MEMORIALIZING THE LOSS OF GENETIC DIVERSITY: A GENETIC ARCHIVE AND MEMORIAL FOR CALGARY

A Masters Degree Project Completed In Partial Fulfillment Of The Requirements For The Degree Of Master Of Architecture

Greig Rasmussen

The Department of Architecture
The Faculty of Environmental Design
University of Calgary

June 30, 2000
The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author’s permission.

L’auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L’auteur conserve la propriété du droit d’auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-66979-3
ABSTRACT

Prepared in Partial Fulfillment of the requirements of the degree of Master of Architecture in the Faculty of Environmental Design, The University of Calgary

Title: MEMORIALIZING THE LOSS OF GENETIC DIVERSITY: A GENETIC ARCHIVE AND MEMORIAL FOR CALGARY

Author: Greig Stephen Rasmussen

Supervisor: M.J. Boutin

June 30, 2000

This Masters Degree Project explores the question of whether it still possible to create an architecture that meaningfully and authentically memorializes. It is argued that this is still possible and valid as memorializing is something deeply essential to our individual and collective being-in-the-world. These issues are explored through a combination of writing and architectural design/intervention utilizing both analytical/phenomenological and poetic approaches and the study of specific precedents. In doing so, the Project attempts to present a way of seeing and of conceiving ‘memorial’ in such a way as to show the architectural, ontological, theological, ethical and emotional interconnections that inhere in that concept.

It is architecture’s ability to instantiate and conjoin individual and collective social memory and identity that enables built form to memorialize. Memorializing is a form of poesis: a way to let Being come to presence and, in a particular sense, a form of love and gratitude. Thus a memorial has the potential to unite human values, emotional and spiritual needs, architectural intentions and the past, present and future in a profound conjunction of matter and spirit.

A genetic archive (for local flora and fauna) and memorial to the loss of genetic diversity within the world’s ecosystems is the subject of the design intervention. It attempts to bring together concepts of memorial and the creation of architectural form within the constraints of a specific program and urban site.

KEY WORDS

Absence Architecture Diversity Loss Meaning Memorials

Memorializing Memory
ACKNOWLEDGEMENTS

To my supervisor, Professor Marc Boutin, I would like to express my heartfelt thanks for his guidance, encouragement, friendship and respect over the course of my MDP and during my stay in EVDS. Mark's commitment, enthusiasm and passion for teaching, and for architecture and its ideas, have made an indelible impression, and it is an honor to have been his student. I also want to thank Professor Ray Arnatt of the Department of Art, for kindly consenting to be my external advisor for the second time in 16 years. Once again the gift of Ray's thoughtful insight has been very welcome and gratefully received. As well, I want to thank Professor Katherine Hamel for kindly agreeing to be the Deans Appointed Examiner on my jury. Finally, I wish to thank the aforementioned individuals for their very interesting and insightful questions and observations during my defense.

I want to also extend many thanks to Bill Porochnuk (Mr. Bill!), the unsung hero and spirit of EVDS, for all the help and assistance he so kindly and consistently gave me over the years and to Marino Vardabasso for helping me unravel a few of the mysteries born of my love/hate relationship with computers!!

My partner in life, Lee Anne Pellerin, I want to thank for her love, support, understanding and patience over the years I have been in the architecture program. Her passionate concern for the ecological well-being of our planet is a fundamental inspiration for this MDP.

As ever, I thank my family and friends for always being there and for their unfailing love and support in all my undertakings, and especially my father for suggesting I return to university.

And finally: to all my 'comrades in arms', my classmates of these past years, particularly (in alphabetical order) Arnold Chan, Jocelyne Belisle, Nicole Howard, Jason Mudry, Laura Plotz, Troy Smith and Will Woodward, thank you!! Your friendship, respect and humor has, from the beginning, been the most enduring pleasure of my time in EVDS. You are all my most unforgettable examples of creativity, self-discipline, diligence, perseverance and, above all, of grace under pressure.
To everyone I love.
MEMORIALIZING THE LOSS OF GENETIC DIVERSITY: A GENETIC ARCHIVE AND MEMORIAL FOR CALGARY

ABBREVIATIONS

LIST OF ABBREVIATIONS


ABBREVIATIONS


CHAPTER 3: PRECEDENTS

Figure 8


3. Ibid. Bauval and Gilbert, Plate 16 (unpaginated).


5. Ibid. Bauval and Gilbert, p. 11


8. Ibid. Scruggs and Swerdlow, Plate 54 (unpaginated).


11. Ibid. *El Croquis No.80*, p. 49.


13. Ibid. *Architectural Record*, p. 86

All other Illustrations: Rasmussen, Greig. 1999-2000.
CHAPTER 4: THE GENETIC ARCHIVE AND MEMORIAL

Figure 9


10. Op. Cit. Planning and Building Department, Section 15C.


15. Ibid. Rasmussen, June 2000.


All other illustrations: Rasmussen, Greig. 1999-2000
# CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>ii</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>iii</td>
</tr>
<tr>
<td>Dedication</td>
<td>iv</td>
</tr>
<tr>
<td>Abbreviations</td>
<td>v</td>
</tr>
<tr>
<td>Illustrations</td>
<td>vii</td>
</tr>
<tr>
<td>Contents</td>
<td>ix</td>
</tr>
<tr>
<td>Chapter 1: On Memorials And Memorializing</td>
<td>1</td>
</tr>
<tr>
<td>Chapter 2: Towards A Phenomenology of Memorials</td>
<td>18</td>
</tr>
<tr>
<td>Chapter 3: Precedents</td>
<td>45</td>
</tr>
<tr>
<td>Chapter 4: The Genetic Archive And Memorial</td>
<td>73</td>
</tr>
<tr>
<td>Bibliography</td>
<td>105</td>
</tr>
<tr>
<td>Drawings</td>
<td>109</td>
</tr>
</tbody>
</table>
Chapter 1: On Memorials and Memorializing

THE BUILDING OF THE TEMPLE

Everything came to his aid during the construction work. Foreign workers brought the marble blocks, trimmed and fitted to one another. The stones rose and placed themselves according to the gauging motions of his fingers. No building ever came into being as easily as did this temple—or rather, this temple came into being the way a temple should. Except that...instruments obviously of a magnificent sharpness had been used to scratch on every stone—from what quarry had they come?—for an eternity outlasting the temple, the clumsy scribblings of senseless children’s hands, or rather the entries of barbaric mountain dwellers.

Franz Kafka, from Parables and Paradoxes

THE TOWER OF BABEL

If it had been possible to build the Tower of Babel without ascending it, the work would have been permitted.

Franz Kafka, from Parables and Paradoxes

This book is written for such men as are in sympathy with its spirit. This spirit is different from the one which informs the vast stream of European and American civilization in which all of us stand. That spirit expresses itself in an onwards movement, in building ever larger and more complicated structures; the other in striving after clarity and perspicuity in no matter what structure. The first tries to grasp the world by way of its periphery—in its variety; the second at its centre—in its essence. And so the first adds one construction to another, moving on and up, as it were, from one stage to the next, while the other remains where it is and what it tries to grasp is always the same.

Ludwig Wittgenstein, from the Introduction to Philosophical Remarks
THE PROBLEM

Is it still possible to create buildings that meaningfully and truthfully focus and instantiate our collective memory? In other words can (the language of) architecture still give form to memory—create buildings that 'remember' our history, so to speak—and thereby memorialize, or are contemporary society and the current conceptual paradigm of architecture such that an architecture of memorial no longer constitutes a valid, existentially authentic response to the current human condition? It is my intention in this project to explore this issue through a combination of writing and architectural design/intervention and will attempt to do so through both poetic and analytic/phenomenological approaches.

PROLOGUE

My work consists of two parts: of the one which is here, and of everything which I have not written. And precisely this second part is the important one. For the ethical [the realm of value] is delimited from within, as it were...and I'm convinced that strictly speaking it can ONLY be delimited in this way. In brief, I think: All of what many are babbling today, I have defined in my book by remaining silent about it.


The memorializing vision is fundamentally a poeticizing vision and an integral aspect of what it means to be human, part of our "form of life" as Wittgenstein would say, a practice embedded in the world and serving human purposes. It is a form of poesis: a way of seeing the world (to paraphrase Goethe) through the lens of human sentiment, through memory and feeling. In the broadest sense, poesis is intimately related to language in that, like language, it is a way of letting Being show itself, of presencing presence. It is thus a kind of existential home, a refuge for an alienated and estranged humanity. In this sense too, poesis underlies our 'will to form', that deeply human need to give shape and structure to what is around us and thereby create order from chaos. Thus, as manifested through architecture, art, or science, memorializing is still valid and possible, though perhaps in our current age we are in need of a reminder of just what it is to memorialize and why this is something deeply essential to human being-in-the-world.

In light of the above, what follows here is not an attempt to frame a philosophical or an
architectural theory—either descriptive or proscriptive—of memorials and memorializing.¹ Rather, it is more on the order of an attempt to present a way of seeing and a way of conceiving ‘memorial’ in such a way as to show the ontological, theological, ethical and emotional interconnections that inhere in that concept. To memorialize, to make a memorial, is, in its deepest sense, an action with the capacity to unite human values, emotional and spiritual needs and architectural intentions, in a profound conjunction of past, present and future.

NEEDLE IN THE HAYSTACK

unfinished thoughts breech the silence
like some wheezing wind
blowing winter requiems
across autumn-stained leaves
frozen in the blue ice

i am the riddle weaver
i am the stare of the anonymous passer-by
i am the time traveler of my own years
and months
and weeks
and days
and hours
and minutes

i am the needle in the haystack
and i write to you from the end of the world

¹ My reasons for saying that what I am presenting here is not a theory are as follows: Every theory must satisfy, by means of experiment and predictive application, two indispensable criteria: verifiability or falsifiability. No work of architecture, no architectural ‘theory’ or, broadly speaking, any other aesthetic theory or artwork, can advance verifiable or falsifiable deductions entailing predictable consequences in the very concrete sense in which a scientific theory carries predictive force. (Concomitant to this is that within the context of architectural theorizing and within aesthetic discourse generally, no interpretative-critical analysis, doctrine or program can be superseded or erased, by any later construction.)

It follows that every work of architecture, every artwork, is, so to speak, a ‘singularity’. No matter how imitative of or influenced by canonical and paradigmatic forerunners it might be, a work of architecture or of art is not a predictable fact determined by theoretical postulates or entailed by logic. It is instead what George Steiner calls “a contingent phenomenality which could or could not have come into perceptible form...” Though we may be able to classify a building, a painting or sculpture, a poem or piece of music within larger historical and formal orders, it remains a “singular act of being and of presence...” (RP, pp. 75-77)
THE MEMORIAL AND THE MONUMENT

At this point it is perhaps best to frame a distinction that is central to this project: that between 'memorial' and 'monument'. I want to argue that while all monuments memorialize and as such are memorials, not all that memorializes is necessarily a monument. A monument I conceive as a kind of ‘purpose-built’ memorial, the war memorial and the grave marker being perhaps the most obvious and often shallow examples. In the most trivial sense too, all built form has the potential to memorialize: the So-and-So or Such-and-Such Memorial Hospital, Museum, School or Office Block etc. are commonplace enough in most cities, and would seem to imply that merely conferring a title on something somehow endows it with the capacity to memorialize.

However, titling in this sense, is more akin to monuments in general, and both, I want to argue, are akin to realism in art. If something is too realistic, too much like ‘the real thing’, the very realism of the thing renders it impenetrable; it may trigger memories for a few individuals, but for the most part, in its completeness there is no room for psychological investment on the part of the viewer. In this sense the monument and the title, like the overly realistic artwork, provide information but very rarely engender the capacity to evoke emotion. (cf. SL, p. 166) As such, I want to conceive of memorializing in a deeper and more profound sense.

NOVEMBER TREES

Softly falling snow
sifts through the grey light,
dead leaves crunch underfoot
and November trees trace spare lines,
like a Bartok Quartet,
upon the ashen sky.

MEMENTO MEI

The non-designed memorial:

Surrounding the site of the former Auschwitz-Birkenau concentration camp are forested areas, parts of which predate the camp and parts of which have since grown over a mass burial site. At the time of the Holocaust, some inmates managed to write messages to their loved ones, which they would slip into bottles and other containers and bury in the earth beneath the forest. These bottles occasionally
resurface and are duly logged and placed in the archive. In a similar manner, the ashes of the dead also rise to the surface of the ground, creating a profound presence on the forest floor....

Each pine at dusk
lodges the bird
of its voice
perpendicular and still
the forest
indifferent to history
tearless as stone
repeats
in tremulous excitement
the ancient story
of the sun going down

John Berger, from And Our Faces, My Heart. Brief As Photos

MEMORY AND IDENTITY

"Each man guards in himself his own particular wound, different in everyone...."

Jean Genet writing on Giacometti, quoted in Real Presences

Memory has long been seen by many philosophers to be one of the necessary (though not sufficient) conditions for defining personal/self identity; it is also a central, defining feature of societies. Despite physical, intellectual, and spiritual changes over time, we remember, and it is continuity of memory—the ability to follow a thread of remembering back into the past—that is one of the chief guarantors of identity. We have the ability to remember our past selves not only through time—from day to day—but also across time—as children, adolescents, adults, and so on. Certainly persons can and do change physically, intellectually, and spiritually over time, but it is this continuity of ego, if you will, this ability of a self to follow a tenuous thread of remembering back into the past, that enables us to define who we personally are. Indeed, memory seen in this light, underlies many of our deepest notions not only of self identity, but also of individual purpose, self worth, spirituality and interpersonal aspects such as love, bonding and friendship. It also underlies broader social ideas of community, legal and moral responsibility, and history. Thus, memory is
essential to identity, and in this sense, our memories are also memorials to our own individual selves and pasts.

As we become increasingly inundated with a relentless stream of new information, technologies and competing ideologies, it becomes ever more necessary to seek respite in order to feel and to remember our individual and collective past. It is only through knowing and reflecting on who we were and where we have been that we can even attempt to understand who and where we are now, and try to create who and where we will be.

**MEMENTO MORI: WHY MEMORIALIZE**

The end of life is not merely to propagate the species, but is to live that life in a certain way. One feature of that way of living is reflection, reflection on human life and its values in general and upon our own lives in particular. There are large parts of our lives that are not made up of [ends which serve the survival and prospering of the species]...; there is also temptation, suffering and death. These things only too often crowd out the single and unreflective joys, but nevertheless are things that we sometimes have to come to terms with.

B.R. Tiighman, *Wittgenstein, Ethics and Aesthetics*

In his great tragedy Macbeth, Shakespeare writes:

> Tomorrow and tomorrow and tomorrow  
> Creeps in this petty pace from day to day  
> To the last syllable of recorded time,  
> And all our yesterdays have lighted fools  
> The way to dusty death. Out out brief candle!  
> Life's but a walking shadow, a poor player  
> That struts and frets his hour upon the stage  
> And then is heard no more. It is a tale  
> Told by an idiot, full of sound and fury,  
> Signifying nothing.²

Such existential pessimism in the face of human mortality is common throughout recorded history.³ And yet there is another more optimistic and far more common response to the fact that mortality governs human existence. Over the more than fifty millennia since human

---


³ Indeed, in relation to that mortality it is sobering to consider that numbers mark both the beginning and the end of our life— i.e. 1957 – 20??— but our life itself, as it was lived, is marked only by the hyphen in between.
beings first appeared, they have consistently tried to leave some testament to their individual and collective existence. Some of these attempts are unconscious, some nonverbal, and sometimes they are accidental or unintended. Gregory Benford notes that:

...deep within us lies a need for continuity of the human enterprise, perhaps to offset our own mortality. This explains why so many messages and monuments have religious elements or undertones.... Somehow in the human psyche a longing for perpetuity has manifested itself powerfully, erecting vast edifices and burying considerable treasures—all to extend across time some lasting shadow of the present. (DT, p. 3)

However, our contemporary appreciation of the expanses of time is vastly different than that of less than two centuries ago. Advances in dating technologies and astronomical cosmology paint a picture of vast perspectives of time stretching from humanity’s murky origins to the eventual heat death of the universe tens of billions of years in the future. Where ancient societies assumed that life and culture would continue into an essentially infinite future, and that their descendents would share with the ancestral past a common perspective and way of life, the modern mind is constantly impinged on by incessant accelerating change and lives in an environment of fundamental anxiety about the passing of all grounding referents and the consequent loss of meaning. (cf. DT, p. 3)

The average human life span is somewhat less than a century; to persist beyond this means surviving only through surrogates such as family, nation, schools of thought in philosophy, science or art, religious communities and so on. Our species has evolved with passionate loyalties to these larger, collective institutions very likely because they promise continuity, a consolation for personal mortality. But, our modern attention span has grown quite short, as has the ‘life span’ of many of these collective units—indeed, in this century, even some countries have failed to outlive their citizens. Additionally, most industrial societies have taken on an increasingly bottom-line attitude such that endeavors whose benefits will accrue only over a long-term are passed over in favor of projects which benefit far less but that pay off in the shortest possible time.
Chapter 1: On Memorials and Memorializing

ARCHITECTURE AND MEMORY: THE CONTEMPORARY SITUATION

We feel that even if all possible scientific questions be answered, the problems of life have still not been touched at all. But of course there is then no question left, and just this is the answer.

Ludwig Wittgenstein, *Tractatus Logico-Philosophicus* #6.52

Nostalgia for the past—an idea of returning to something that might have been but can no longer be—is instrumental in distorting and deforming modernity and the quest for an ever-better spiritual and architectural situation of human beings....[O]ne must resist the temptation to become a victim of easy ideologies which tend to flatten and reduce architectural discourse through, very often, underlying authoritarian agendas....[There remains a] necessity to create a different—and by different I mean ethical—architecture for the twenty-first century which is based on a fundamentally transformed political, cultural, and spiritual experience of the twentieth century.

