats are presented, it seems, by competing mutual intolerance of masons of Scottish and Irish decent held by each for the work of the other. As an ominous sign, Guelph has atleast two examples of buildings where old rubble stone walls have been contrived as a screen of ruins infront of a contemporary building (one is labelled Wellington County Courthouse, the other a residence near Catholic Hill.

Threat 5 - State of the Trade

Restoration and adaptive reuse projects involve greater risk to Owners than new Greenfield work due to the greater potential for unanticipated concealed site conditions. Add to this the reluctance and inability of most contractors to work with existing buildings as a result of risk management and lost understanding of 'out-dated' materials and methods, fear of mold, staining, and other normal minor deterioration of otherwise sound materials and structures. The 'state of the trade' is the legal standard for practice. Perhaps this is why the state of the construction industry can be generally poor on quality and remain good on profit.

The current state of the trade is formed by a market with aggressive competition driven by ignorance and misplaced risk management notions among large purchasers of construction services and their purchasing departments. These bureaucracies may be successful in procuring office equipment, stationery, or other mass produced products, but have no concept of the effective interplay of diverse participants, processes, and products necessary to procure work on a one-off building, especially if it involves heritage. Purchasing officers facilitate their own processes by treating craftsman and architects as any other 'vendors' and hawkers delivering products to sites. Their ignorance of construction is in part responsible for the proliferation of project managers, increasing trade competition, decrease in numbers of tradesmen, declining general standard of construction knowledge and performance, growth in specialization and related number of layers of 'brokers' or 'managers' in project delivery. These add unnecessary complexity to construction, frustrate the abilities of the participants (ie: ability of contractors to coordinate and supervise trades, consultant teams to review and administer, and Owners to decide and pay).

Many of the symptoms of the current malaise seem to be attributable to Risk Management (a profitable fear-based industry) including: the perceived requirement for larger rather than small scale projects (precluding certain traditional forms of construction and craftsmanship), one-size-fits-all RFP's, all-encompassing contractual agreement forms and general requirements, and responding additional design-build requirements added to a growing number of technical specifications sections.

Consultants accreditation is also becoming a factor. "Fools rush in where angels fear to tread" may characterize the new influx of credentializing professionals looking to expand business in sustainability and heritage to help survive the next economic recession cycle. As consultant competition for projects increases, quality of service will decline unless owners finally recognize that their interests are better served by quality based, not fee-based, selection processes.

Consultants, owners, and industry need to establish appropriate project delivery methods, sources of skilled tradesmen, and sustainable adaptations of local traditional construction details. Restoration consultants often work with trades to research and devise methods to approximate an historic detail originally executed by a skilled artisan at the height of his craft when *it* was the *state of the trade*. The cost related to contemporary methods and materials, refined in dialogue with the consultant and trial and error, are high and carried by individual projects since the industry is not maintaining or producing the related skills.

Threat 6 – Industry Association and Commercial Publications

In order to better understand this threat, here are some practical definitions: *jointing* is setting and finishing of bed and vertical mortar joints as masonry units are layed up, prior to final mortar set up, usually struck or shaped with a trowel, slicker, rod, v-shaped or other tool; *pointing* or re-pointing is the raking out of masonry *jointing* or *pointing* to about a 20 - 25 mm depth, inserting, compacting, and finishing new pointing mortar to the desired profile and finish; *over-pointing* on walls of field stone, rubble, or brick is the use of tinted pointing mortar to *render* or fill recesses around uneven stone facets to provide a generally smooth wall while partially exposing the surface of larger stone units (in Quebec rubble walls from 17th and 18th century are referred to as *un appareil irrégulier _ blocage*^{viii}, as opposed to

pierre taillée, and the above described finished appearance mur enduits _ pierre apparente^{ix}); overpointing is augmented or padded where necessary to provide a generally plumb and true surface for the relief joint or tuck-pointing pattern.

American Masonry Association articles such as that by Mario Cantin^x based on experience of his company, Invisible Tuckpointing, can be misleading due to what is not, said (ie: ribbon pointing is difficult and expensive). Figure 12, the *before* image, tells the story of the lost *relief joints* in favour of *finished*, a bannal European-style recessed brush-stippled joint exposing the arbitrary stone shapes and arrisses. Nevertheless, this may be preferable to the result presented in figure 13 from DeGrunchy's catalogue of projects.