Daniel Libeskind,
1995 Raoul Wallenberg Lecture

Built form signifies. Indeed, we might say that architecture is a kind of *language* in the sense that regardless of its function a building is also a text that conveys many nonverbal, *semiotic* messages—a building as interrelated collection of signs and significations. Semiotic meanings are deeply cultural, shaped by the passage of time and seem to be unimpeded by scale (cf. DT, pp. 18, 19). At the same time, with regard to architecture and built form, culture is only a part of how we receive and interpret semiotic messages. The physicist Gregory Benson points out that:

[s]emiotic messages satisfy us best when we understand them both structurally and aesthetically....A sense of wrongness can also be deeply intuitive [e.g. a leaning pillar or tower, an inverted pyramid standing on its point]....Violating this intuition brings a sense of error or ugliness....We get an uneasy surprise from..."dishonest" design. (DT, p. 19)4

Thus, it is precisely because it can *mean* something that a building is not merely the residue of a process, but has the potential to transcend its materiality and, to a degree, its culture and instantiate a meaning that exceeds the sum of conscious and unconscious intentions

---

4 This is very likely why ancient places and things seem to hold inherent wonder for us: because they address the deep aesthetic biases we share. Those ancient markers that strike us most do so because they possess a "still and subtle balance that their makers carefully shaped, speaking across time in the language of beauty." (DT, pp. 19-20)
that brought it into existence.\footnote{This is exactly analogous to the idea of ‘emergent properties’ in complexity theory. An emergent property is one that comes into being through the interactions of elements within a (sufficiently) complex system (and at times through the interactions of complex systems themselves), such that that property comes about—emerges—only through the interaction of those elements and not from the properties of any single element or subset of elements. Human thought is a paradigm example of an emergent property in that thought emerges through the interaction of material, chemical and electrical elements internal to the human brain and body and possibly also from the interaction of the brain and body with the external environment. (cf. CY, pp. 11-12, 192-203, 278-9)}

In the past, architecture was a central way western societies gave form to communal memory and grounded communal identity. This is to recognize that a building signifies something that transcends itself, its purpose and program, its architectural style and its method of construction. In a certain sense, a building acquires a memorial aspect by becoming a form of social memory and identity made concrete and it is this ability to conjoin memory and built form that enables architecture to memorialize. Over the course of the twentieth century however, a sense of absence and loss can be seen to have permeated western society and culture, and architecture increasingly reflects this collective spiritual void. All our dreams of utopia have ended in ghettos, concentration camps and genocide and all our phenomenal advances in technology over the past decades, despite increasing our life span, decreasing disease and (in a limited number of societies) poverty etc., do not seem to have increased the sum total of happiness in the world one iota.

SUMMER ELEGY #1 (STORM)

just now a wind shears the passing clouds
white ghostly whispers crowd the heart’s history
secrets
lost in the gale
and it seems the pale sky fills
with the whole grieving of this world

This absence is felt in every aspect of collective and individual life. Not only is culture becoming increasingly commodified, but so is the very expression of feeling itself. On a collective level and increasingly on a personal one, authentic sentiment—the genuine emotion that can only evolve within a living culture of engaged individuals—is being replaced by mass produced imitation sentiment. More and more, the public expression (and to a frightening degree the private expression) of our most profound feelings and sentiments are mediated through the ubiquitous marketing strategies of mass media—be it on behalf of
business or government or some other special interest—and are then marketed back to us as a commodity. This has resulted in a kind of nostalgia, one that could be called ‘consumer sentimentalism’—the manipulation of fear and ignorance: fear of the present and nostalgia for a past that is nonexistent in that it was necessarily different from its commodified image.⁶

Alongside this, human relations—the existential and ethical issues of being-in-the-world and being-with-others—once conceived as ethically grounded, are now conceived primarily as a matter of taste or as a technological question. We no longer speak of choosing a way of life, with all its spiritual, ethical, physical and cultural dimensions, but instead talk of adopting a ‘lifestyle’: choosing how to live is thus increasingly seen as having more to do with adopting a fashion—making a fashion statement. We do not speak of relating to others, but instead ‘interface’ with them—the particular term may be an idiomatic flash-in-the-pan, but the increasing use of technological metaphors with regard to human interrelationships reflects our tendency to conceive such interrelationships, and indeed even our interrelationship with nature, as merely facile technological analogues.

As if in response to this, in our era we have endeavored more than ever before to reach back in time, expending great efforts in archeology and other sciences, almost as if seeking our identities in distant ancestors. More intimately aware of the natural world and their relation to it, our ancestors conceived themselves as an integral part of a living unity, and over millennia, the legacy of this conception has had a powerful spiritual impact such that even today (perhaps especially today) we seem to “equate the natural with the holy,” and sense that somehow we are disconnected, alienated from the natural world and therefore from any conception of what transcends us. (cf. DT, p. 64) Indeed, our modern alienation and nostalgia for a past ‘golden age of authenticity’ may be part and parcel of our notion of progress itself. Cultural critic Dean MacCannell notes that:

> The progress of modernity...depends on its very sense of instability and inauthenticity. For moderns, reality and authenticity are thought to be elsewhere: in other historical periods and other cultures, in purer, simpler lifestyles. In other words, the concern of moderns for “naturalness,” their nostalgia and their search for authenticity, are not merely casual and somewhat decadent, though harmless,

---

⁶ This is often referred to as ‘Disneyfication’: in architectural terms it preys on people’s fears and their ignorance of the present and on their ignorance of and nostalgia for the past. MacKenzie Town in Calgary is a paradigm example: it exploits e.g. peoples fear of neighborhood crime (despite the fact that such crime is not particularly widespread) and in a stylistic sense, it ‘references’ the vernacular of a past that never existed in that form.
attachments to the souvenirs of destroyed cultures and dead epochs. They are also components of the conquering spirit of modernity—the grounds of its unifying consciousness. (quoted in DT, p. 6)

IF EVER YOU CROSS

Grey clouds roll above
These imaginings.
Autumn leaves fall
As memory’s bare branches
Toss and sway in the wind.

But,
By the river
The leaves are green
If ever you cross....

Drifting on the night.
Sleep takes you in:
Drifting out of knowledge
Into grace.
Drifting home—
A place
Away from the longing.

And this is dismembering
The history of a life,
The meaning of a time
And place.
The memory of love found
And lost...
Bare branches toss....

Yet,
By the river
The leaves are green
If ever you cross....

Different conclusions
Confronted in the end
Than contemplated in the beginning,
Yet somehow all of them the same:
So much that is useless.
Pointless when finished:
At best you don’t remember
Or only half-recall
Why you ever started...
Swaying in the wind....

Still,
By the river
The leaves are green
If ever you cross....
In such a social and cultural climate, it should not be surprising that over the past one hundred or so years, architecture has seemed to become largely incapable of expressing the range of values and aspirations of an authentic and encompassing collective social life. Instead, architecture (particularly that architecture which evolved within the ambience of Modernism and Post-Modernism) has increasingly evolved into a ubiquitous stylistic language concerned largely with expressing the values and aspirations of a narrow ideology concerned primarily with economic and technological power. In other words, architecture can be seen to have become inseparable from the predominant concerns of late capitalist society—the domination of economic power through the promotion of consumerism and technological mastery. 7

Modernism (and the Post-modern) “emphasize transience, not permanence, quick-witted response to the unrecurring present rather than sustained meditation on the burden of fate;” as such they are essentially antithetical to memorializing which fundamentally has to do with the suggestion of values that transcend the present moment. (CB, p. 109) To memorialize is to ‘make a different claim on our consciousness’; it is to mark time in such a way that it “seems to stop, calling attention to what is of lasting interest in it—[to] what outlasts the moment of its occurrence....” (CB, p. 109) In this sense the memorial, so to speak, humanizes time.

SUMMER ELEGY #2

each summer marks the growing distance
between this life and those i have passed by
and more often now the dark birds fly above
aimless
in their migration
biding time as time abides
and the long hours unwind
‘in the brain’s grey reaches’

7 See Endnote 1.
THE MEMORIAL AS SPACE OF ABSENCE

People do not have to work at making their own humanity manifest. This observation serves to shift the question a bit from what it is to discern the humanity in a work of art to how it is that art can make humanity discernible.

B.R. Tilghman, *Wittgenstein, Ethics and Aesthetics*

Symbolization is an essential component of our emotional life and central to memory. Because we have the ability to make the associations that constitute symbolization, symbols can in turn evoke emotions. With regard to architecture, symbolization usually takes the form of an object or place that we psychologically invest with meaning. Now, when someone or something important in our lives has passed on (be it through death or just the passage of time) and is no longer present, the loss we experience is often incomprehensible, and our response is very often “to create something permanent in the belief that it will survive.” (SL, p. 157) Creating a symbolic site or object such as a memorial provides a permanent place where who or what has passed on (be it through death or just the passage of time) will be kept “truly alive in memory—alive as life is lived and felt, not just in action, but in human interaction.” (SL, p. 160) In such a place of remembering and mourning (for in this context, memory and mourning are part of the same emotional matrix), we can “recognize our loss, experience the resulting pain”, and perhaps too, begin to heal. (SL, p. 160)

ALL I HAVE LEFT

It is as if the words of this poem are all I have left of you....

With reference to architecture, the creation of a “space of absence” is a central strategy with regard to forging a psychological link to what is no longer present. In *Symbolic Space*, Richard Etlin says of a space of absence that it is “associated with commemoration” and speaks of its possessing a “mysterious solemnity that takes us out of this world into a type of limbo. It is a place of paradoxes, neither of this world nor of the next, neither the space of the living nor the place of death.” (SS, p. 172) He goes on to define a space of absence as “a void whose overwhelming message is the absence of the dead person, no longer with us in life and yet somehow present in the aura of the monument.” (SS, p. 172) Jeffrey Ochsner too, writes that is a kind of “void in which we have the simultaneous experience of both the
absence and the presence of the dead." (SL, 156) However, this “void” need not necessarily be a literal space; instead it can be a physical object with the ability to evoke this response in those who interact with it. In architectural terms, the space of absence has to do with the “basic and primal,” and defines “a place set off from the world of the living either by making a temple-like enclosure, by opening a cavity in the ground, or by gathering a dense mass of stone around a constricted area.” (SS, p. 172) Additionally, the space of absence usually employs one or more strategies such as:

- a descent into the earth;
- an ascent into the sky—a “staircase to heaven”;
- a special quality of light (and shadow-play)—“luminous and crystalline or somber and ghostly”
- a processional pathway as formal promenade (circulation and programmatic sequencing). (cf. SS, pp. 172, 186, 189; SP, pp. 37-40)

In symbolic terms, the space of absence is, in Etlin’s words, “grounded in the same intuition about abstract presence as is symbolic character” and is also “a species within the broader genus of numinous space.” (SS, p. 172) However, the space of absence differs from both symbolic character and numinous space in that it is extremely personal in subject, having to do with “the encounter of two or more spirits or souls in a way that defies reason.” (SS, p. 172)

Through the space of absence we experience the presence of that which has passed on. This occurrence is possible not because we somehow ‘find’ e.g. the deceased ‘within’ the space of absence; they ‘exist’ are only ‘alive’ in our memories. Instead, the space of

---

8 Projection should not be confused with symbolization. What we project into the space of absence, into the “void,” are our memories and feelings. A memory qua memory does not stand for anything: it is itself, an act of remembering and therefore a first order (non-reflective) act of consciousness. And while we may give symbolic significance to a memory or its occurrence (e.g. “It is telling that I/he remembered his mother just now/then”), this is itself a separate mental event, a reflecting upon the memory and thereby a second order (reflective) act of consciousness. It is the same case with regard to feeling (emotion) qua feeling: a feeling is itself and stands for nothing other than itself—e.g. feeling bereaved is not a symbol of one’s grief, it is, as it were, the grief itself—and while symbolic significance may be given to a feeling or its occurrence, this is a separate mental event, an act of reflection and thereby a second order act of consciousness.

With regard to symbols, the space of absence (whether or not it involves a physical void) is an object that need not necessarily be symbolic in itself—i.e. ‘purpose-built’, as a monument is. Indeed, it can be any object to which we relate via psychological projection. As such, it is through the act of projection itself, via our interaction with an object, that the space of absence both comes to be and acquires symbolic significance. Thus, with this latter sense in mind, memorializing need not involve a deliberately created symbolic object, but it will involve an object that, through human interaction with it, comes to be seen/recognized as symbolic.
absence is a site for projection, a site where we project our own life, memories and associated feelings, and thereby confront our own internalized 'living' representation of that which is being recalled. This representation is experienced as originating within the object, but this is actually "a fundamental aspect of the phenomenon of projection, which psychoanalysis has identified as the unconscious act of ascribing to something outside oneself, one's own ideas or impulses." (SL, p. 163) In this spirit John Berger writes that when something is no longer present, when it has disappeared:

...a struggle ensues to prevent what has disappeared, what has become invisible, falling into the negation of the unseen, defying our existence. Thus, the visible produces faith in the reality of the invisible and provokes the development of an inner eye which retains and assembles and arranges, as if in an interior, as if what has been seen may be forever partly protected against the ambush of space, which is absence." (AOF, p. 50)

Thus, we begin to see that to memorialize is not merely to create a symbolic site or object, but is to create a space of absence within which to remember, mourn, commemorate and heal; a meeting place between our imaginatively projected selves and our imaginative representation of what/who has passed on.

OFTEN YOU APPEAR

how many thoughts away is my spirit tonight....
i have almost forgotten your smile
and strain to make the image clear
    a mist
on some far
    horizon

it is well into autumn
and each successive snowfall stays
    a little longer
and i can't catch hold
of any definite feeling just now
only grey clouds
    in a grey
    sky

so often you appear in my landscapes
when the leaves wither
and sadness lingers
and bare trees are sentinels
in the wet snow....
ENDNOTES

1. In concert with this, it is a commonplace to point out that for all intents and purposes, contemporary architecture, art, science, technologies, indeed our whole range of contemporary values, has developed within the ambience of Modernism. However, almost the whole tenor of the Modernist endeavor runs counter to any conception of a present conjoined in an unruptured continuity with the past. This is particularly apparent with regard to memorializing. In relation to art, for example, the art critic Donald Kuspit points out that “[a]vant-garde art finds it hard to mourn the dead, especially in public....[T]he primary quality of avant-garde art is freshness’, but there is nothing fresh about mourning and memory." (CB, p. 109)

I believe that with regard to architecture over the past century or so, the case is exactly similar. Modernism, one might say, is an ideology that has always been oriented to the moment, not to eternity, as almost the entirety of pre-modernist tradition was. (This attitude comes out even in our attempts to interpret past structures. For example, it is very probably true that Stonehenge itself was an observatory, but it was so “not in our modern sense of a place to discover the new," but rather, an observatory in the sense of a site to embody knowledge of the sky won over centuries, if not millennia....” (DT, p. 20) Note the difference in the meaning of the verb ‘to observe’, meaning in one sense ‘a place from which to see and discover’ and meaning in another sense ‘to mark a remembrance’ (as in e.g. to observe an ancient rite). It is this latter, non-modern sense that I want to argue is deeply central to a proper understanding of what it is to memorialize.) Modernism stresses the necessity of being avant-garde and in being so, instantiating the future in the present. The ‘shock of the new’ at the forefront of the advance into the future and the idea of permanent revolution are the operative creed—“ever more accelerating, finally chaotic change, that is change for the sake of change, bringing with it the fear that if one looks back one will turn into a dead pillar of salt.” (CB, p. 109)

Seen in this light, in many ways architecture seems to have become a major form of social legitimizer: it is one of the chief means by which the economic and technological power of the day, and those who acquire and control it, are given an image of respectability and inevitability. It is commonplace that nearly every society has used architecture as a tool to express, glamorize and legitimize power and the individuals who wield it. However, what seems to be unique in the case of Modernist (and Post-modernist) architecture is that through contemporary society’s emphasis on the idea of creating the future-in-the-present, and a valorization of concepts such as ‘the new’, ‘progress’ and a concomitant fetishization of function and technology, architecture itself has become self-legitimizing. It is thus because not only is what is new automatically thought to be ‘good’ and ‘better than what has come before, but what is seen as technologically advanced is perceived in exactly the same way. (This Modernist view tends to run counter to the underlying values I shall attempt to discover over the course of this inquiry into the nature of memorializing. These values have to do with notions of timelessness and, as was said in reference to Jazz musician Stan Getz, have also to do with believing “in the power of beauty instead of finding beauty in power.”) (Leonard Feather, notes from the CD: The Dolphin.)

From the beginnings of modernism in the nineteenth century, critics have sought to undermine the very notion of timelessness. It is argued that all cultural works, except monuments and memorials, are essentially and necessarily mutable. But memorials “give a false sense of continuity,” and “insist that remembrance remains inert, moored in the landscape....” (DT, p. 7) In this spirit, Lewis Mumford
wrote that "monumentalism" was dead, adding that "If it is a monument, it is not modern, and if it is modern, it cannot be a monument." (DT, p. 7)

What has been called "Post-modernism" is equally unconcerned with memorializing. (Postmodernism seems to me simply another instance of Modernism's extraordinary ability to mutate into new forms whilst leaving its essential axioms virtually unchanged; it seems more a rapidly passing fashion, a question of mistaking a "momentary cultural exhaustion" for a fresh and innovative cultural paradigm. (cf. DT, p. 8)) Post-modernism essentially parallels the Modernist endeavor in fetishizing such concepts as 'progress,' 'newness,' 'change' and 'technology,' and under this guise, retains an essentially avant-gardeist concern with creating/expressing the future-in-the-present. Post-modernism's concern with the past has to do with transmogrifying past ways of seeing and being-in-the-world into mere historical styles—the ironic reference—wherein the (architecturally or artistically etc.) instantiated values of the past become simply a locus of shallow reference within an otherwise meaningless pastiche of empty signs.
CHAPTER 2: TOWARDS A PHENOMENOLOGY OF MEMORIAL

Remembrance,  
the invocation of a loss;  
what no longer is  
exists only in  
memory.

The eternal present:  
through memory  
a symbiosis  
of what comes to be  
and what has passed  
away.

What has passed on  
is a part of both what is  
and what is coming  
to be.

Through memory,  
the past and the present acquire  
resonance, meaning,  
consequence.

To remember  
is to conceive a memorial  
and to defeat  
time.

LOST  
NOW  
PAST  
MEMORY  
TIME  

MEMORIAL
THE ORIGINS OF ALIENATION

Poetry can speak of immortality because it abandons itself to language, in the belief that language embraces all experience, past, present, and future...[and] it is precisely the coexistence of future, present, and past that poetry proposes.

John Berger, And Our Faces, My Heart, Brief As Photos

Humans are unique among living beings in that they constitute two events, each corresponding to a form of time. The first event is that of our body and the time during which we are conceived, grow, mature, age, and die. The second event is that of our consciousness, and the corresponding time of consciousness. In terms of lived experience, human beings are the locus of these two times, and in recognition of this reality we distinguish between body and soul. (cf. AOF, p. 10) John Berger writes:

The first time understands itself. Which is why animals have no philosophical problems. The second time has been understood in different ways in different periods. It is indeed the first task of any culture to propose an understanding of the time of consciousness, of the relations of past to future realized as such. (AOF, p. 9)

But contemporary culture seems either to have lost the ability to produce such an understanding or has failed to see the necessity to do so. At one time culture valued history as the guardian of the past, but from the advent of modernism, Western culture particularly began to see history primarily in terms of the relation of present to the future. History is no longer conceived as a recognition of the changeless but as the story of progress, both sociopolitical and especially technological. (cf. AOF, p. 12)

As a result, we now live in a new temporal dimension, particularly with regard to collective social life. Society used to offer an example of relative permanence, but it has now become the guarantor of impermanence. Consequently, we find ourselves more alone than we used to be because "[n]o social value any longer underwrites the time of consciousness. Or, to be more exact, no accepted social value can do so." (AOF, p. 12) We are estranged from where we have been, and thus from where we are now; we have lost the capacity to be at home.
INVOCATION: REST (Requiem I)

the present surrounds us
though we desire the future
wanting visions to fill our eyes
show the days ahead
and set our longing free

needing rest
and mercy in this world
maybe finding some small light
in the darkness

In this light, we are brought to the commonplace observation that humans are, in an existential sense, alienated, homeless in the cosmos and on the earth. The Greek word *Alienus* means 'a stranger,' and a stranger is someone who is not at home where they are. (cf. IT, pp. 133-4) Even in our relatively stable society we live in a state of continual mobility. People move from city to city, city to suburb, suburb to suburb, our houses often more wayside stations than homes. Indeed, a compelling metaphor for what life in contemporary “global society” has become is that of the airport, with its unceasing traffic of arrivals and departures.

We are homeless, then, and according to Heidegger, homelessness is the destiny of modern man. Such alienation, he argues, comes about fundamentally through the relation between humanity, technology and Being: though we have attained a mastery over beings, in doing so we have lost the sense of Being itself—a loss of meaning that technological thinking leaves us unable even to grasp. (cf. IT, p. 134)

The philosopher William Barrett touches on this point when he says:

After the first space flights another metaphor for our earthly existence became current. We were here on earth like voyagers on a spacecraft [Marshal McLuhan’s metaphor of ‘Spaceship Earth’]….In the technological era it is natural we should find a technological image for our terrestrial existence...[but] from the moment we think of our life on this planet as a voyage in a spacecraft through empty space, we have ceased to dwell on this earth as men once did. (IT, p. 134)
ALIENATION, MYSTERY AND PRESENCE

The solution of the riddle of life in space and time lies outside space and time.

Ludwig Wittgenstein, *Tractatus Logico-Philosophicus*, #6.4312

If everything behaves as if something has meaning, then it has meaning.

Ludwig Wittgenstein, *Philosophical Remarks*

The source of our alienation and homelessness lies hidden at the core of the question: 'What is truth?'. Barrett compares modern people to characters in a Kafka story haunted by some transcendent world, by that sense of 'otherness' inherent in Being, in all that *is*, the presence beyond our own banal world. Yet we are perpetually defeated in our every attempt to make contact with it in that the more we try to grasp presence itself, the further it recedes. (cf. IT, p. 63) Presence remains ungraspable because it is not itself in time or space; it is only manifest through time and space. Thus presence is not the temporal *now* of the instantaneous moment in time, because the *now* is manifest only within and through presence, and thus can never serve to define presence. Instead, presence as atemporal is the perpetual *here and now* (the *hic et nunc*) of felt experience, lived-being-in-the-world. In other words, “[being manifests itself as presence,]” as disclosure itself. (IT, p. 146)

Being *is* there, always, pervading the everyday world. And yet, as Barrett points out:

We have to speak of this IS which is not in the least like any distinct entity or thing, which has no definite characteristics, qualities, or relations like a thing; and we are to speak of it in a language geared to things, qualities, and relations. And yet it is only in the light of this IS that we can talk at all about things, qualities, and relations…. (IT, p. 147)

Here, at the core of truth itself, that “most luminous and evident of all things” is a mystery before which we stand as aliens, homeless strangers in the world. (IT, p. 147) But perhaps we ourselves have freely chosen not to be at home with it.
Memorializing the Loss of Genetic Diversity: A Genetic Archive and Memorial for Calgary

Chapter 2: Towards A Phenomenology of Memorial

KING OF MAJESTY (Requiem V)

always there
as you have always been
all language names you
questions you
and even if they're wrong
we give answers
some human gesture to ease the fear
of what's unknown and what's unseen within—

vertigo

we slip
and fall

reaching for the infinite

Heidegger argues that: the fundamental human freedom is our freedom toward death. In the light of that freedom "we can take upon ourselves, as authentic humans, whatever decisions and tasks fall to us in the ordinary course of life." (IT, p. 139) There resides here the intimate relation between freedom and truth. As Barrett puts it:

We must be free for the truth; and conversely, to be able to be open toward the truth may be our deepest freedom as human creatures. The capacity for untruth is not a mere private matter of personal psychopathology. Truth harbors within itself the tragic possibilities for untruth because of its intrinsic connection with freedom....Thus truth and untruth are inextricably mingled not only in...deeds...but also in our theoretical efforts to understand. (IT, p. 149)

For example, a new scientific theory can blind us for a time to other things in our world. Indeed, the more spectacular and comprehensive the theory seems, the more likely we are to indulge in our all too human tendency to oversimplify, "twist all the ordinary matters of experience to fit into the new framework," and chop off whatever does not fit. (IT, p. 149)

In so doing, we take what can only ever be a partial truth and make it total; in a very real sense, we become "totalitarians of the mind," but with ourselves as our own victims, "for we have imprisoned ourselves in a total ideology beyond which we cannot see." (IT, p. 149) In twisting the world to fit into such a self-imposed framework we lose the freedom to let things be what they are, in all their mystery and otherness, in all their presence. Yet we ourselves have freely chosen to surrender this freedom.

---

1 One is here reminded of Sartre: 'there is no reason, other than our aesthetic biases, why the universe should be simple rather than complex!'
CRY (Requiem II)

learning to know myself
know what that means...
sometimes knowledge deceives us—

though i never thought i'd be this lost

knowing i love
and knowing yet
how little of love i know
how little of love
how little
love

We have surrendered our freedom because humans "cannot abide to stand within mystery, and so must have a truth that is total." (IT, p. 150) But at the same time we cannot escape this mystery; it stands at the core of the nature of truth, and as such we are always within it and its presence is presence itself—Being. (cf. IT, p. 153) So if we let this presence recede altogether, if we make ourselves so alien to Being that we forget it, then we are all the more likely to succumb to the ideological deception of one totalized truth or another (including the ideology of skepticism).

Yet such deception can be overcome because the reality hidden behind presence is, at the same time, also manifest through it. As Barrett points out, "[o]nly by the light of one presence can we correct the deception that may be harbored within another." (IT, p. 151) It seems a disagreeable situation to be in, that we reside in and yet cannot escape this mystery. It seems more disagreeable still that not even science can alter or alleviate this existential factum of human existence. Science functions by proceeding from the known to the unknown; but both what is known and unknown are grasped precisely within the mystery itself; as such, any future attempt at analysis may "refine the language by which we elicit the mystery but will never abolish it." (IT, p. 153)

LORD (Requiem IX)

this longing for something beyond
living solitude
through to some deeper mystery
yet uncertain the mystery deepens
or my awe of it—

these thoughts step into darkness
moving with purpose though i am lost
And here the matter comes full circle back to the question of alienation. Because the mystery opens only to human beings, humans are strangers in the universe in a way that no other animal can be. This is our ultimate alienation—that we are estranged from Being. However, as Barrett points out, there is room for optimism:

We may chatter about alienation as a cultural or social phenomenon, but all such talk falls short of the deepest dimension in which man is a stranger in his universe. And yet this dimension of strangeness is the peculiar home where he is drawn closest to all that is. (IT, p. 154)

**LANGUAGE, BEING AND TRUTH**

The sense of the world must lie outside the world. In the world everything is as it is and happens as it does happen. In it [the world] there is no value—and if there were, it would be of no value.

---

**Ludwig Wittgenstein,** *Tractatus Logico-Philosophicus* #6.41

One thinks that one has traced the nature of a thing when really one has traced the frame through which one sees it. And when one draws a boundary, there could be many reasons.

---

**Ludwig Wittgenstein,** *Philosophical Investigations*

[L]anguage is the defining mystery of man, ... in it his identity and historical presence are uniquely explicit. It is language that severs man from the deterministic signal codes, from the inarticulacies, from the silences that inhabit the greater part of being.

---

**George Steiner,** *Language and Silence*

What allows us to ‘draw close to Being’ is language. Language has the ability to connect things: “[a] word, any word, perpetually sends out tentacles of connectedness everywhere.” (IT, p. 168) Language too, allows “that peculiar interlinking of the actual and possible that is the mark of human being as distinct from the being of things.” (IT, p. 171) Indeed, certain uses of language can be likened to love in that both bring together what has been separated. Language connects because it is the locus of truth and in a somewhat different way (to be discussed later) of meaning. As such, language functions primarily by uncovering something in the world, by bringing what is hidden into the open, and language has this capacity only because it itself transpires within the open world.
MEMORIALIZING THE LOSS OF GENETIC DIVERSITY:
A GENETIC ARCHIVE AND MEMORIAL FOR CALGARY

Chapter 2: Towards A Phenomenology of Memorial

When truth happens...some portion of the world...has become illuminated. If we go looking for truth inside the mind we shall only find the mind already outside of itself in the world. When a new truth arises to change our minds, as we commonly say, it does so only in that it changes some portion of the world for us. (IT, pp. 141-2)

What is called poesis or the 'poetic' is the broadest, most inclusive and most potent conception of 'language' with regard to languages' ability to provide a home for humanity within Being. By 'poesis' I mean to include not only poetry—the linguistic expression of the poetic—but the other art forms as well—music, visual art, architecture, theatre, dance and literature (and perhaps philosophy)—because, in their existentially authentic forms, these too constitute poetic acts and discover, create and express meaning. As such, they are also 'languages' with the ability to shelter humanity within Being. Potentially, poesis (as with any form of language) is complete: "it has," Berger writes: "the potentiality of holding...the totality of human experience—everything that has occurred and everything that may occur. It even allows space for the unspeakable." (AOF, p. 95) Potentially too, poesis is the only human home, the only unhostile dwelling place for humanity. The poetic impulse and insight, especially as instantiated in the arts, is crucial because its task, as Berger writes:

...is to bring together what life has separated or violence has torn apart. Physical pain can usually be lessened or stopped only by action. All other human pain, however, is caused by one form or another of separation....(AOF, pp. 95-6)

JANUS

Between.
We are ever between
sky and earth,
love and desertion,
prayer and blasphemy....

Always
facing both:
twin poles
of the human
compass.

Poesis lessens human pain through its ability to reassemble what has been scattered, by 'defying the space which separates.' (cf. AOF, p. 96) Thus by helping to lessen human

2 In other words, through the use of metaphor (= a porter, to carry over, transport), poetry discovers meaning through resemblance, correspondences between experience and experience, experience and thing, thing and thing which, taken all together "would be proof of the indivisible totality of existence." (AOF, pp. 96-7) And, as we shall see, in relation to issues of truth this is crucial because
pain, the poetic brings “a kind of peace” through recognition of experience and through the promise that that experience will not disappear as if it had never been. The promise of the poetic act is that of a remembrance such that the experience has been acknowledged and given a home. *Poesis* accomplishes this because underlying the poetic impulse is the proposition that *poesis* is a place where time has no finality, and where time is encompassed and contained. As well, inherent in the poetic act as an act of remembrance and sheltering, is the faith that *poesis* has the capacity to embrace all experience, past, present, and future and the proposal that through its ability to connect what has been separated, past, present and future coexist. (cf. AOF, pp. 21-2) As will be seen shortly, it is because of its capacity to bring together and to be a place where experience and time are reconciled (thereby lessening human pain), that poesis and the concept of ‘memorial’ are inextricably linked.

**BLESSING (Requiem XII)**

‘history is time
and myth is space’
the inseparable place within which
unknowing
we bless another’s life with our own
shape being with our hands
and live in grace—

too often
too much of what we love is all around us
unfathomed

only resemblance allows things to retain their individuality and particularity without making comparisons (which are by nature hierarchical) or diminishing that particularity. (cf. AOF, p. 97)
Part II

CLIMB THE DARKEST HOURS

All my lost brothers and sisters,
tonight you walk the twilight roads of my thoughts,
swim cool, new moon seas,
climb the darkest hours like the hands of a clock
-reaching for midnight.

MEANING AND LIVED EXPERIENCE

Silence is a logos.

Apollonius of Tyana, quoted in Real
Presences

A sentence always means more....No formalization is of an order adequate to the semantic
mass and motion of a culture, to the wealth of denotation, connotation, implicit reference,
elision and tonal register which envelop saying what one means, meaning what one says or
neither. There is a palpable sense in which one can see that the total explicative context, the
total horizon of relevant values which surround the meaning of any verbal or
written utterance is that of the universe as human beings, who are beings of speech, inhabit
it....Hermeneutic and evaluative propositions are not, as logicians put it, candidates for truth-
values.

George Steiner, Real
Presences

What we cannot speak about we must pass over in silence.

Ludwig Wittgenstein, Tractatus
Logico-Philosophicus, #7.0

Mystery breaks out in full daylight.
The mysterious is confused with darkness and obscurity.

George Braque, Notebooks.

And this is how it is: if only you do not try to utter what is unutterable then nothing gets lost.
But the unutterable will be—unutterably—contained in what has been uttered.

Ludwig Wittgenstein, from a Letter
to Paul Engelmann, 1919.
Meaning, conceived as the texture of our felt experience, and thus the heart of all our individual existences—in other words meaning-as-presence, Being—is something essentially unsayable. But at the same time meaning shows itself, as it were, on the face of things—it is the physiognomy of a work of art or architecture (as it is of all phenomena). In other words, meaning is revealed in experience, shows itself to our perception of the world; and in terms of both insight and creation, art (and architecture), as a poetic act and thereby a form of poesis, is the one phenomena that most facilitates this showing. Art/poesis shows what is unsayable by ‘allowing space for the unspeakable’, embracing and connecting past, present and future.

This is therefore not to say that what is unsayable—meaning—does not exist. But it is to say that in respect to our lived experience, meaning lies outside the limits of mere linguistic, non-poetic, sense (with all this implies vis à vis logic and logical form). Instead, meaning in the world shows itself in those moments we experience when we are momentarily ‘off guard’, so to speak, against the world; moments, we might say, out of time and disengaged from our usual ego-bound consciousness. In other words, meaning lies outside the limits of what language can say, though not outside the limits of what poesis can show, and I want here to argue that poesis (which includes architecture and art) is the only human phenomena with the capacity to show meaning in our lives and in the world, without attempting to say it. A mother first beholding her new-born infant, a young child caught in the wonder of a new experience, a lover lost in the sensation of their beloved, a person reflecting on a memorial, a viewer suspended in rapt contemplation of an art work—these moments, and their like, are the true history of the human spirit, the soul’s history as, in T.S. Eliot’s words, a “pattern of timeless moments.” And when some new aspect of the world dawns upon us—perhaps a work of architecture or of art, or an experience or an idea has led us to see something new or in a new way—the world becomes deeper, richer, and we with it.

---


4 In a sense then, what I am trying to say here with regard to the relation between meaning and lived, felt experience (“lived being-in-the-world”—“le vécu”, as Sartre puts it) is to make a foray into territory about which nothing intelligible can ultimately be said. It is, as Eliot writes, “a raid on the inarticulate, with shabby equipment always deteriorating.” (Eliot, T.S. “East Coker”, *Four Quartets* by London: Faber & Faber, 1944, lines 179-80) And what I want to say here too, is neither science nor philosophy. In other words, in no way is it an attempt to systematically advance and prove an hypothesis or a series of logically successive interrelated propositions about the nature of my subject. Nor should what I want to say in this regard be itself construed as poetry—a work of art using
MEMORIALIZING THE LOSS OF GENETIC DIVERSITY:
A GENETIC ARCHIVE AND MEMORIAL FOR CALGARY

Chapter 2: Towards A Phenomenology of Memorial

Perhaps what I have been calling the 'limits of language' (the limits of what language can say as opposed to what poesis can show) will be made clearer when we consider the following. Things have a specific meaning insofar as they point or refer to other things or to behavior that they elicit from us. As such, meanings are best conceived first and foremost as in the world, not in the mind, "in the linkings and interconnections of things we find there." (IT, p. 170) Signs and symbols too possess meaning not by virtue of being mental phenomena (existing in some distinct mental realm) but as aspects of things we encounter and have to deal with in the world. (cf. IT, p. 137) Wittgenstein writes:

Again and again there is an attempt to define the world in language and to display it—but that doesn't work. The self-evidence of the world is expressed in the very fact that language means only it, and can only mean it.... As language gets its way of meaning from what it means, from the world, no language is thinkable which doesn't represent this world. (PO, p. 193)

That the world is at all, is mystical (as Wittgenstein puts it), but it is not mystical that nothing meaningful can be said about this mystery. We humans are beings of time, place and context. The very fact that our words and concepts mean anything is through their use in an environment of language, culture, custom and practices. Thus, no matter how completely we explicate in words the meanings we use, we remain immersed within a context of meanings. That is to say: all meaning takes place in the world, which is, of course, precisely where language itself originates. And language always speaks within this finitude of the human condition. (cf. IT, p. 169) If one could step outside, so to speak, and view the world sub specie aeterni (from the point of view of eternity)—free from all the constraints of our humanity—then there would be no mystery, nothing unsayable. But then, there would be no way to communicate this either. (cf. also Tractatus Logico-Philosophicus, #6.41, also #’s 4.12, 6.124, 6.45, 6.5, 6.52, 6.522)

Perhaps this can be made clearer through an analogy. When we see, we do not see ourselves seeing; in other words, the visual field is not itself perceivable, it has no owner. There is just perception and we have no access to the perception of ourselves perceiving. Thus the limit of our perception is the limit of the world: we are the limit of the world, each of us at every moment. But what we perceive always surpasses what we can say about it. I don't mean "surpasses" in the sense that if we had a larger vocabulary or a more complete language, that shows what is unsayable without actually trying to say it—though it is closer in spirit to poetry in that it is an attempt to speak of something from a perspective that lies more within the purview of art and lived experience.
language, then we could say all that we perceive. I mean that perception surpasses language in the sense that what we perceive cannot be translated without remainder into another medium (in this case, words). Here, in part, is what is mysterious or unsayable about the world. But there is something deeper to this mystery than merely having an untranslatable remainder, a residue of experience that we cannot put into words.

Perhaps it is appropriate at this point to say a little more about the distinction between "saying" and "showing" that I have been invoking. This was first formulated by the philosopher Ludwig Wittgenstein to argue that even if we could invent the most logically perfect and complete language with which to describe the world, a language that could completely elucidate all states of affairs—all facts—we would, first of all never know if and when our description was complete. Secondly, the fact that the world is would itself not be part of that description, and thirdly, both value and the meaning or the sense of the world would lie outside the limits of that language, and therefore outside the world.