Figure 12. Ribbon removed, restored? Figure 13. Cobweb ribbon joint

While the DeGrunchy Masonry Restoration website provides much helpful information including a good review of pointing types, its catalogue of work contains much of the curvilinear ribbon pointing reviled by Michael Thornton; The *after* images catelogued do not contain our rectilinear relief joint (that might be in the *before* image). The closest example, aptly refered to as *Cobweb ribbon joint* (figure 13), shows to advantage the rectalinear *before* joints in figure 12, but

the description sounds like our joint: "Here we placed raised white material on top of neutral background mortar as was originally performed."^{xi}

Understanding and responding to Threats to Spirit of Place

Architects' old school books or a hawk of lime putty

To understand factors affecting popular perception of [feeling about] restoration, let alone that of beauty and the relative significance of detail, one must account for one's education; contrary to the axiom, there is much accounting for taste! To this end, and in keeping with the present extrapolation, here is a sampling of old and newer books, and their authors, that may well have helped to form the taste of certain architects in practice today.

Unlike our public libraries, and those of certain university professional schools^{xii}, architects tend not to throw out our old or obscure books. In fact we often re-read books after ten or thirty years or so - if we have time –perhaps to confirm that we have learned more than we have forgotten, even if our best projects were done in school. The trick is to pass on the valuable lessons by re-telling the story, in it's native language, even if it seems obvious.

Alberti goes on at great length to support, with many ancient and contemporary recommendations, the learning, practicing, and appreciation of painting in the formation of a noble spirit^{xiii}. Painting is also noted as the source of architectural ornament. Alberti notes that "avarice is always the enemy of virtue", advocating study over moneymaking. We are led to gather that its practice or appreciation, among other benefits to the mind and soul, trains the eye in the perception of "circumscription, composition, and the reception of light", the three parts of painting, derived from nature.

John Ruskin, in The Seven Lamps of Architecture, writes his criticism of restoration: "Neither by the public, nor by those who have the care of public monuments, is the true meaning of the word restoration understood. It means the most total destruction which a building can suffer: a destruction out of which no remnants can be gathered: a destruction accompanied with false description of the thing destroyed. Do not let us deceive ourselves in this important matter; it is impossible, as impossible as to raise the dead, to restore anything that has ever been great or beautiful in architecture."

Ruskin also offers guiding lamps in the same book. While that of *life* is very nice, those of *memory*, and *truth*, respectively may contribute to our biased opinions with statements: "...openly display its materials, remain true to its medium..." and "buildings, which inevitably embody the culture out of which they proceed, should be constructed for the ages".

Rasmussen, another author and opinion maker, well describes our modern sensibility in his applause for the "sublime" and "striking" form of the incomplete Portal di Santo Spirito, Antoinio da Sangallo, "without ornament ... only bold, clear-cut moldings...":

"This is how the elements of classical architecture appeared to the Italian people of the Renaissance. They experienced them in the beautiful Roman ruins, which at that time, as still today, were undoubtedly even more impressive than they had been in their original form. Marble facings, bronze and gilded ornaments, sculpture, and all small details, had disappeared. The Renaissance architectural theorist succeeded in transferring this aspect of sublimity and grandeur to the illustrations in their books on architecture, in which simple woodcuts gave the main structure alone, without any petty details." xv

Leon Krier argued for full restoration of the Parthenon over thirty years ago. While Krier's *classical* view of restoration may be the antitheis of Ruskin's romantic view, he shares much of Ruskin's criticism of our industrialized and globalized society, or what Krier calls "...the phenomena of the ephemeral, of Kitsch and of self destruction [that] are the major products of our industrial civilisation..." in his 1979 polemical project for a small school at St Quenin-en-Yvelines. This, and his other beautiful and intelligent writings, projects, and polemical sketches, have been a welcome antidote to bad planning and prevaling dualist views of romantic old contrasting heroic industrial new. It is now okay to contemplate - and execute - new buildings in local traditional forms and construction. With the *new urbanism*, updated principles of Christopher Alexander, and a proliferation of revitalization institutes, city centres, heritage led regeneration trusts becoming mainstream, shouldn't we be able to develop the appropriate feelings and skills to maintain the older examples of our traditional forms?