It is beyond our scope here to examine Wittgenstein's arguments further. Suffice it to say that the distinction between saying and showing—the argument that from the perspective of lived experience, meaning is something whose sense lies outside the limits of language and to which we can, at best simply point to and say: "Look! See for yourself."—is a distinction profoundly at odds with the current spirit of our civilization. This spirit holds that all questions are ultimately answerable and all phenomena ultimately explainable, through the application of science and technology. It holds too, that information is knowledge and expresses this ideology by "building ever larger and more complicated [intellectual] structures" to explain things. It is a spirit whereby we try to "grasp the world by way of its periphery—in its variety...adding one construction to another, moving on and up, as it were, from one stage to the next." (PR, p.7)

The spirit behind Wittgenstein's distinction between saying and showing, and which underlies this Masters Degree Project is, to the contrary, one that strives for "clarity and perspicuity in no matter what structure;" it ties to "grasp the world at its centre—in its essence." Thus, it is a spirit that, so to speak "remains where it is and what it tries to grasp is always the same." (PR, p. 7) Eliot expressed this spirit when he wrote:

---

5 What would the concept of a more "complete" language be? How do we make sense of the notion that e.g. English is somehow incomplete and that more words would somehow complete it?
MEMORIALIZING THE LOSS OF GENETIC DIVERSITY:
A GENETIC ARCHIVE AND MEMORIAL FOR CALGARY

Chapter 2: Towards A Phenomenology of Memorial

There is only the fight to recover what has been lost
And found and lost again and again: and now under conditions
That seem unpropitious. But perhaps neither gain nor loss.
For us there is only the trying. The rest is not our business.⁶

Perhaps an example from everyday life will help to further clarify the distinction between “saying” and “showing”: a smile on a human face. Another person smiles at us and we know that smile to be amused or cynical or enigmatic or affectionate or lustful or loving etc. The smiles’ meaning is, so to speak, given with the gesture of smiling, within the context of a particular face. It is not the case that we deduce the meaning or sense of that smile from e.g. the position of the corners of the mouth relative to the eyes and nose—we don’t say to ourselves something like: “Ah, the position of the intersection of the upper and lower lips has shifted upwards from the horizontal by 20° of arc, therefore it is a smile of amusement.” Instead we simply know the smile is one of amusement. The smiles’ meaning, we could say, is the physiognomy of the very gesture of smiling itself.

If we are asked to describe the meaning of that smile further, not even a complete description of the smiling persons’ face in terms of the relative position in time and space of all its elements would elucidate the smiles’ meaning any more completely. Instead we might make a picture, invent a metaphor or make some other gesture to try and convey the sense of that smile to another person. Or we might simply say: “Look for yourself!”

An anecdote from the world of music might be helpful in elucidating this last point. The composer Robert Schumann once played a new piano composition to a group of listeners at an informal get-together. When Schumann finished playing the piece, someone asked him what it meant; his reply was to play the piece over again. Meaning, then, is here conceived as the physiognomy of what appears—a gesture, a word, a thing such as a work of architecture or an artwork—and the meaning which shows itself in a building, in an artwork, on a face, in a poem or novel, always exceeds what we can meaningfully say about it. This is the mystery and the silence at the heart of the world, of poesis and of works of architecture and of art.

Rather than attempt to give instruction on how to look at architecture or art or how we might

begin to understand it (and perhaps ourselves) better or further, what I want to say is on the order of a reminder. I want to remind us of the mystery that the world is, which is the original point of departure for all human endeavor by way of architecture, art, philosophy, science and religion. These are first and foremost gestures by which the human spirit responds to what cannot be said—gestures that attempt to show, or that point to, the mystery of Being that surrounds us and that is within us at all times and in all places.

In confining ourselves merely to the ego-bound horizon of the who, what, when, here and now—we confine ourselves to the limits of ourselves. But when a building, a space, a work of art, a smile, a gesture ‘connects’ with us, if we put our selves aside temporarily, this connection can allow us a glimpse of something within and beyond ourselves. And that glimpse is a momentary victory, to re-quote Eliot, in “the fight to recover what has been lost and found and lost again and again,” by every individual and every generation and civilization throughout the history of the human spirit. But also, as Eliot has said, perhaps this finding and losing is neither a gain nor a loss to us, because the answers to the questions of life lie in the essence of living—in the journey and not in the destination. Thus:

For us there is only the trying. The rest is not our business.

DECREE

Words cloak these mysteries
in an imaginary night;
a place of secret thoughts
and dark shadows,
lit by a winter moon.

Yesterday
I decreed that only a train of thought
may carry cargo.
Part III

MEMORY, ENTROPY, REPRESENTATION AND DEATH

AND NOW I AWAIT (Version II)

'this is a love poem for a time'
memory's eternal present turns full circle
and now i await this autumn's first snow
as i have always done
though not aware of waiting

watch
leaves

turn

and gage the weight of their fall
the distance of their twirling drift
slow
settling as they touch ground
and feel scattered as they scatter
across the grass
desperate to catch what passes
as it passes away
'this is a love poem
for a time
moments the world lay open
to the mind'

At the moment of revelation when appearance and meaning become identical, the space of physics and the seer's inner space coincide: momentarily and exceptionally the seer achieves an equality with the visible. To lose all sense of exclusion; to be at the centre.

John Berger, And Our Faces, My Heart, Brief as Photos

There is an interesting meeting point between the principle of entropy (the second law of thermodynamics), how primitive/ancient peoples conceived the cosmos, and the idea of memorial. Science posits that the cosmos is gradually moving from a state of order to one of disorder—to chaos. Eventually the universe will cool to absolute 0° K and become an utterly still and changeless void. The ancient Greeks, those intellectual and spiritual precursors to all of Western civilization, believed something similar.

To ancient Greeks, the divine energy, the movement that causes things to appear before us
and then disappear into the absence of time past was *pneuma* (= wind or breath, that which comes and goes). If man does not "offset this downward drift [into absence] and help *pneuma* in its renewal of life by participating in its comings and goings", then all that is will eventually drift into nothingness and the cosmos slide into chaos. It is through "re-membering the important things that have been, by re-calling them from the past to the present with the magic of re-presentation," that we can retain what appears to have passed away, and actually assist in its reconstruction and repair. (OS, p. 176) Thus memory has/is the magical power to recall and repair/renew what is past and save the cosmos from its "natural" drift into absence or chaos. "To put it simply, without the magic of memory, time would appear to be irreversible, and everything would drift into death." (OS, p. 176)

The Greeks (and other ancient and primitive peoples) recognized this tremendous capacity of the mind and its powers of representation "to neutralize time's tendency to obliterate the past." Indeed, in most cultures throughout human history, recalling the past through dream, trance, ritual, and art has been "central to the maintenance of cultural and personal sanity." (But in modern, "progressive" Western culture, the past has been discredited, "and only in the West have certain kinds of cultural and personal insanities consequently flourished." (OS, p. 177)) It is perhaps a sobering thought that forgetting means not only the death of what has been forgotten, but it also means death for those who forget.

**REMEMBER (Requiem VI)**

you are too present this day  
your face above me weeping  
always weeping  
and every tear seems another year gone  
i remember you held me once  
and the anguish i was keeping  
slipped away  
spinning  
into the downturning  
spiral of past
MEMORY AND TRUTH

Wherever there is disclosure, there is truth. To be in a world—any world—is insofar fourth to be in the truth.

William Barrett, *The Illusion of Technique*

In Greek mythology, *Mnemosyne* is the mother goddess of Memory. She is daughter of Heaven (*Ouranos*) and Earth (*Gaia*), associated with water, and is mother of the nine dancing Muses. (cf. OS, p. 317) It is *Mnemosyne* and her daughters who supervise the magical arts and crafts of remembrance that keep us and all those who have gone before us safe from the lethal waters of *Lethe*, the river of forgetfulness.

For the ancient Greeks, there is also a very special relation between memory and truth. Strictly speaking, the Greeks did not have a word for “true.” The Greek word we translate as “true” is *alethes* (= unhidden, evident, manifest, open, present). (cf. IT, p. 145) This word does not speak of the correspondence between a statement and a fact, between a mental judgement and a thing, between an ideal content and the matter of perception. In other words ‘truth’, in this sense, is not a question of a proposition’s being isomorphic to the world—a one to one, point by point correspondence to objects or states of affairs. *Alethes* speaks only of something that has emerged from the hidden into the open. (cf. IT, p. 144)

At the same time, in their word for “truth,” the Greeks hit upon something deeply insightful: they kept the negative form—*A-letheia* (= unhiddenness, to pass into the light, into unconcealedness, a clearing in the forest)—and, unlike other Indo-European languages, did not gradually pass over into some directly positive form like the English “truth.” This is because the Greeks were very aware of why the *Letheia* (hiddenness) was to be preserved within the same word for the luminous and evident. The use of a positive form suggests a state or condition that has divested itself of any reference to its hidden opposite, but the privative word of the Greeks conceives of truth as the deprivation, the wrenching, or tearing something out of hiddenness; and in such a way that the hidden mystery persists in and through and around what is disclosed. (cf. IT, p. 153)

In other words, for the ancient Greeks, darkness and light, untruth and truth are always...
commingled. In this regard, they were very aware of the human propensity for truth and untruth such that only a creature capable of truth is also capable of lying or deliberately deceiving himself. But in their deepest cultural self-concept, the Greeks were people of the light, and held that within each human being was a fragment of the divine light. Indeed, the older poetic word for man is ἅλος (= a mortal creature of the light), and the root for “light” runs through their verbs for speaking and saying—to utter something is to bring it into the light. (cf. IT, p. 148) Thus for the Greeks it is we humans who, through language, reveal truth and at the same time, it is truth that keeps us from drowning in the deadly waters of Lethe by allowing things to appear, to ‘shine forth’ (ἐπιφαίνω) “as they truly are and should be, cleared from the polluting waters of ignorance and forgetfulness. By thus saving and renewing the cosmos, one also saves and renews oneself.” (OS, p. 177)

Because truth is disclosed through language, and by ‘language’ I mean here particularly, but not exclusively, poiesis—the poetic ‘languages’ of all the arts—truth is also intimately tied to memory in that to speak or show—e.g. through architecture or art—the truth is to bring things out of forgetfulness (Letheia: darkness, hiddenness) and into remembrance (Aletheia: the light of disclosure). Thus language/poiesis, so to speak, is memory at work. This ties to a point of Wittgenstein’s about memory. In the Philosophical Investigations (II, xiii), he argues that remembering is not something mental, but is something in the world. In other words:

To remember is not to experience a subjective mental state, a memory content, from which the past is inferred....A statement about yesterday is a statement about yesterday, not about my mental content today. The past, as direct referent, is preserved in my present language. (IT, p. 174)

Thus, the copresence of past and present is made possible through language. Yet as an activity, as a “form of life” (Wittgenstein’s term), language is essentially open-ended toward the future. As such, language and most particularly poiesis—as embodied through the poetic act—is “memory cutting a path through the present toward the future, but in such a way that it gathers the three together into itself.” (IT, p. 174) In other words, memory is a necessary condition for meaning in the world.
FRAGILE

i have packaged
each of my thoughts of you
in little cardboard boxes
sealed with tape and string
addressed to an unknown destination
and marked
FRAGILE

MEMORY, TRUTH, AND THE BEAUTIFUL

In ancient Greek, the verb for 'calling' is kāleo, and in the middle-voiced perfect tense (= to have been called) means "to be." The kal- root in kāleo is the same as in kalos (= beautiful or good), which suggests that in the beginning, what it is that the gods call forth is the goodness of the beautiful, and this is the kosmos (a term that, in its etymology, includes the idea of beauty). Thus, within the cosmos, individual things are called upon to 'appear' (epiphainein = to shine forth). (cf. OS, p. 320) To appear, to shine forth, presupposes an encompassing darkness (or chaos) from which the shining thing emerges. This darkness is the primordial chaos, which is equated with forgetfulness. Such appearances, like e.g. the stars, the sun or indeed, the birth of a child, have always been thought exemplars of beauty, and are surrounded by an aura of divinity and sacredness (as the term "epiphany" indicates). When this is combined with the fact that those beautiful things which appear in the cosmos are mortal and soon pass away, "one comes near the notion that things that are named into being are called forth from their usual hiddenness to shine forth in their beauty. Thus, in the beginning the real is the beautiful...." (OS, p. 320) Such a shining forth from out of darkness and chaos and into unhiddenness is, as I have previously pointed out, that which is true. So in the relation of Aletheia and poiesis, what shows itself through the poetic act, is not only what is true but what is beautiful.
BEGIN AGAIN (VERSION II)

begin with an image
   late evening snow
   the weightless sparkle
   as flakes catch the light
falling
   falling as our own purpose
   falls
   away
reflecting
   for an instant
   some
   other
   intention

begin with a future
   that only the poem foretells
where only the landscape rhymes
   with next day’s dawning
   and the small birds
   that outlast winter

begin with a word
   ‘am i my own last word?’
sometimes within the speaking voice
there is a truth to live by
   and the last judgement is that
   what we are
   and what we say
   are the same

begin with a landscape
   all the wilderness i have lived
begin again

i dreamed this poem long ago
   ‘i wanted a portrait of a man
   so perfect it was weak in his weaknesses’
it always comes out wrong
and all the time piecing together words
images
   occasional glimpses of the larger fragment
of what could be
were i
   less
   incomplete
begin with beauty
    the melancholy longing when you find it
    in a face
in such moments we see perhaps
    a reflection
of what we cannot touch in ourselves
    and the grace we grant another

MEMORY AND MEMORIAL

An angel in white stone, whose wing tips merge, in the winter light, with the high hawk-colored cliff behind the village—this stone angel holds the wrist of a soldier, whose legs have already given way, and who is slumping into death. The angel does not save him, but appears somehow to lighten the soldier’s fall. Yet the hand which holds the wrist takes no weight....If his fall appears to be lightened, it is only because both figures have been carved out of the same piece of stone.

On the plinth below are inscribed the forty-five names of the men who fell in the war between 1914 and 1918. Then on another face of the plinth, twenty-one further names were added after the Second World War. Seven of these last were deported and died in German concentration camps, others were machine-gunned within earshot of the war memorial. All were in the Maquis....

Amongst these men, many, at different moments, had a vision of a morning in the future when they would walk again, indelibly scarred but carefree, through the village of their country which had been freed. The stone angel, if she represents anything, represents that morning.

John Berger, from And Our Faces, My Heart, Brief As Photos

The vase gives a form to the void,
    and music gives a form to silence.

George Braque, Notebooks.

The connection of the real, the beautiful and that which shines forth to the concept of ‘memorial’ is intimately related to the concept of truth as Aletheia, and takes as its starting point the ancient Greek god Hermes. Hermes’ name is derived from herma (= stone heap or standing stone), and the major gift he has to bestow on man is luck. He is the also the god of wild and lonely places, those boundary zones between the known, sacred and cultural space—the world—and the dangerous and unknown profane space surrounding it. Barrett writes that: “To be is to be within a world,” and the boundaries of that world can be indefinitely extended. Those further boundaries may be far away from what is luminously present to us as truth, but they are not always; “and however remote, the background is also
always present with the foreground." (IT, p. 150)

In this sense the sacred space of our world and profane space, as space, are coextensive but distinguished by way of qualitative difference. Sacred space is where what is—Being—is differentiated; here beings are gathered together in their individuality and uniqueness, and are known because unhidden: they shine forth, illuminated by the light of truth. Hence sacred space is conceived as a heterogeneous space, a space of hierophany—a place, where "[t]he manifestation of the sacred ontologically founds the world....[T]he hierophany reveals an absolute fixed point, a centre." (SAP, p. 21) In contrast, profane space is the darkness outside the boundaries of the known world. Here what exists—Being—remains undifferentiated; here beings are without individuality and uniqueness, and remain unknown because concealed in chaos and the darkness of hiddenness. For this reason profane space is conceived as homogeneous, and within such a "homogeneous and infinite expanse...no point of reference is possible and hence no orientation [i.e. no relation to Being, to place-as-world—no world can be founded] can be established...." (SAP, p. 21)

Thus, "if," as Mircea Eliade argues, "the world is to be lived in, it must be founded;" a fixed point of order, an orientation must be established without which nothing can begin or be done because "no world can come to birth in the chaos of the homogeneity and relativity of profane space." (SAP, p. 22) The "projection of a fixed point—the centre—is [thus] equivalent to the creation of the world;" and it is through establishing order—through the creation of place—that Being comes to presence and where what has been hidden in darkness and chaos is revealed in the light of truth and beauty. (SAP, p. 22) It is only within the sacred space established around this centre, around this point of order within the world thus founded, that we find our existential home, overcome our alienation and cease to be strangers on the earth—Et In Arcadia Ego.⁸ Thus, it is through the poetic act of building (in the most primal sense of gathering and heaping stones together), through building a herma, that we (invoke Hermes and) create a place, an axis mundi—a centre—around which we can live in the light of truth and the beauty and revelation of what is, Being.

---

⁸ translation: And I Am In Arcadia (Paradise)
Chapter 2: Towards A Phenomenology of Memorial

ANECDOTE OF THE JAR

I placed a jar in Tennessee,
And round it was, upon a hill.
It made the slovenly wilderness
Surround that hill.

The Wilderness rose up to it,
And sprawled around, no longer wild.

Wallace Stevens

Placing a man-made creation into the unmediated wilderness of nature alters both, but is nature that seems to change more. However, the breath of pneuma is forever smudging and blurring the boundaries between profane and sacred space. (cf. SP, pp. 20-24) For this reason boundaries are dangerous places where chaos and death lurks—“Here be dragons,” old maps said when they reached the edge of cultural space.

What do you do in a wild and lonely spot when you feel the malice of pneuma might blow you away...? What you do is gather stones together, and build a little heap—a little culture to defy Nature. If you had the time and the technology, you would do better than this, and roll a great stone onto its feet, a standing stone. This would be a prop and a support, a here-I-am act of defiance.... (OS, p. 199)

Such cairns were both magical talismans to ward off bad luck and markers to fix a point of orientation in the midst of chaos, and it is in such primordial gestures of gathering, heaping and building that the origins of the memorial are found.8

HOLY (Requiem XI)

grey sky restless
rain-scented air
and twice
i touch fingers to the earth
to praise you
praising those i love

for all that’s loved is holy

I mean here that the concept of gathering, coming together, is at the core of the cultural

---

8 A corollary with regard to standing stones or gatherings and patternings of such stones (e.g. Stonehenge) is that to see pattern in the movement of stars is also to see permanence underlying change. Thus to erect dolmens and menhirs is to align oneself with permanence, and to make a stand against death. This is to see that “the gods of chaos may not only be subdued by stillness, but may be themselves still.” (OS, p. 200)
undertaking, and heaping stones is a primary instance of gathering the many into one. In ancient Greece, people would gather in the temple—the neos or naos—itself a magical thing/place made by the heaping-up of stones. Indeed, the verb neo itself means to heap up (as in creating a cairn) what is separate or has been separated and "what we do in the temple is renew our energies by gathering ourselves together in acts that commemorate our origins." (OS, p. 199) (In this regard too, the Latin templum means 'a sacred space'.) This connects to what I have been saying with regard to poiesis such that to heap up and gather together what, through the movement of pneuma, has been separated and pushed into hiddenness or forgetfulness, is a form of love and a poetic act. And love is, in this sense, a defiance of death and a protest against the homogeneous and homogenizing (profane) space beyond the boundaries of the established world (which is sacred and homogeneous space). It is a form of love in that the aim and movement of love is to close all distance and to bind together. Death too erases distance and binds together, but it does so in terms of a movement that reduces all to a common oblivion. As Berger remarks: "...whereas love celebrates the unique, the unrepeatable: death destroys them." (AOF, p. 90)

LAMB OF GOD (Requiem XIII)

you were
too gentle to go undamaged by this world
a lamb
lost finally amongst the lions

and there 'your eyes closed
slowly
as they must have opened
in the beginning'

Hermes gift to humanity was luck, and what essentially guards luck is piety, the gratitude we remember to express whenever we visit sacred places such as the temple. Heidegger reminds us that giving was originally not a giving-away of our surplus to the gods, but a giving-to, a rendering up of what belongs to the gods—a form of sacrifice. (cf. OS, p. 317) As the philosopher of religion Dudley Young points out:

9 The adjective neos and the prefix neo-, both designate things newly made or renewed. As well, in ancient Greek the root ag means "to gather"—e.g. the agora was the place in a town or city where citizens would meet and gather. (cf. OS, p. 199)
10 It seems probable that "the arts too originated in grateful remembrance of what we have been given"; this is suggested by the fact that Mnemosyne is both the mother of the muses and the goddess of memory. (cf. OS, p. 317)
In the libation, we give back to divinity some part of itself, commemorating chiefly our gratitude [for the gifts of divinity]...through which both our luck and our life itself... are sustained. One might call this "original piety," and it is easily seen that it consists primarily in remembering something we might be disposed to forget. (OS, p. 317)

It is through 'remembering what which might otherwise be forgotten' that we arrive at a deep connection between gratitude, memory and memorial. The English term "memory" is derived from the Latin memoria and memor (= mindful, the act of calling to and bearing in mind). Calling to and bearing in mind are essential aspects of gratitude: this connection is apparent in the concepts 'memorial' and 'commemoration' wherein the memorial asks us to recall and bear in mind who/what is memorialized or commemorated. (cf. OS, p. 317) (It is also useful to bear in mind that the Old English word for 'thought' is thanc, thus again associating thoughtfulness with piety.) (cf. OS, p. 318)

**ETERNAL LIGHT (Requiem XIV)**

we've encircled life with memory
built sanctuaries against the night
where all we have known
and all whom we've loved
are holy
and seek to rest within that space

in the darkness now
i too am there and loved you
and maybe you'll remember
and light a candle once
for me

**CONCLUSION**

Thus remembering, conceived as a calling to and a bearing in mind, is essentially a form of (magical) representation, the representation of objects in time. It is, in essence, representing through "ritual remembrance" what was once here but that is now absent from us through the passage of time or forgetfulness. (cf. OS, pp. 175-76) It is in remembering-as-representation too, that we find the essence of the memorial, of what it is to memorialize. It is a pious, life-ensuring cosmic act of gratitude and piety wherein we gather together and call to presence—to shine forth and be made manifest in the beauty and light of truth—that which has slipped into the darkness of forgetfulness and death. It is a poetic act and a form of love whereby we hold back the concealing winds of chaos and death by re-calling what
Chapter 2: Towards A Phenomenology of Memorial

has passed on and re-binding what has been separated from us to the present, into the continuous here and now that is Being. In so doing, to memorialize is to thereby establish both meaning and the boundaries of our world.

But, to memorialize is also something perhaps even more deeply human: it is a form of hope. A memorial connects with the deepest aspects of poesis as a home and shelter to an alienated humanity such that it gives voice to human experience and thereby shatters the silence of past events that threaten to recede into darkness. Thus to memorialize is to discover the hope that this voice may be heard, and that when heard, the experience which cried out and to which the memorial has given voice will be judged, acknowledged, given shelter and a home in the world. This hope, I believe, is at the very origin of prayer. (cf. AOF, p. 98)

EPISTLE

For what it is
For how it is done
For how it's not done
For when it's finished
For the many times started
For the many times unknown
For the fewer times known
For the answers not given
For the answers not found
For why it's done
For why it's unfinished
For why it doesn't end
For what is accomplished
For what is left undone
For who is undone
For whom it is done for
For who it is done to
For those who carry it
For those who carry on
CHAPTER 3: PRECEDENTS

Perhaps at the beginning
time and the visible,
twin makers of distance,
arrived together,
drunk
bettering on the door
just before dawn.

The first light sobered them,
and examining the day
they spoke
of the far, the past, the invisible.
They spoke of the horizons
surrounding everything
which had not yet disappeared.

John Berger, from And Our Faces,
My Heart, Brief As Photos
INTRODUCTION

"Architecture and music are cosmological arts that give form to the environment, preparing it to constitute a world on the upsurge of the arts of significance. They prepare the way, ordering the chaos by means of a logic of qualities based on simple opposites for Architecture: open and closed, convex and concave, light and shadow, upright and excavated, etc...and their orderly display according to number and proportion, i.e., according to the measure that rules a symbolic, sensible mathematics, previous to our numerical science."

Luis Gonzalez Cobelo, Architecture and Its Double: Idea and Reality in the Work of Daniel Libeskind

[Structure is itself interpretation and composition is criticism.]

George Steiner, Real Presences

In the end...size doesn't count. It's scale that counts. It's human scale that counts; and the only way you can achieve human scale is by the content.

Barnett Newman, from the film 'Painter's Painting'

The second part of my project entails the examination of three precedents:

I. The Great Pyramid (The Pyramid of Cheops/Khufu)
II. The Vietnam Veterans Memorial by Maya Lin
III. The Berlin Jewish Museum by Daniel Libeskind

These three structures have been chosen as paradigms of objects that, in the light of the analysis offered in Chapter 1, memorialize. However, they were chosen not only with regard to their similarities, but to their differences as well. For example, the Vietnam Veterans Memorial is the only one of the precedents that, strictly considered, is not only a memorial but is also, specifically, a monument, whereas the Great Pyramid and the Jewish Museum are not otherwise monuments, though they indeed memorialize. As well, the Great Pyramid is ancient and is the only one of the three precedents that was not necessarily intended by its creators to memorialize, and the Jewish Museum is the only precedent that, strictly speaking, is a building.
THE GREAT PYRAMID

HISTORY

The pyramids of the ancient Egyptians, especially the early step pyramids, were conceived and considered to be holy mountains or ladders to heaven—"the holy hill of Atum rising from the primal sea..." in the time of the beginning (the Zep Tep). (OM, p. 26) The architect of the first pyramid (a step pyramid built for the Pharaoh Zozer at Sakkara, 30 miles south of Giza) was the legendary Imhotep. Though quite possibly an actual historic figure, Imhotep was later deified as a god and associated with the god Thoth. Indeed, Thoth, the ancient ibis-headed god of wisdom, who was reputed to have invented science and hieroglyphic writing, was later identified with the Greek god Hermes and was said to have been himself responsible for the planning and construction of the Great Pyramid. (cf. OM, p. 46)

Built under the aegis of the Pharaoh Khufu (Cheops), the son of Zozer, circa 2450 BCE, the Great Pyramid is the oldest and tallest of three pyramids standing on the Giza Plateau (the Makattam Formation), a few kilometers from the heart of modern Cairo, Egypt. (cf. OM, pp. 36, 46, 47).¹ It is an extraordinary structure and memorial though the exact intentions of its builders will probably never be retrieved. However, contemporary texts do refer to the Great

¹ Khufu's Pyramid has a height of 147 meters (481.3949ft). Khafra's Pyramid, the next oldest and tallest, though it is a few meters shorter than Khufu's Pyramid—140 meters—it actually appears taller because it stands on a slightly higher elevation on the Plateau. The Pyramid of Menkaura is the smallest of the three major Giza pyramids with a height of 65 meters. (cf. OM, pp. 46, 47)
Pyramid by its original name: “the Horizon of Khufu” which would seem to indicate it had something to do Khufu and also with regard to the relation between the sky and the earth. (OM, p. 46) Indeed, there is very good evidence to suggest that the Great Pyramid was part and parcel of a larger complex that literally formed a man made terrestrial map of a specific area of the celestial cosmos sacred to the Egyptians and central to their religious belief.

THE SITE: TERRESTIAL AND CELESTIAL RELATIONSHIPS

In what archeologists call the Pyramid Texts, the ancient Egyptians called the visible sky around the constellation Orion (= Osiris) the Duat. (OM, p. 76) This celestial Duat ran along the ‘west bank’ of the Milky Way and had a terrestrial counterpart (encompassing the cities of Heliopolis, Letopolis, Memphis and the Giza Plateau) in the region now called the Memphite Necropolis.
This area along the Nile River was the terrestrial abode of the Pharaoh-gods and was conceived by the Egyptians as a mirror image of the eternal celestial home of the divine Pharaoh's soul—his *ka*—after the Pharaoh's earthly death. (cf. OM, pp. 121, 217) Thus, this entire region of ancient Egypt was considered a sacred site, a vast symbolic landscape echoing and mapping cosmic landscape of the gods the sky near Sirius, Orion and the Hyades, along the banks of the Milky Way.” (OM, p. 217)

The constellation dominating the celestial *Duat* was Orion. Orion was of central importance to the ancient Egyptians because they identified Orion with their great god of the underworld, Osiris. The Pharaoh was considered the son of Osiris, and it was to be with Osiris that the Pharaoh's *ka* journeyed along the celestial Nile/Milky Way after death. The companion star to Orion is Sirius, the brightest star in the sky. The ancient Egyptians identified Sirius with their favorite goddess Isis who was the sister-wife of Osiris. (OM, p. 8)
This ancient cosmology had important, indeed decisive implications with regard to the location, orientation and certain deliberately constructed formal features of the Giza pyramids. In effect, "the Pyramid constructions were to be considered Osiris," such that the three pyramids correlated with and symbolized Orion's (Osiris') belt. (OM, pp. 122, 123)

Thus, the Giza Pyramids-Orion's Belt correlation mirrored and mapped the correlation between the celestial Duat and the terrestrial (Memphis) Duat. (cf. OM, p. 138) This idea is further expressed in the fact that "...the Great Pyramid incorporates star shafts 'locked in' to Orion's Belt and Sirius at around 2450 BCE." (FG, p. 497)²

SONNETS TO ORPHEUS (Excerpt)

Song, as you teach it, is not desire,
not a bidding for a thing at length attained:
song is Being. For the god, a simple matter.
But when are we? And when shall he turn—
the earth and the stars to our being?

Rainer Maria Rilke

---

² Some scholars believe these to be air shafts, despite the fact that their ends were sealed up from before the completion of construction until modern times. (cf. OM, pp. 4, 5, 41-2, 44-5, 97-104)
PYRAMIDS AS MARKERS

There is a likely possibility that the Great Pyramid also served the ancient Egyptians as a geodetic marker. This is tied to the notion that the pyramids were planned and constructed by the god Thoth and to the identification of the Egyptian Thoth with the Greek god Hermes. In light of the previous chapter, the identification of Thoth with Hermes hinges on the point that Hermes' name means 'a stone heap' or 'standing stone,' which in turn is associated with boundaries between sacred and cultural space—the world. In this sense then, the pyramids were likely conceived as boundary markers, marking the limits of the sacred, cultural space of ancient Egypt against the unknown and dangerous profane spaces of the deserts and 'barbarian' lands surrounding the Memphite Necropolis-Nile Delta region. It is here that the ancient Egyptians established the centre of their kingdom and their world.

The Great Pyramid is located almost exactly on the 30th parallel at latitude 29° 58'51. (cf. FG, p. 286) This meridian slices the Nile Delta region into two equal halves. If diagonals are extended from the Pyramid's apex and running north-east and north-west until they reach the Mediterranean, the triangle thus formed encapsulates the entire Nile Delta and thus the entire heart of the kingdom of ancient Egypt. (cf. FG, p. 431) (The actual apex of the Nile Delta is a point in the middle of the Nile located at latitude 30°06'N, longitude 31°14'E and the Pyramid stands at latitude 30°N, longitude 31°09'E, the difference—a few minutes of terrestrial arc—being that required for a suitable site on which to construct the Pyramid.) (cf. FG, p. 432)
Mathematically speaking, the Great Pyramid incorporates some interesting geometric relations: for example, the irrational number \( \phi \) (\( \Phi = 1.61803... \)).\(^3\) \( \phi \) is obtained geometrically by dividing line A-B at a point C in such a way that the "whole line A-B was longer than the first part, A-C, in the same proportion as the first part, A-C, was longer than the remainder, C-B."

\(^3\) As well, the proportions of the Great Pyramid are tied to the value and expression of \( \pi \) (\( \pi \)) such that the ratio between the perimeter (3023.16 ft) and the original height (481.3949 ft) is \( 2\pi \). (cf. FG, p. 178) Additionally, the slope of the sides of the Great Pyramid is 52°. This angle, and consequently the structure's proportions (i.e. \( \frac{1}{2} \) the section) are, in turn, determined by a 3, 4, 5 triangle such that:

\[
\begin{align*}
a^2 + b^2 &= c^2 \\
3^2 + 4^2 &= 5^2 \\
9 + 16 &= 25
\end{align*}
\]
MEMORIALIZING THE LOSS OF GENETIC DIVERSITY: A GENETIC ARCHIVE AND MEMORIAL FOR CALGARY

Chapter 3: Precedents

Phi is "the limiting value of the ratio between successive numbers in the Fibonacci series—the series of numbers beginning: 0, 1, 1, 2, 3, 5, 8, 13...—in which each term is the sum of the two previous terms. (FG, p. 336) Phi is also the second term in the proportional ratio 1: 1.61803...—the 'Golden Section'—which is also tied to the geometry governing the proportions of the King's Chamber.

The King's Chamber is a space within the Great Pyramid located in line with the 50th course of the masonry at a height of almost 50m (150ft) above the ground. This is precisely at the

4 This sequence governs the proportion of living beings from the spiral pattern of the seeds in the head of a sunflower, to that of a Nautilus shell, the placement of branches on a tree to the proportions of the human hand and body. (cf. Robert Lawlor, Sacred Geometry: Philosophy and Practice, London: Thames and Hudson Ltd., 1992, pp. 56-59.)

5 From the entrance to the Pyramid, the King's Chamber is reached by initially descending a stone ramp (which leads to a subterranean chamber beneath the Pyramid) and then branching off 18m along the ramp and ascending over 100m (at an angle of over 26°)—a 'staircase to heaven'—past a horizontal passage leading to the Queens Chamber and through the Grand Gallery (a long—nearly 60m—corbeled chamber 8.53m high). (cf. OM, pp. 39-42)
level where the vertical section of the Pyramid is halved, where the area of the horizontal section is one-half that of the base, where the diagonal from corner to corner is equal to the length of the base, and where the width of the face is equal to one-half the diagonal of the base. (cf. FG, pp. 330, 338) The King’s Chamber has the proportions of a 1 x 2 rectangle, being exactly 10 Royal Cubits (17ft 2in) wide and 20 Royal Cubits (34ft 4in) long. The height of the Chamber (19ft 1in) is exactly one-half the length of the diagonal of the floor (38ft 2in), therefore a φi (Φ) relationship—1:1.61803, a Golden Section—is expressed between the horizontal and the vertical dimensions of the King’s Chamber. (cf. FG, p. 336)

THE GREAT PYRAMID AS MEMORIAL

It is, of course, unlikely that the Great Pyramid was intended specifically as either a monument or a memorial. It was also, according to a growing consensus within recent scholarship, likely not intended, nor was it ever utilized, as a tomb. Not only was the Great Pyramid never inscribed by its builder—as it most certainly would have been if it were a tomb—but there is not one shred of physical or written evidence to this effect (in fact, there is no evidence that any Egyptian Pyramid of the Third Dynasty or of earlier periods were used as tombs or inscribed by their builders). (cf. OM, p. 33) It was most probably intended as a kind of ritual ‘machine’ to launch the ka (soul) of the pharaoh on its journey to the celestial Duat so as to become (one with) the god Osiris.

Nevertheless, the Pyramid does memorialize in a number of ways. In its shear scale and magnitude of achievement, it memorializes Khufu, its time and the culture of its creators by

---

6 One Egyptian Royal Cubit = 52cm (0.5237m). (OM, p. 236)
giving voice to their experience and vision of the world. With regard to its celestial and terrestrial alignments, the Pyramid is sited not only ‘two-dimensionally’—terrestrially—but ‘three-dimensionally’—cosmically. As such, the Great Pyramid memorializes in a number of ways:

- it ‘remembers’—addresses in its form, location and relationships, and literally points to—the god Osiris and his companion goddess Isis. In this sense too, it is thus a space of absence because it is/was a symbolic site or object with the ability to evoke (unconscious) human projection, a place where the ka (soul/spirit) of the dead Pharaoh and the absent god (Osiris) are recalled and thus brought together;
- it brings together the terrestrial kingdom of Egypt and the celestial Duat, the abode of man and the abode of the gods and in so doing, not only binds together what has been separated, but brings both into presence—the continuous here and now that is Being—into unhiddenness. This is a form of poiesis and of the love that joins;
- it fixes (and marks) a centre, a point of order around which the world can be founded (an axis mundi), and in so doing establishes Egypt as a place and establishes both meaning in the world and the boundaries of that world. This is a form of hope and poiesis that gives voice to human experience that otherwise will fall back into darkness and it is to thereby establish a home and shelter for humanity;
- it ‘remembers’, so to speak, the exact time of its origin and of the peoples’ relation to their gods by way if its marking specific celestial and terrestrial alignments—a form of gratitude and ‘original piety’ in remembering what will otherwise be forgotten.
- by way of a careful and elegant instantiation of measure and proportion, the Great Pyramid even today memorializes through showing, through manifesting the inseparable harmony of truth and beauty.

This last point brings out that it is perhaps through sheer formal simplicity that the Great Pyramid speaks most eloquently to us today as a memorial and as a work of architecture. Through its use of pure geometric form (and in its lack of ‘decorativeness’) the Pyramid, like many other ancient constructions such as Stonehenge and Newgrange, seems to evince a nearly contemporary sensibility with regard to formal clarity and minimal form. Perhaps too, it is these elements that reinforce much of the ‘timeless’ quality of this ancient wonder of the world.

DUINO ELEGIES (Excerpt)

...These things that live on departure
understand when you praise them: fleeting, they look for
rescue through something in us, the most fleeting of all.
Want us to change them entirely, within our invisible hearts,
into—oh, endlessly—into ourselves! Whosoever we are....

Rainer Maria Rilke
Chapter 3: Precedents

THE VIETNAM VETERANS MEMORIAL

"Why do the young men die? Why does anybody die? Tell me."
"I don't know."
"What's the use of all your damn books? If they don't tell you that, what the hell do they tell you?"
"They tell me about the agony of men who can't answer questions like yours."