Jane Jacobs [often quoted, but seldom followed], in her Platonic-styled dialogue "systems of survival' (1992), and more recent book 'Dark Age Ahead' (2004), rings the alarm and exposes in detail instances the serious threats to culture that present the context and

urgent necessity for sustainable conservation practices. A successful culture must support an artisan class to maintain the places and objects of its representation and ritual. Citizens need to understand and maintain independent guardian and commerce syndromes, as articulated by Plato and Jacobs, and avoid "monstrous hybrids" exemplified by the rise of "corpocracies" (as defined in Thomas King's Dead dog Café^{xvi}: states ruled by multi-national corporation(s)

Find and Promote the Spirit of Old Ways

What any out-of-favour traditional vernacular masonry ornament needs to regain public attention and affection is good press. And what better way to 'sex up' masonry conservation than to tell the truth, associate it with moral authority, non-denominational lineage, mystery, and perhaps 'sacred sex' (if Lynn and Clive have their way^{xvn}). In the 1981 Holy Blood, Holy Grail, or more recent Dan Brown series of novels, the revival of interest in the Holy Grail, Knights Templar, and mysterious Freemasonry, surely there must be some cryptic or anthropomorphic reference in our adopted pointing details. If not, readers of Our Town, (Vol.2, Issue 1, June 1987) will know that Guelph indeed has a significant tie to the Scottish Rite Freemasons^{xviii}, those on the board of the Canada company, and Guelph's founder, John Galt's fateful gift of Catholic Hill, and story of Ferdinand Maximilian von Habsburg's foundations for an enormous stone church on the site of Guelph's own *Notre Dame*, and the lodges still active in town.

Restoring the spirit of old ways in practice

Recent exterior stone masonry restoration at The Royal Conservatory of Music's McMaster Hall c.1881 (former Baptist Theological College) exemplified the challenges of supporting original traditional detail against the tide of contemporary taste, cost, and risk management. Some significant success resulted from effort and a few basic principles. Detail review, identification, and protection of sound (even eroded) samples of original pointing; specifying "match existing joint profiles and colours" and "do not cut out sound existing pointing without location-specific written instruction from the consultant; do not allow 100% percent pointing even if it is indicated for pricing purposes only; drawing details indicating observed profiles and

composition as a starting point for bidding/pricing; working with successful competent restoration masons to develop contemporary joint composition, colours, and profiles that is achievable given the available skills, schedule, and budget, that best approximate the appearance and spirit of the original work while providing the enhanced life-cycle performance, and up-dating specifications for long-term maintenance.

While we normally regard pointing as having a minimum 30-year maintenance cycle, in many cases we find a significant amount of original pointing remains sound – if eroded - after 100 years or more. Where replacement pointing is encountered – often with a hard masonry cement – it generally requires replacement.

Sometimes a patch or pointing repair from the 1930's provides the best or only evidence of original pointing as the surrounding original work has significantly eroded since a mason carried out the patch in the traditional manner.

Lessons in Heritage 'Modern'

The opposite of expression of hand made detail is the effort to make complex human effort and craft appear as an effortless and elegant abstract industrial product. The key details of original TDC preserved by a corporate cultural reverence for the original design specifications of Mies van der Rohe that extend from the graphite black paint formula for the steel curtain wall, to the glass bowls containing yellow chrysanthemums on the counters in the banking Pavilion. Yet there are many anecdotes attributing the success of the project to the personal care and efforts of individuals, suppliers, and trades. This greatest of the modernist urban towers that followed, relied on hand torque of screws securing each glass panel in the curtain wall.

The building was designed to be repainted every 5-7 years, thus establishing a workable maintenance cycle and short enough to avoid forgetfulness or loss of corporate memory. It is interesting to note that TD Centre's bronze-clad predecessor, the Seagram building in New York City, while donned in a more noble metal intended to be exposed to weather, is now protected by a sacrificial clear sealer and subject to a maintenance regime not unlike that of the TD Centre exterior. Could this be as a result of lessons learned in the TDC project and it's successful maintenance (not to mention recent lighting and other energy efficiency upgrades). It is said that the temples of ancient

Greece had annual scheduled maintenance often including a complete re-application of wax to protect the polychromatic stone colours and details from weather (and human contact). The maintenance culture helps to preserve the building and the knowledge of the related culture.