From the screenplay of Zorba the Greek, by Nikos Kazantzakis, quoted in To Heal A Nation

HISTORY

The Statement of Purpose for the design competition for the Vietnam Veterans Memorial included the following statement:

The purpose of the Vietnam Veterans Memorial is to recognize and honor those who served and died. It will provide a symbol of acknowledgement of the courage, sacrifice, and devotion to duty of those who were among the nation's finest youth.

The Memorial will make no political statement regarding the war or its conduct. It will transcend those issues. The hope is that the creation of the Memorial will begin a healing process. (HN, p. 53)

The Vietnam Veterans Memorial inhabits a two acre site in Constitution Gardens, at the northwest corner of the Mall in Washington, DC. This site was selected chiefly for its proximity to the Lincoln Memorial, (which symbolizes the nation's reconciliation following the Civil War). Designed by Maya Ying Lin, a 20 year old Yale University Undergraduate
MEMORIALIZING THE LOSS OF GENETIC DIVERSITY:
A GENETIC ARCHIVE AND MEMORIAL FOR CALGARY

Chapter 3: Precedents

student, the Memorial was dedicated on November 13, 1982.

TEARS (Requiem VIII)
you have passed on and the earth is weeping still
grey clouds gather
loose their rains
and the last light wavers on the line
where seas and continents meet the evening sky

no one to comfort us
no one to dry our eyes

FORM

The Vietnam Veterans Memorial has an overall width of 492 feet and is comprised of two intersecting vertical walls of black Indian Granite that meet in a V, with an angle of 125°. These walls are set into the ground with the top edges aligned exactly with the flat ground plane behind it and engraved upon them are the names of American dead and missing from the Vietnam War. In front of the V, the earth is scooped out forming a shallow bowl with a maximum depth of ten feet at the apex. (As a result, the space of the Memorial is strictly contained; the visitor is removed from the Mall to what Jeffrey Ochsner calls a “space apart,” a space in which the single focus is the Memorial. (cf. SL, p. 163)) At grade, the walls are 1in. in height and, as they descend into the bowl, gradually increase (over the approximately 250 foot length of each arm) to their maximum height of 10 ft at the apex. Running directly along the front of this wall and following the scoop of the ground, is a 10 ft wide paved path.
SITE

The Vietnam Veterans Memorial responds very specifically to its site in that the western arm points directly at the Lincoln Memorial and the eastern arm of the Memorial points directly at the Washington Monument.

These two alignments define the Memorial's broad, V-shaped form and allow these other structures to be incorporated as part of the overall design. This contextualization increases
the significance of certain aspects of the Memorial. The record of the names inscribed there and the very importance accorded to the Vietnam War in the future history of the United States itself, resonate with increased presence due, in large part, to this proximity to what are likely the two most important symbolic public structures in the United States. As such, Ochsner points out, the Memorial becomes: "not only a site for private grief...[but] also a site for shared public mourning." (SL, p. 159)

PROCESSION

Engraved on the Memorial's two granite walls are the names of more than 58,000 American dead and missing from the Vietnam War. Each name is inscribed to a depth of 0.015in. (allowing for maximum depth with no shadow) in capital letters 0.53in. high. The names are listed alphabetically in chronological order of when each individual fell and are unaccompanied by any indication of military rank or unit. (cf. HN, p. 118) In this regard, it is possible to discern a sense of time within the Memorial in that each alphabetical grouping of names subtly indicates the losses of each day of the war.

As we walk along the wall, the years each emerge, become dominant...and then recede. In this sense, our passage along the wall becomes simultaneously a passage through time. (SL, p. 162)

Thus, the visitor walks along the length of the Memorial, "experiencing it sequentially and taking in the names only gradually," and the number of names grows as the path descends. (SL, p. 161) As the visitor walks into the space of the Memorial and thereby descends into the ground, all visual reference to the surrounding site context is severed. It is only once the apex is passed by and the visitor begins to rise out of the ground that the visual relationship...
to the rest of the Mall (especially to the Lincoln Memorial and the Washington Monument) once again becomes apparent.

INSCRIPTION AND REFLECTIVITY

The walls shine like mirrors.
So we begin to see hurts inside us, too,
when we see our own reflections
in the walls.

Jack Wheeler, (from a Veterans Day prayer, 1983, quoted in To Heal a Nation)

Even though the Vietnam Veterans Memorial is the only dark colored monument on the Mall—all others there are white in color—its color is not its most significant aspect vis à vis the experiential qualities of the Memorial, but is the heightened reflectivity that the black marble imparts to the walls’ surface. (cf. SL, p. 164) The surface reflectivity of the polished black granite upon which these names are inscribed interacts with the inscribed names and plays a crucial role with regard to the interrelation of the viewer and the Memorial. Because of the high degree of polish, as the visitor processes along the Memorial to where the wall starts to rise above head level, very clear reflections of others begins to be visible in the surface of the black granite. Additionally, in facing the wall directly, the visitor sees themselves reflected back in the polished surface. This creates a kind of ‘virtual space’ into which the visitor can psychologically project themselves and their memories of the deceased and somehow connect with the deceased’s name (and thus with the deceased person himself). (cf. SL, p. 164)

In this light, it can be seen that the Vietnam Veterans Memorial is a space of absence. The central elements in creating this ‘space’ are that of the Memorial’s reflective qualities and the names of the deceased that are permanently inscribed on the wall. Ochsner writes:

Through the reflective surface we first find others and then ourselves in the wall. The simultaneity of vision of the names of the dead and missing, first with images of
unknown others and then with ourselves, could not be more direct in establishing an interpersonal connection.... (SL, p. 164)

The reflectivity of the polished black granite is not that of a mirror, but is much more like that of the surface of a glazed window. Ochsner points out that: "If the Vietnam Veterans Memorial were constructed of mirror glass, it would become too reflective and overpowering... its harsh reflectivity would be a kind of opacity" and consequently the Memorial would not allow us to enter into its space. (SL, p. 165) Mirror reflections are too exact to leave any degree of ambiguity, and it is ambiguity, the felt quality of the kind of space such as is found in a more window-like reflection, that is required for the Memorial to allow the visitor to experience the unconscious projective fantasy that allows that space to become a space of absence and loss. (cf. SL, p. 166) The Memorial allows for such projection in that "we not only see ourselves superimposed on the names, we also see ourselves gazing out from within the wall. Thus, the space apart in front of the wall connects to a space apart that is seen through the surface of the wall." (SL, p. 164)

A space of absence is also an experiential void within which one simultaneously experiences the absence and the presence of the dead, and it is precisely such a simultaneity that the visitor experiences when confronted with the polished black granite wall of the Memorial. (cf. SL, 156) In one sense, the wall is like a window that opens into an interior space, allowing the visitor to imaginatively project themselves through it. In another sense, however, the wall is unlike a window in that it is not a neutral receptor because the names of the dead are inscribed on it. Consequently, as Ochsner points out, "[a]s we gaze upon the wall, the figure reflected back gazes upon us through the field of names.

Figure 9. Vietnam Veterans Memorial: Reflections
Thus, the wall engenders our (unconscious) projective fantasy, but simultaneously structures it." (SL, p. 165) It does so through allowing the viewer to experience a "simultaneous recognition of identity—of ourselves with those in the wall, of ourselves as in the wall but also separate from it, and therefore of the living and the dead....seeing ourselves within the other and the other within ourselves." (SL, p. 165) This experience is, at one and the same time, one of separation and of connection, the gulf separating the living and the dead and the connection between them through projected memory.

CAFETERIA POEM

In a cafeteria
thinking of you
and these words feel
like last rites

The strong tactile qualities of and contrasts between the smooth, polished surface of the wall and the engraved names compels the visitor to touch its surface, and to touch the names. This enhances the experience of simultaneous connection and separation and facilitates unconscious psychological projection. Ochsner points out that "[t]he perception of apparent spatial depth engendered by the reflectivity can cause the names to seem to float in space." (SL, p. 165) But touching the wall and the names serves to simultaneously verify their reality. It also provides a second connection between the living and the dead such that when the wall is touched, the reflectivity of the surface creates "the appearance of fingers touching fingers (as if on two sides of a surface)," as if a hand were reaching out from within the space of the wall. (SL, p. 165)
THE VIETNAM VETERANS MEMORIAL AS MEMORIAL

Whether our lives and our deaths were for peace and a new hope
or for nothing we cannot say; it is you who must say this.
We leave you our deaths. Give them their meaning.

Memorial Poem quoted in To Heal a Nation

Unlike the Pyramid of Khufu, the Vietnam Veterans Memorial was designed as a Memorial, specifically as a monument that memorializes:

- it 'remembers' the dead and addresses its nation's memory of them in terms of its form, location and relationships to other memorials;
- it marks a place for and a relationship between, the living and the dead and in so doing, not only binds together what has been separated, but brings both into presence. This is a form of poesis and of the love that joins;
- in its siting, it fixes a centre for public and private mourning and remembrance;
- as a space of absence, through the deliberate and profound utilization of the reflective qualities of polished black granite, it is a place that allows for psychological projection, a phenomenological void that establishes a relation between the dead, the collective gratitude and remembrance of their deeds and the historical continuity of their nation—a form of gratitude in remembering what will otherwise be forgotten.

IN PLACES I KEEP ALIVE

we look
in order to bridge the distance
between our eyes
come together
in this place and time
love
measured by the quality of truth
flowing between us
we are the point the waters meet
walking on water
oceans of feeling
shorelines receding....

seasons renew truths change
and we pass on
move further from our beginnings
and i'm left
with no other story save my own

feel my longing
like grass growing from the cool brown earth
in places i keep alive
for me
The Jewish Museum, Berlin

Figure 10: Jewish Museum, Berlin: Ground Floor Plan

I bear equally with you
the black permanent separation.
Why are you crying? Rather give me your hand.
promise to come again in a dream.
You and I are a mountain of grief.
You and I will never meet on this earth.
If only you could send me at midnight
a greeting through the stars.

Anna Akhmatova, quoted in And Our Faces. My Heart. Brief As Photos

HISTORY

In 1933, just as the Nazi’s were consolidating their power, a Jewish Museum was established under the administration of the Berlin Museum; however, by order of the Nazi government, the Jewish Museum was closed in 1938. When it was reestablished in the late 1940’s, the Jewish Department ended up being housed in two separate locations. In view of this inconvenient situation, in 1988 a competition was held to design a new wing for the Berlin Museum that would house a distinct and united Jewish Department. (The Berlin Museum itself is housed in the Collegienhaus, a reconstructed 1735 Baroque palace on Lindenstrasse, at the southern end of the historic heart of Berlin.)

In 1989 the competition jury selected Daniel Libeskind’s entry calling it “a profound response” to the competition requirements and “a quite extraordinary, completely
MEMORIALIZING THE LOSS OF GENETIC DIVERSITY:
A GENETIC ARCHIVE AND MEMORIAL FOR CALGARY

Chapter 3: Precedents

autonomous solution. Symbolically and architecturally speaking, Libeskind conceives the more than 10,000 square meter, zinc clad extension to the Berlin Museum as:

...an emblem, where the invisible, the Void, makes itself apparent as such. The void and the invisible are the structural features that have been gathered in the space of Berlin and exposed in an architecture in which the unnamed remains in the names which keep still." (JM, pp. 45; cf. p. 42; PD, p. 78)

TO STAND in the shadow of the scar up in the air.

To stand-for-no-one-and-nothing.
Unrecognized.
for you
alone.

With all there is room for in that,
even without
language.

Paul Celan

DESIGN PROCESS

For his design Libeskind developed a unique form-giving process: he researched the pre-holocaust addresses of important Jewish and non-Jewish Berliners, plotted them on a city map and then traced lines between them. Following this process for a range of individuals—from Paul Celan to Mies van der Rohe—created what Libeskind called “an irrational matrix” in the form of a system of squared triangles. (JM, p. 42; cf. PD, p. 78) This yielded distorted, broken-open versions of the Star of David that Jews were forced to wear under the Nazi’s.

7 Construction of the Jewish Museum was completed in 1999, but the installation of exhibits will not be completed until October 2000.
Libeskind also derived inspiration for the design from Arnold Schoenberg's only opera \textit{Moses and Aaron}, which Schoenberg had tried, but failed to complete as Hitler came to power. The uniqueness of this unfinished work is that: while its first two acts are a sustained and "spectacular musical edifice," act three (only minutes long) contains no music—the libretto is recited. What attracted Libeskind to this work was its "monumental absence, the power inherent in uncompletion." (cf. JM p. 42) Additionally, Libeskind found inspiration in Walter Benjamin's \textit{One Way Street}, an essay which he calls an "apocalyptic guidebook."

\section*{PROCESSION}

The competition program required that the addition be entered from the existing Berlin Museum building. But Libeskind's design utilizes no bridge or other above-ground visual connection between the two. Visitors access the Jewish Museum through an underground corridor. Upon arriving at the addition, they are confronted with three corridors. One corridor proceeds straight ahead to the main stair, which ascends through the entire museum in a single run—a 'staircase to heaven'—allowing visitors to choose one or all of the levels. A second leads the visitor to a heavy metal door opening onto the base of a dark, echoing tower which Libeskind calls the Holocaust Tower: it "represents the end of Berlin as we knew it...the apocalyptic void." (PD, pp. 78-9) Inscribed with the names of the Berlin Jews murdered by the Nazi's, it constitutes a gesture of recognition for the hundreds of thousands of dead. A third corridor, (representing the exile and emigration of Berliners to other parts of the world, leads to an outdoor garden. (cf. PD, p. 79)

To exit, the visitor returns to the basement and either exits the same way they entered or proceeds down the corridor to the outdoor garden, and exits there. (cf. PD, p. 79) This
garden is named for the writer E.T.A. Hoffmann and consists of forty-nine square columns filled with dirt and planted with vegetation (the number 49 represents the year of Israel's founding—1949).

Figure 12. Jewish Museum, Berlin: Holocaust Tower and E.T.A. Hoffmann Garden

SONNETS TO ORPHEUS (Excerpt)

...And should all things of the earth forget you, say to the still earth: I flow. Speak to the rushing water: I am.

Rainer Maria Rilke
I believe this scheme joins architecture to questions that are now relevant to all humanity. What I have tried to say is that the Jewish history of Berlin cannot be separated from the history of Modernity, from the destiny of this incineration of history; they are bound together. But bound not through any obvious forms, but rather through faith; through an absence of meaning and an absence of artifacts. Absence therefore serves as a way of binding in depth, and in a totally different manner, the shared hopes of people. It is a conception which does not reduce the museum or architecture to a detached memorial or to a memorable detachment. A conception, rather, which re-integrates Jewish/Berlin history through the unhealable wound of faith, which in the words of Hebrews (11:11) is the "substance of things hoped for; proof of things invisible."

Daniel Libeskind, *The Jewish Museum: Extension to the Berlin Museum with Jewish Museum Department*

Up the main stair and branching off of it a various levels, a series of galleries follow the zigzag line of the building. These galleries will contain exhibits that document the achievements of both Jewish and non-Jewish Berliners. A second line of empty, raw-concrete space, lit dimly by indirect slit-like windows and skylights, cuts across the galleries in a straight line perpendicular to the street. These are void spaces, without artifacts or means of access, that run obliquely through the galleries and stand for "the inexpressible ‘absence’ of Jewish lives lost in the Holocaust." (cf. PD, p. 78) As the visitor moves through the exhibit spaces, circulation sometimes narrows into passages that bridge across the empty, inaccessible voids. Libeskind writes:

To put it simply, the museum is a zigzag with a structural rib, which is the void of the
Jewish Museum running across it. And this void is something which every participant in the museum will experience as his or her absent presence. (JM, p. 45)

The void intrudes into the circulation and 'creates oblique corners, all of which serve to remind the visitor of the Holocaust's profound interruption of the exhibition narrative'. (cf. PD, p. 78) Thus, architecturally speaking, the building is premised on:

...a new type of organization which is organized around a centre which is not, around what is not visible. And what is not visible is the richness of the Jewish heritage in Berlin, which is totally reducible to archival and archeological material, since physically it has disappeared. (JM, p. 45)

Thus, all the visitor can do is:

"roam through these spaces, experiencing in time one tormented angular turn and foreshortening after the other, and come face to face with the impassable axis of the empty spaces, which manifest the Formal Order that is void of what is enclosed beyond the boundary of all possible manifestation, way beyond the enclosure of experience." (AD, p. 37)

In this light, it is clear that the Jewish Museum is a space of absence, a place where we experience the presence of the dead and yet simultaneously, through the profound reality of the 'structural void', are physically confronted at every turn with their absence, echoing and underscoring the incompleteness of the individuals' lives and of the community which the building memorializes. (cf. SL, 156) The museum evokes and particularizes "an absence more than a presence: the unnamable of the voice of God, but also absence as an accusing form of presence of an incinerated culture and community, in whose cremation Modernism
was burned as well." (AD, p. 37)

DEATH FUGUE (Excerpt)

Black night of daybreak we drink it at sundown
we drink it at noon in the morning we drink it at night
we drink and we drink it
we dig a grave in the breezes there one lies unconfined
A man lives in the house he plays with the serpents he writes
he writes when dusk falls to Germany your golden hair
Margarete

......
Black night of daybreak we drink you at night
we drink you at noon death is a master from Germany
we drink you at sundown and in the morning we drink and
death is a master from Germany his eyes are blue
he strikes you with leaden bullets his aim is true
a man lives in the house your golden hair Margarete
he sets his pack on to us he grants us a grave in the air
he plays with the serpents and daydreams death is a master
from Germany

your golden hair Margarete
your ashen hair Shulamith

Paul Celan

---

Schoenberg’s music is also referenced in the structure both through the proportions of the void that conform to musical intervals and in lines scribed on the elevation that graphically echo musical ideas. As well, a total of sixty “stations” are marked throughout the building which conform to aspects of pre-war Berlin cited in Walter Benjamin’s essay. (cf. PD, p. 78)
Unlike the Pyramid of Khufu or the Vietnam Veterans Memorial the Jewish Museum, Berlin is a building, which, though it functions as a museum also memorializes, and it does so in a number of ways:

- it 'remembers' the dead and addresses their memory in terms of its underlying structural principle (the void) and its form, which results from its relationships to no-longer-existing sites in the city and to specific works of art;
- it marks a place for and makes manifest a relationship between the living and the dead and in so doing, through the use of a 'structural void', not only binds together what has been separated, but makes palpably present the absence of a murdered culture and people. This is a form of poesis and of the love that joins what is to what has been lost.
- it fixes a centre, a point of order for public and private mourning and remembrance;
- through its form being derived from alignments to no-longer-existing sites and through providing a place for psychological projection, the Museum is thereby a space of absence.
We join spokes together in a wheel, but it is the centre hole that makes the wagon move.

we shape clay into a pot, but it is the emptiness inside that holds whatever we want.

We hammer wood for a house, but it is the inner space that makes it livable.

We work with being, but non-being is what we use.

Lao-Tzu (ca. 500 B.C.)
GENETIC DIVERSITY AND THE NEED TO MEMORIALIZE

When we think of the world's future, we always mean the destination it will reach if it keeps going in the direction we can see it going in now; it does not occur to us that its path is not a straight line but a curve, constantly changing direction.

Ludwig Wittgenstein, *Culture and Value*

The second part of this Masters Design Project entails the design of a genetic archive for local flora and fauna that will also be a memorial to the loss of genetic diversity within the world's ecosystems. Over past decades there has been a gradual reduction in genetic diversity within the world's ecosystems both directly and indirectly as a result of human intervention. For example: direct human intervention in agriculture has served to reduce genetic diversity with regard to something as essential and ubiquitous as wheat: modern agricultural practices and technologies of genetic manipulation (cross-breeding, hybridization etc.) has gradually led to a situation where a very few (artificially hybridized) varieties of wheat have supplanted all other naturally pre-existing varieties. Seed grain for most of these older varieties of wheat (so-called 'heritage grains') is not obtainable—the species are either extinct or nearly so—and thus their specific genetic information (and consequently their individual traits) has disappeared both from regional ecosystems and from the world's plant gene pool.

This situation also pertains to most varieties of domesticated animals and plants—pigs, cows, tomatoes, corn and other crop grains, and so on—where older varieties are rapidly disappearing or have disappeared completely along with their unique genetic information. Most importantly, this situation also pertains to many non-domestic species of plants, animals, insects and even bacteria and viruses.¹ The poet John Donne wrote: "each man's death diminishes me," and in an exactly parallel way whether these species have a use value to human beings or not, their value is intrinsic and their loss and the consequent loss

---

¹ One need only think of the current magnitude of devastating genetic loss resulting from the ongoing destruction of the South American rainforests: how many plants and animals have been lost forever that may have supplied, e.g. a cure for cancer or other diseases? What effect will the loss of these living things have on not only the local ecology, but on the world's ecosystem in general? How many other species may be severely depleted or may be run to extinction because of the loss of diversity in some other area of the world? Within complex, symbiotically interconnected ecological systems it is impossible to damage one part without that damage affecting the whole—on both a local and a global scale.
MEMORIALIZING THE LOSS OF GENETIC DIVERSITY: A GENETIC ARCHIVE AND MEMORIAL FOR CALGARY

Chapter 4: The Genetic Archive And Memorial

of genetic diversity both within the species and in the ecosystem as a whole, affects us and the entire planet in ways we cannot imagine and may never completely know.

REFUTATION (Requiem VII)

less than i'd hoped
more than it might have been
this life
and all i wished would be
on this blue world
holds me apart from you
and from myself—

living within this distance
refuted

This great ecosystem-wide loss of genetic diversity—not only within species but across species—is supremely serious in that such diversity is a precondition for both ecological stability and evolutionary change. It is also a incalculable loss to humanity because our own survival is dependent on the well-being of the natural environment. As well, that genetic information is no longer available for human use e.g. in developing varieties of wheat that are resistant to new strains of disease or that are more adaptable to changing climatic conditions etc.

There has also been great loss in genetic diversity as an indirect result of human intervention in the ecosystem. Urban expansion, recreational and industrial development, inadvertent effects of pesticides and insecticides, various technologies etc. have all served to push many species to extinction or near extinction, thereby further reducing genetic diversity within the world's ecosystems.

However, lest the motivation behind this project be construed as merely enlightened self-interest, wherein memorializing this loss of diversity is seen only as a byproduct of preserving genetic samples, I want to draw attention to the foregoing analysis of what it is to memorialize. This reminds us that the primary idea behind this design for the Genetic Archive and Memorial is that memorializing has essentially to do with re-presenting this lost diversity, bringing it back into presence. By instantiating our collective memory of that which has passed away—the genetic blueprints for myriad forms of life—we thereby prevent what
no longer is from passing completely into chaos and oblivion. This is not only a form of caring for Being but it is also to begin to ameliorate our existentially alienated condition; it is, so to speak, to ‘re-house’ ourselves in Being.  

Secondarily, the Genetic Archive and Memorial will also serve as a kind of time capsule whereby at some future date this material could possibly be reintroduced into the ecosystem and help rediversify the world’s genetic reserve. Here the primary motivation is neither scientific, technological nor commercial, but is, for want of a better word, ‘spiritual’. This has to do with a particular way of being-in-the-world: of not being estranged from Being, of making an offering by taking on an attitude of caring and of gratitude. It is also to remember Being, as opposed to dis-membering it; it is ‘to bring together what has been separated’ and to treat/conceive Being as the indivisible organic unity that is the fundamental ground of our own being, rather than as a divisible and exploitable resource.  

OFFERING (Requiem X)

too much happiness or sorrow
sometimes they are the same
always one leads to the other
always offering more
than i can contain

---

2 We face a particular problem at this point in time, a problem that has never before faced humanity in quite the same way. As Gregory Benson argues: ‘...the rate of [technological, social and cultural] change drives short-term thinking, but as our powers increase, our problems become longer-term. Environmental impacts are the best example. Meanwhile, our principal tool, technology, is moving toward the transient and small.’ (DT, p. 26) Thus our latest technology is inappropriate for sending messages into the future because information stored via computers, or as some other form of digital information, is highly fugitive. All it requires for information stored via these means to become unreadable is either a magnetic field (which will, in most cases, obliterate any information so stored), or for the hardware or software to become obsolete (which, occurs at an ever-accelerating pace). (cf. DT, p. 27)

In light of this, architecture can be one of the least fugitive ways that humans can send messages—in this case a message of memorialization—into the future. This involves issues of the permanence (or at least, the longevity) of the architectural object, issues of tradition and cultural practice (both of which are beyond the scope of this project) and, as was discussed in Chapter 2, with the phenomenological origins of the concept ‘memorial’ in terms of delimiting the boundaries of cultural space. As well, insofar as it is an art, architecture partakes of the poetizing vision—it is a ‘language’ so to speak, a form of poesis whereby what cannot be said can instead show itself in the (experience of the) work of architecture.

3 Heidegger’s term here is Dasein = human being—‘being’ meaning the mode of existence and not what exists (the existing thing).
Of course, the idea of the time capsule is here turned on its head, so to speak, in that what we usually try and send into the future is some tangible aspect of ourselves, something of our physical culture that will somehow represent us to the future in some recognizable, and mildly interesting way—assuming the future will care about us. In the case of the Genetic Archive and Memorial though, what we are sending into the future is not strictly something made by humans for humans and about humans—though the conditions leading to loss of genetic diversity are predominately man-made—but something that is most emphatically non-human, and larger in scope than the mere limits of human culture.

What we are telling the future about ourselves is perhaps something about a caring for that which transcends us, an attempt to reconcile and reconnect with Being in a way that extends far beyond the narrow limits of our species, and perhaps also beyond the merely pragmatic issues of human survival and enlightened self-interest. This is to send both an ethical message—it is to say we recognize intrinsic value in something outside ourselves—and a spiritual message—it is to say we remember what is lost and express a caring for that which is of intrinsic value.  

An additional point to be raised here vis à vis memorializing is that of the differences between human and non-human death and loss. Both individually and collectively, humans have little trouble empathizing emotionally and identifying imaginatively with, the death of members of our own species and the loss of things of specifically human concern such as cultures, institutions, places of human habitation etc.. (In other words, it is less of an abstraction (especially if there is a connection by way of family, ethnicity, politics, religion, ideology etc.) to imagine that it could otherwise have been or will perhaps someday be, us personally who is being memorialized, or our loved ones, our descendants, our allies, our co-religionists, our fellow citizens, our way of life....) The human world is clearly accepted as a sphere of moral and ethical focus and, in this respect, throughout most cultures it is commonplace to build memorials, institute ceremonies and set aside special days such as Good Friday or Remembrance Day to commemorate human death and human-oriented loss.

However, non-human death and loss (especially when that death or loss is not something of direct human self-interest or concern) are much more abstract and difficult to imaginatively identify and emotionally empathize with. Indeed, it is only very recently that contemporary western culture in particular has begun to seriously include the non-human as an arena of moral and ethical focus; for example, in recent years, the United Nations instituted Earth Day in recognition of the value and importance of the planet and all that it is home to. However, Earth Day is certainly not yet accorded the status of, say, a national or religious holiday or even of such commercially-oriented celebrations such as Valentine’s Day, St. Patrick’s Day or Mother’s and Father’s Day and it is likely to be quite some time before human society consistently accords non-human life and loss the same degree of concern and value as human life and loss.

I believe however, that if a Genetic Archive and Memorial—a memorial to the worldwide loss of non-human genetic diversity—were ever to be built, it would perhaps contribute in some small way towards the ongoing establishment of a greater degree of human collective awareness and concern for all life on this planet.
WONDROUS SOUNDS (Requiem IV)

wondrous sounds ring in memory
returning from somewhere i once was
sounds of years and seasons i've lived...
how can i say what that music
means in my life....

this day beyond my window
birds sing as the brown fields emerge
a little
from beneath the snow

SITE DESCRIPTION AND ANALYSIS

The site for the Genetic Archive and Memorial is located in Calgary, Alberta, Canada and lies on the southeastern edge of the downtown. More specifically, it is a roughly 24m wide by 120m long strip at the southeast end of the block between 9th and 10th Avenues SW that runs parallel to the MacLeod Trail N underpass. At this point, 9th Avenue SW is a major one way eastbound thoroughfare that crosses the downtown core; 10th Avenue SW is a two way east-west thoroughfare outside the downtown that parallels downtown's southern edge. MacLeod Trail N (one way northbound) is also a major traffic artery that runs from the extreme southern outskirts of the city into and through the eastern edge of downtown.

5 Map: Planning and Building Department, Municipal Topographic Series, Section 15C, The City of Calgary, 1996.
The most prominent feature of this site is that it is bisected from west to east by the Canadian Pacific Railroad main line. These tracks and attendant spur lines run along the southern edge of downtown, an embankment separating this edge of the city core from the remainder of the vast southern extent of the city in much the same way as the moat or defensive perimeter walls of a medieval castle segregated the fortress from the surrounding countryside. It is a strip of interstitial space that, in relation to the development (or at times the lack of development) along either side, constitutes an 'avenue of dissonance', a *rupture in the urban fabric* that disrupts not only its visual and aesthetic continuity, but also much of the network of roads and sidewalks in and around the city core. Consequently, the free passage of both pedestrian and vehicular traffic is seriously impeded, being forced to skirt much of the length of the tracks only to then be funneled through a relatively small number of underpasses into and out of the downtown core. This condition only aggravates the lack of southern access to and from the downtown at times of rush hour and in severe weather.

The northern end of the site is a paved, grade-level parking lot that extends westward along the south side of 9th Avenue SW for about three-quarters of the block, where the lot terminates at a nondescript multi-story office building (twelve stories). Opposite the north edge of the site, along the north side of 9th Avenue SW, is The Calgary Performing Arts Centre.

Diagonally north-east from this end of the site (across MacLeod Trail N) are located both the new and the old (historic) City Halls, which in turn, are the terminus for Calgary Olympic Plaza (which runs westward between 8th and 7th Avenues SW).
SOUTH and WEST

The southern end of the site is an unpaved parking area (also at grade) for Canadian Pacific Railroad service vehicles that extends westward the entire block along 10th Avenue SW. A corrugated metal-sided crew shack midway along 10th Avenue and a series of utility shacks along the southern edge of the railway embankment are the only structures located in this area.

Opposite the south edge of the site and continuing south along both sides of MacLeod Trail N for a block, are a number of quasi-historical three and four story brick- and stone-clad buildings, roughly dating from the 1910's and 20's. These are the run-down remnants of a once thriving area of old Calgary.

EAST

The entire eastern edge of the site terminates at MacLeod Trail N, on the opposite side of which is a large electrical substation. Along the length of this edge, the roadway and
sidewalks of this major, north-bound artery pass 4m beneath the railway tracks by means of an underpass. Consequently this edge of the site is defined only by a below-grade concrete retaining wall and sidewalk that parallels MacLeod Trail N through the underpass, the underpass itself and by the railway overpass that spans it.

Because it is bounded to the north, south and west by flat parking lots and to the east by a roadway underpass, in effect, there is no clear terminus to any edge of the site. By virtue of this lack of termini the site is, effectively, a non-site, an ugly swatch of minimally developed space on the southern boundary of the historic, civic and cultural area of Calgary's downtown core.

**SITE CONTEXT AND CONSIDERATIONS**

Every condition is always complementary to the condition which preceded it.

George Braque, Notebooks

The arrow points only in the application that a living being makes of it.

Ludwig Wittgenstein, Philosophical Remarks

In light of the foregoing analysis, there are a number of contextual issues and considerations relevant both as to the selection of this site as appropriate for a Genetic Archive and Memorial and to the formal massing of the building itself. The presence of the railway, the fact that the site both parallels a major access thoroughfare and underpass and straddles the boundary between the downtown core and a now run-down area of old Calgary, the
relatively low height of neighboring buildings and the lack of clear termini which create, in effect, a non-site, are all considerations factored into the choice of this site for my design intervention and into decisions regarding the final form of the Memorial itself.

The railway dominates this site, as indeed it does (either directly or indirectly) the entire civic core. Because it is bisected by and thus straddles the main east-west Canadian Pacific rail line—a narrow industrial zone which both defines the southern edge of the downtown core and limits further expansion of that core—the site was felt to be appropriate for this program in that the railway is, in many ways, indicative of why there has been such widespread loss of genetic diversity in both local and global ecosystems.

From its inception, the rail system has played a major role in facilitating the transportation of very large human populations and quantities of goods and produce and in allowing ever-greater access to increasingly distant markets. In turn, this has helped foster a greater standardization of agricultural produce for reasons having to do with ensuring the commodity will not spoil during transportation and contributed also to the easy importation of non-local plant and animal species (both deliberately and accidentally). Additionally, the railroad’s facilitation of a more ready access to distantly grown produce has helped increase demand from processors, distributors and consumers for a more standardized product. Such standardization has further served to reduce local genetic variation and diversity.

Railways are also a major exemplar in terms of the overall impact of human industrial and infrastructure technology on the natural world. Such technology not only exerts pressure on the level of the individual plant, animal or insect etc. viz. impacting the immediate conditions for their daily survival, but also exerts pressure on entire species and subspecies in terms of impacting the conditions governing overall genetic selection viz. the stability of overall ecological conditions and the stability and size of local breeding and reproductive populations.

Additionally, with regard to the city of Calgary and to the Genetic Archive and Memorial, the railroad is central to the contextual ambience within which the Memorial has been conceived and that for which it is intended to be received. The impact on and continued domination of the railroad over access to and from the city centre, on the planning and direction of its growth and on the overall aesthetic quality of the central civic, historical, cultural and
MEMORIALIZING THE LOSS OF GENETIC DIVERSITY:
A GENETIC ARCHIVE AND MEMORIAL FOR CALGARY

Chapter 4: The Genetic Archive And Memorial

business heart of the city, is indicative of the collective social values (and the decisions and priorities grounded in those values) that have helped bring about the escalating loss of worldwide genetic diversity.

The fact that the site’s eastern edge is bounded by and parallels MacLeod Trail N is another central consideration viz. the Memorial as is the fact that this major, north-bound thoroughfare enters a railway underpass at this point and gradually drops to 4m below grade. MacLeod Trail is an historic street; it was originally the wagon trail between Fort MacLeod and Fort Calgary (and indeed today, at the southern city limits, MacLeod Trail becomes Highway #2 South to Fort MacLeod). This past is reflected today where, as it approaches the site from the south, the street is not only edged with the remnants of quasi-historical buildings, but further acknowledges the history of the immediate area by beginning to drop below grade (for the underpass) at precisely the point where this now run-down area—which was once a part of the old Calgary downtown—runs up against the railway line that defines the south boundary of the downtown core. In effect, the site straddles the boundary between the present and (a remnant of) the past downtown. Interestingly, and importantly for this Project, the presence of these old, ‘previously downtown’, buildings suggests that in the past (i.e. at the time these buildings were constructed) the railway tracks did not so much separate adjacent areas of the downtown as conjoin them, bring them together! Thus the site can be conceived as offering an opportunity to (re-)link the present to the past.

The relatively low height of buildings in the immediate vicinity of the site was a consideration with regard to the project in a number of ways. It would condition my intervention in terms of the overall height of the Memorial; as something that would not direct the viewer/user out of themselves—a reflexive (unreflective) condition—as tall, grandiose structures in large part

---

6 These old buildings are a mix of commercial, retail and some warehousing types, which further reinforces the view that they were once linked across the railway tracks and considered as part of the old downtown core.

7 I mean by this something very much like the “zips,” the vertical lines, in a Barnett Newman painting. For Newman, these do not so much divide the canvas as join the expanses of color space on either side. In effect this was to conceive drawing in a new way; where drawing is generally conceived first and foremost as division, the “zip” was drawing conceived as conjunction. However, Newman’s “zips” also function much as an axis mundi in that they serve to gather, differentiate and thereby structure the space around them. (also cf. Greig Rasmussen. Painting as Atonement: An Interpretation of Meaning and Space in the Work of Barnett Newman, MVA graduate research paper, The Department of Fine Arts, University of Alberta, 1985, pp. 7-11)
tend to do, but instead direct them back into themselves—a reflective condition. This low building height would also condition the design in terms of certain roof details, as the roof would be clearly visible from a height greater than 6.6m above grade.

The character of this site is really more that of a non-site—an area—and is such because it so greatly lacks distinct and assertive boundaries. There is no clear terminus to any side and consequently all the edges of the site bleed out to nothingness. It is my view that the most decisive edge to be considered is the eastern edge; giving this edge a clear and definite termination, marking this as a sharply delineated boundary, will go a very long way towards differentiating the remainder of the site (extending westward along both sides of the railway embankment) as a space, and not merely as an area. This is particularly true for the north end of the site where the lateral extension of the remainder of the site (from west-east) will now clearly terminate—to the west with the multi-story office tower, and to the east with the Memorial. The south end of the site is slightly more problematic: there would remain the present, poorly defined western edge which merely ends at MacLeod Trail S (one way southbound) and another railway underpass. Definition of a clear edge here awaits a future intervention.
THE DESIGN

The problem...is not how to make the unpleasant pleasant [i.e. it is not "simply an extension of the aesthetic"], but is really how to make the serious, that is the ethical, aspect of life a proper object of contemplation and reflection. There is no general or theoretical answer to this question; it is really a practical one of artistic technique and vision....

B.R. Tilghman, Wittgenstein, Ethics and Aesthetics

For every acquisition there is an equivalent loss.
That is the law of compensation.