Preservation vs Restoration, Picturesque vs Classical

what else do we learn from a ruin?

How can correct pointing, and attitude toward pointing, inform our attitude toward restoration of great historic monuments and sites? Just as contemporary tastes or ignorance may lead to unsympathetic transformation and rustication of local traditional masonry in a small Canadian City, longstanding European romantic taste for picturesque ruins and follies affect our attitude to the major monuments of western culture. Rather than promote opportunities for citizens to acquire knowledge and improved taste through exposure to the beauty of work from a golden age (as the ancient Greeks themselves strove to do through art and architecture), we 'moderns' in our arrogance see ourselves at the end of history and philosophy ... selecting period and level of restoration for a few alien fragments that speak to us no more.

Quebec city, Place Royale restoration, initiated over 30 years ago, eradicated later building additions, fronts, (and 19th century Scottish pointing) –much evidence of British occupation – in favour of the uniform representation of a "Golden Age" of French occupation. The initial decision to proceed in this manner, however much it may have been criticized later, was likely a sound political decision in support of fledgling secular Quebecois culture.

Also over 30 years ago, in Athens, Greece, Manolis Korres, his colleagues, and political masters, given available information about the famous building, could have chosen to restore the Parthenon to its long standing original state, so revered by various cultures that survived virtually intact for 2,100 years. However, they chose to *preserve* the tragic ruin that they received, a monument to the careless events of looting and destruction over only the most recent 300 years (figure 14). The selection of any other previous period for *restoration* - whether during it's use as Greek temple/treasury, Ottoman mosque, Christian churches, or just before the explosion - would provide an almost complete restoration of the ancient Greek building, initiated a

renaissance in classical artisans and scholarship, and corrected universally acknowledged historic wrongs.





Figure 14. Restored Parthenon, detail

Figure 15. Nashville's Parthenon

Was the decision taken simply political, or politically-correct, or was it a logical expression of our modern Ruskinian romantic attitude toward all old or non-industrial building and architecture? Whatever it was, when the work is finally complete, Greeks, like the rest of us, will still have to go somewhere like Centennial Park, Nashville, Tennessee (figure 15) to experience the scale, sculptural programme, and polychrome glory of the ancient Parthenon xix.

More recently, after only two years of work, Canadians have restored the original dramatic form of their 1936 Vimy Monument^{xx}.



Figure 16. Restored Vimy Monument, March 2007.

The committee responsible made the hard choice to replace much original fabric and alter the stone cladding system to improve durability and restore the monolithic appearance of Allward's design.







Figure 18

Progess photos from January 2006, show the stone walls in the base being rebuilt (figure 17) to include a space for drainage, and new steps layed over sandbags and rubber for drainage and and sound attenuation of footsteps(figure 18).

Conclusions

As we hope to successfully agued, that the essence of the work of the mason is not just in the laying up of stone or brick, but in the perfecting of the appropriate appearance via artistic sensibilities and skilled craftsmanship in pointing. Contemporary practice in restoration work is the primary cause of recent increase in the loss of familiar rectalinear pointing patterns in many of our historic places and homes. Given the spotted history of conservation, restoration, and rebuilding of monuments of golden ages, those interested in conserving (with more than a photographic record) such hand crafted ornament as an accompaniment to your daily life will need to be vigilant and passionate. Take every opportunity to point out instances of original complete masonry work to owners and contractors, limit cutting-out on site, share awareness of the work's history and value with trades and local populations, revise your master specifications to include this type of joint and guidance for its maintenance, and perhaps take up the trowel, mallet, and chistle to try your own hand.

Practicing members of ICOMOS, CAHP, ACO, APT, and other conservation organizations, have cut-out a heroic scope of work for ourselves and we keep adding on. Just as we get a feeling for holistic review of authenticity and prioritize essential truths and overall spirit of place, we cannot afford to abandon previous rigour in examining the other tests or sources of information and passion (form and design, materials and substance, use and function, traditions ad techniques,

location and setting, spirit and feeling, all internal to the site, and other external sources) with an eye to ongoing interpretation and traditions, and conscious of the branches of forms and techniques that we choose, on a project by project basis, to prune from our cultural heritage. Our task is especially critical as older building traditions and techniques continue to prove their value in informing contemporary sustainable planning, urban design, building science, passive environmental conditioning, durability, adaptability, and beauty in vernacular building and architecture.

References

 $\underline{See:}\ http://www.icomos.org/usicomos/Symposium/SYM96_Authenticity/Canada_English.html$

ⁱ H. Stovel, December 1995, US/ICOMOS – 1996 Interamerican Symposium on Authenticity in the Co...tage – National Position Paper of Canada ICOMOS National Committee

ⁱⁱ GBCA, in association with Moriyama + Teshima Architects, is providing restoration and building science guidance for the Guelph Civic Administration Complex (GCAC) as a whole, and is architect for the adaptive reuse and addition at the existing City Hall as a new P.O.A. Courts building.

iii Gordon Couling, Glenn Fretz, Heritage Cambridge (a branch of ACO), Our Heritage in Stone, a helpful guide to increased awareness of stone architecture in the Cambridge area, Heritage Cambridge, 1978

iv ibid, page 8.

^v Siad, M.N.A.: Demers, R.G.: McSheffrey,L.L. NRCC-46109, Hygrothermal performance of a masonry wall retrofitted with interior insulation, IRC; see: http://irc.ncr-cnrc.gc.ca/ircpubs.

vi Thornton, Michael, ICCROM, "Pointing the right way", Traditional Homes, vol. 6, issue 1, 1989, pages 120-122, ISSN: 0950-2181.

Abstract: An increasing number of beautiful natural stone walling in England is being visually destroyed by the so-called "Ribbon" or "Strap" pointing, now used both on rubble and ashlar stonework. Expert advice on correct masonry pointing is given, including suggestions for suitable mortar formulas. vii Robert C. Mack, FAIA, Preservation Brief 2: Repointing Mortar Joints in Historic

VII Robert C. Mack, FAIA, Preservation Brief 2: Repointing Mortar Joints in Historic Masonry Buildings; see: http://www.nps.gov/history/hps/tps/briefs/brief02.htm
VIII Yves Laframboise, L'architecture traditionnelle au Québec, Glossaire illustré de la maison aux 17e et 18e siècles, 1975,ISBN-0-7759-0457-0.

ix ibid

^x Mario Cantin, Tuckpointing:_How to Achieve a Good Color Match, Masonry, the official voice of the American Masonry Association.

xi DeGrunchy Masonry Restoration website: www.degruchymasonry.com/portfolio_stone

xii The author obtained some excellent books on French-Canadian religious architecture for pennies from a U of T Faculty of Architecture Library book sale as these were not sufficiently in demand by architecture students or their esteemed professors.

xiii Leon Battista Alberti, book two of *On Painting*, translated by John R. Spencer, Yale University Press, revised edition 1966.

xiv John Ruskin. ([1880] 1989). The seven lamps of architecture. New York: Dover Publications. P. 194

- xvi CBC Radio programme; see the website: www.umanitoba.ca/canlit/King.pdf xvii See chapter seven of Lynn Picknett and Clive Prince' *The Templar Revelation*, Touchstone, Ney York,NY,1998,
- xviii see the website http://scottishritemasons-can.org/index.htm where we read: "The purpose of the Scottish Rite, simply stated, is to seek that which is the most worth in the world; ...to exalt the dignity of every person, the human side of our daily activities, and the maximum service to humanity; ...to aid mankind's search in God's universe for identity, for development and for destiny, and thereby achieve better men in a better world, happier men in a happier world and wiser men in a wiser world."
- xix According to Wikipedia 'Parthenon' The Nashville Parthenon: In the 1920s, Nashville citizens chose to *restore* rather than *preserve* or demolish their decaying temporary plaster replica of the Parthenon, replacing it with a permanent, concrete and steel building, and maintaining that building fabric and active programme as an art gallery.
- xx Excellent website and linked pages at: www.vac-acc.gc.ca/remembers. Restoration progress photo's are credited to P. Frutier / Government of Canada. The site, while not naming the restoration consultant, documents key restoration work and includes a utility allowing this writer to confirm that the northeast wall, "E" "L", section 4, includes his two grand uncles among the inscribed names of 11,285 Canadian soldiers who were killed in France and whose final resting place was then unknown.

xv Rasmussen, [emphasis added] Chapter III, Experiencing Architecture, M.I.T. Press, 1959, 14th printing 1977, ISBN 0 262 68002 5