George Braque, Notebooks

The design for the Memorial grew directly out of reflection on and considerations and discoveries that emerged from three areas:

- the philosophical and spiritual concepts, ideas and syntheses that emerged from my inquiry into the question of what it is to memorialize;
- the conceptual, psychological and physical aspects of the three precedents that I examined;
- the conceptual, visual, psychological and physical aspects considered, and the formal, technical and conceptual conclusions drawn from, my analysis of the site.

In light of the research I have undertaken, it would seem that there are five (non-formal) essential aspects to the Memorial. To memorialize is to instantiate individual and/or collective memory and is:

1. to create a space of absence (whether physically embodied or not) into which we can project our living psychological selves and our memory of what is no longer present;
2. to create a sense of place by bring together the past, present and future;
3. an act of gratitude and caring wherein we gather together and call to presence—to shine forth and be made manifest in the beauty and light of truth—what has slipped into the darkness of forgetfulness and death: an ethical and spiritual act;
4. a poetic act and a form of love whereby we re-call what has passed on and re-bind what has been separated from us to the present and thereby establish both meaning in our world and the boundaries of our world;
5. a form of hope wherein it gives voice to human experience of past events that threaten to recede into darkness and the discovery of the hope that this voice may be heard and the experience given voice to will be judged, acknowledged, given shelter and a home in the world.

The precedent studies helped to establish various formal strategies for creating particular
experiential and phenomenological qualities I wished to embody in the design of the Memorial:

- a descent into the earth;
- an ascent into the sky/a staircase to heaven;
- a processional pathway as formal promenade (circulation and programmatic sequencing);
- the use of light to suggest the dematerialization of matter and more importantly, to underpin the spiritual and psychological association of light with Being, life and presence and with knowledge, beauty and truth (the transubstantiation of matter into spirit, so to speak);
- the engagement of not only the sense of sight, but also of the senses of touch, hearing and, to a lesser degree, smell);
- the use of formal simplicity and the golden section to impart a sense of harmony and right proportion.

The site analysis led directly to the development of the conceptual parti. This has to do with the lack of definite terminus to the eastern edge of the site and basically derives from a hand gesture: holding the hand in a 'karate chop' position and placing it along the length of the eastern edge of the site on a map of the site. This forms a 'wall' and a spatial bridge running north-south (across the railway tracks) creating a clear and definite terminus along that edge of the site. This led directly to the idea that the Memorial should create a definite edge for the site—and thus transform what is currently a non-site—an area—into a site, a space.

The second aspect of the design arising from the site analysis is that of acknowledging the presence of the railway by allowing the design to directly engage it. The Genetic Archive and Memorial is comprised of two separate volumes—one on each side of the tracks—that are only connected below grade and again 5m above the tracks by means of a narrow, steel-clad 'bridge'. Additionally, the circulation path for the building extends not only above and below the tracks, but uses the overpass to help create a series of spatial compressions and expansions along that pathway. The Memorial also engages the railway inasmuch as the overpass serves as a roof over one section of the building. Finally, the design acknowledges the railroad's presence in that it does not attempt to insulate the building from the sound, vibration and perhaps even the smell of the trains that use the tracks.
The third aspect arising from the site analysis has to do with reweaving the urban fabric in the immediate area. While there is currently both pedestrian and vehicular access (by way of the underpass), the railway tracks nevertheless are a visual, phenomenological and psychological rent in the urban fabric. This is reinforced by the fact that no building on either side of the tracks in this area attempts to reach or link across them, save one—Calgary Place—and even this building does so only in terms of a large, multi-story parkade. It is also reinforced by the fact that buildings along the south edge of the tracks are considerably smaller in size and height than those on the downtown side. The result is that the area ‘reads’ as if there were both a long swath of near nothingness separating the civic core from the remainder of the city—an avenue of visual and phenomenological dissonance—and (because of the sharp disjunction in the scale of built form on either side of the tracks) a psychological and, for the most part, an actual physical barrier to movement and development.

Designing the Memorial so as to visually (and physically) link the downtown and the near-historic area south of the tracks along MacLeod Trail N will, I believe, also strengthens the psychological and phenomenological sense of connection between the two areas. This is entirely consistent with the function of memorials in that one of their tasks is to bring together what has been separated by recalling it into presence, into the light; in this case the Genetic Archive and Memorial will not only attempt to accomplish this spiritually and emotionally (psychologically) with regard to the loss of genetic diversity in the natural environment, but will also attempt this visually, conceptually/phenomenologically and physically (and to a degree psychologically) with regard to the built environment.

A NOTE ON PERSONAL SENSIBILITY

At this point I wish to briefly discuss the role of my personal sensibility vis à vis the design of the Genetic Archive and Memorial. I have been a practicing artist—a painter—for more than
twenty years and for fifteen of those years, my work has developed within the theoretical and aesthetic ambience of Minimalism. It is a style, a way of seeing that is now inseparable from who I am as an artist—from who I am creatively—and the design of the Genetic Archive and Memorial reflects this. This being said however, the form of the building derives not so much from any preconceived aesthetic such as minimalism as from the exigencies of shaping the experiential qualities of the space of the Archive and Memorial. Additionally, my spiritual and aesthetic sensibilities tend to focus on the authenticity and uniqueness of individual experience rather than on collective experience. The twentieth century is too crowded with negative examples of the cynical manipulation and exploitation (politically, commercially and ideologically) of mass/collective experience and emotion for me to not be skeptical of collective experience with regard to its authenticity and its capacity to deeply affect the individual apart from the crowd.

As such, my design for a Genetic Archive and Memorial for Calgary is very deliberately focused on the individual experience rather than on providing a spectacle for mass consumption: the intended focus is not the building itself but is instead the experience that the building facilitates (as opposed to provides). It is not a building that lends itself to large crowds of visitors at any one time, let alone as a place for e.g. environmental rallies; rather, its intention is to move the individual visitor to introspection, personal emotional and spiritual reflection—take them on an exploration of their personal values vis-à-vis the value of other life forms and the loss of diversity. Consequently, it is not the aim of my design to present a prepackaged and predigested set of collective values and emotions and thereby invoke an awareness that appeals only to the transitory moment of the mass experience.

THE PROGRAM
The program for this design is simple, and comprises only what is absolutely necessary for the Genetic Archive and Memorial to function.

<table>
<thead>
<tr>
<th>DESCRIPTION OF SPACE</th>
<th>AREA(m²)</th>
<th>(includes circulation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reception</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>Coat Check</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Washroom (Female)</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Washroom (Male)</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>
MEMORIALIZING THE LOSS OF GENETIC DIVERSITY: A GENETIC ARCHIVE AND MEMORIAL FOR CALGARY

Chapter 4: The Genetic Archive And Memorial

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Washroom (Handicapped)</td>
<td>6</td>
</tr>
<tr>
<td>Reading Room</td>
<td>180</td>
</tr>
<tr>
<td>Administrative Offices</td>
<td>100</td>
</tr>
<tr>
<td>Staff Lunch Room</td>
<td>20</td>
</tr>
<tr>
<td>Staff Smoking Room</td>
<td>8</td>
</tr>
<tr>
<td>Cafeteria Kitchen</td>
<td>10</td>
</tr>
<tr>
<td>Cafeteria Seating</td>
<td>35</td>
</tr>
<tr>
<td>Specimen Storage/Exhibit (including circulation and service corridors)</td>
<td>575</td>
</tr>
<tr>
<td>Loading and Receiving</td>
<td>50</td>
</tr>
<tr>
<td>Specimen Preparation</td>
<td>30</td>
</tr>
<tr>
<td>Storage Area</td>
<td>40</td>
</tr>
<tr>
<td>Janitorial Storage</td>
<td>20</td>
</tr>
<tr>
<td>Mechanical/Electrical Rooms</td>
<td>130</td>
</tr>
<tr>
<td>Pump Room</td>
<td>18</td>
</tr>
<tr>
<td>Fire Escapes</td>
<td>180</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1586</td>
</tr>
</tbody>
</table>

FORM AND DESIGN

Here is Nakedness  
The rest is raiment.

Here is raiment  
The rest is finery.

Here is purity  
The rest is defilement.

Here is poverty  
The rest is ornament.

Charles Peguy

Figure 10: Site Map
Chapter 4: The Genetic Archive and Memorial

There were a number of issues and requirements that helped shape my design decisions regarding the form of the Genetic Archive and Memorial. The narrow, elongated form of the Memorial was derived in large measure from the conceptual parti (the ‘karate chop’) and addressed the requirements that:

1. the building physically and visually (re-)link/bridge this area of the downtown to a quasi-historical section of old Calgary and
2. the building function as a definite terminus to the eastern edge of the site.

Splitting the building (above grade) around the railway tracks but having it continue below grade and be connected high above the tracks derived from the first requirement (above) and from the requirement that:

3. the building clearly acknowledge the presence of the railroad on the site.

The formal, frontal and monolithic composition emphasizing lateral rather than vertical extension, utilization of the existing railway underpass throughout the entry sequence (which also reinforces the role of the building as a ‘link’) and the use of a clearly defined and articulated materials pallet came out of the requirement that:

4. the building should impart the sense of being a ‘place apart’ and possess the qualities of inwardness and dignified ‘thereness’—presence.

The design parti for the Genetic Archive and Memorial derived from reflection on the concept of ‘memorial’ and from design and conceptual issues precipitating from the precedent studies. It was also deeply informed by the site analysis. The design parti is, in effect, a folding concrete ground plane that forms two spaces in the hollows formed by those folds, one interior and one exterior: one ‘within the earth’, so to speak, and the other ‘beneath the sky’. (I also chose to echo the parti in other design details such as the reception desk and the relation between the rooftop cor-ten volume and the open interior courtyard that parallels the Reading Room.) This parti grounded the development of the building form: in effect, it gave the building’s section and the idea for the below-grade exterior entrance courtyard.

THE DESIGN PARTI
In terms of its program, the Genetic Archive and Memorial is about inwardness and offering an opportunity and a place for reflection, commemoration and remembering. To bring these qualities out in the final design, I chose to utilize a deliberately 'minimalist' approach with a corresponding concern with and emphasis on an harmonious 'rightness' and understated subtlety of proportion and detail. In keeping with this approach I have attempted to employ concise, clear and simple architectural gestures to articulate the conceptual and physical requirements of the program and best accommodate to the site conditions. To this end, the design attempts to strive for clarity without being merely obvious, and for simplicity without being simplistic.

Further to this 'minimalist' design approach is the utilization and articulation of a limited materials pallet: primarily black-dyed concrete for the building enclosure and interior finishing, and Cor-ten steel for certain architectural 'objects' (staircase, ramps). Cor-ten elements are also employed as a repeating datum throughout the design: vertically with regard to the door to the entrance courtyard and the rooftop 'bridge' volume, horizontally viz. the lining of the water channels and reflecting pool.

With regard to windows, the number of openings in the building has been kept to a bare minimum. These are defined through a visual language of simple 'punches' or 'cuts' through the enclosure. I felt that this strategy would harmonize with the program and the minimalist sensibility of the design in a way that exposing and elaborating the glazing more overtly would not. Thus, window openings are not for the use of visitors (i.e. to see out of) but are designed and placed, in every case, to enhance the phenomenological qualities of light within the building (viz. the program) and to also allow light to articulate form, materials and composition. For example, there is a single tall, vertical opening (0.20m wide by 3.75m
Chapter 4: The Genetic Archive And Memorial

High) cut through the east facade of the south volume of the Memorial; this is immediately adjacent to the interior wall terminating the Reading Room at its south end. This window is designed not only to rake a narrow swath of light across the face of the stainless steel bookshelves lining that wall—echoing horizontally what a skylight above the adjacent east wall does vertically—but to articulate a corner where two bookshelf-lined walls intersect.

Similarly, narrow horizontal openings (0.40m high by 12.00m long) cut part way along the bottom of the two east facades allows light to rake across the respective interior floors. Additionally, these openings and a narrow cut (0.15m high by 0.20m deep) located immediately below them (at the waterline of the channels) and running the full length of both facades, are designed to help ameliorate the 'visual weight' of the building's mass (make it seem lighter) by veiling in shadow the junction between the structure and the earth.

The Memorial's two public doorways (the first below the railway overpass from the sidewalk into the entrance courtyard and the second into the Archive and Memorial itself) also utilize the same visual language as the window openings. However, not only are these openings 'punched' through their respective walls, but the use of sliding doors prefigures and echoes the sequence of spatial compressions and expansions which I have used to shape both the form of the building and the experience of the Memorial.

The cor-ten steel door leading to the entrance courtyard slides horizontally into a reveal along the interior surface of the concrete wall that defines the eastern terminus of the site (retaining its role as a datum to passersby when closed and to departing visitors when open). This door also has a number of 0.15m square openings punched through it, not simply to provide visual access to the courtyard when the Memorial is closed, but to provide the only moment of decorative detail in the entire design.
The entrance into the building itself is by way of a punch through the east facade. Behind this is the wide but shallow space of the entrance vestibule, which utilizes an air curtain instead of exterior doors for insulation and environmental containment. Two automatic sliding glass doors into the building allow a little light through into the Reception area beyond. These doors, however, are mostly shrouded in shadow due to their set-back from the facade and to the fact that this entrance (and that into the courtyard as well) is directly centered beneath the railway overpass.

In both formal and phenomenological terms, light plays a central, indeed a crucial role in the design of the Genetic Archive and Memorial. On the exterior the design allows natural (and at night, artificial) light to reflect onto the building from the rippling surface of the water in the reflecting pool and water channel. This will soften the building’s monolithic quality somewhat by means of the play of dancing patterns of light on the walls.

Inside the Archive and Memorial, natural light is employed as an architectural element, helping to illuminate and define spaces and to alter the perception of mass. For example: in the otherwise dark volume of the Archive space, light from skylights over the service corridors literally shines down through the corridor floors and out through the open-backed genetic sample storage ‘walls’ (thereby ‘dematerializing’ them in a way similar to the role of windows in a gothic cathedral); light even percolates through the sides and walkways of the ramps, thereby illuminating, defining and ‘dematerializing’ them.
In contrast to the mostly ambient light in the Archive, light floods the Reading Room, pouring down into an unroofed interior courtyard and through an adjacent glass curtain wall. Indeed, to the more poetically inclined, a large area of the wall, floor and ceiling of the Reading Room may seem to have been ‘replaced’, or better, dissolved, by light. As well, light rakes along the front of the bookshelves, rushing in through an overhead skylight and through the aforementioned tall, narrow window opening in the east wall.

In the Memorial’s design, ‘object’ elements are used to help articulate and structure both space and the circulation path. To this end, the four main public spaces, Reception, Archive, the Cafeteria seating area and the Reading Room, are each designed as an open volume containing a single major ‘object’. The Reception area contains a single, black concrete box-like structure which occupies the center of the space. Within this structure are combined the Reception Desk, Coat Check and Washrooms. This ‘object further serves to help define the inner perimeter of the (semi-private/private) Administration area. The Archive volume contains only an ‘object’ ramp the strands of which are attached to the sides of four, floor-to-ceiling cor-ten columns. In the Cafeteria space (the seating area) the only permanent fixture is a large cor-ten steel staircase along the west side—parallel to the glass curtain wall—which ascends to the Reading Room above. The kitchen/preparation area is set behind a wall at the south end of the space and only a service window connects it with the seating area. The Reading Room contains only an ‘object’ ramp which is suspended from the ceiling.\(^8\)

All other service rooms, elevators, emergency stairs etc. are lodged in narrow volumes between walls (‘inhabited’ walls, so to speak) or behind a dividing wall across the south end

---

\(^8\) The bookshelves do not function as ‘objects’ here but instead line the east perimeter wall (and small area along the north and south walls of the space) echoing the ‘walls’ formed by the genetic sample storage shelves in the Archive.
of the south volume of the Memorial—i.e. the loading dock, storage and preparation areas, mechanical rooms etc.. The building’s intake and exhaust vents are located within two separate ‘pits’ created where the roof folds down to the level of the mechanical room floor below. In this way the vents do not intrude on any of the Memorial’s elevations, are easily accessible for maintenance and minimize the possibility of the intake vents drawing in noxious fumes such as vehicle exhaust or stale air from the Memorial’s exhaust vents and venting this into the building. As well, because the height of the Genetic Archive and Memorial is only 6.60m above grade, the top lines of the elevations would be clearly visible from grade; additionally, a number of existing buildings in the immediate vicinity overlook the site and are taller than the Memorial (future structures in the area are likely to be so as well). In light of this, I felt that placing mechanical units directly on the roof would not only detract from the visual clarity and cleanness of the building’s elevations but would be an unsightly element as viewed from above.

The proportions of the Genetic Archive and Memorial are based on multiples of a 10m by 10m square, combined with a Golden Section derived from that square (which yields a rectangle of 16.18m). Thus the width of the Memorial is 10m; the south volume is 4 x 10m = 40m in length; the north volume is 3 x 10m + 10 (Φ) = 46.18m in length; the distance from the back (western) edge of the Memorial to the outside of the perimeter wall (the eastern edge of the site) is 10 (Φ) = 16.18m; the distance from the front (eastern) facades of the Memorial to the (western) edge of the paved area behind the structure is also 10 (Φ) = 16.18m.
A PHENOMENOLOGICAL WALK-THROUGH

Architecture is a gesture. 

Ludwig Wittgenstein, Culture and Value

The design of the Genetic Archive and Memorial attempts to create a space of absence by employing a ‘descent into the earth’ (the entrance, the courtyard and more than one-third of the Memorial are below grade). This is combined with and reinforced by an entry sequence that involves a series of spatial compressions and expansions/releases and an interior processional pathway utilizing ramps—a ‘staircase to heaven’—that takes one on an ‘ascent into the sky’. Perhaps the best way to show this is to describe what the visitor would see and experience in a visit to the Memorial and Genetic Archive.9

As one approaches the Genetic Archive and Memorial at grade, very little about the building is revealed. It is reasonably clear from this vantage that the building consists of two volumes separated by a large gap through which run the railroad tracks. The sides and backs of the structure are 6.60m high walls of black-dyed concrete; they have no windows and the only doors visible are a fire exit at back of each volume and a fire exit and folding overhead door (for the loading dock) on the south end of the south volume.

Figure 19. Model: North Elevation

Situated in front of the north side of the Memorial is a reflecting pool, 7.00m across and running the entire 10.00m width of this end of the building. The pool not only prevents

9 What follows is not intended to be an exhaustive interpretation of the experience of a visit to the Genetic Archive and Memorial. I take it as axiomatic that:
   a) the scope of interpretation—the meaning—of a work of architecture, and indeed, of any art work, always exceeds its maker’s intentions and
   b) that no experience of such can be translated without remainder into a verbal description, no matter how exhaustive that description.
visitors from approaching the building at this point but, when combined with the perimeter wall that runs along the eastern edge of the site (which I shall discuss presently), effectively prevents them from obtaining more than a narrow, raking view cutting obliquely across the front facades of the Memorial and down into the below-grade entrance courtyard—a kind of visual compression. (By looking up to the Memorial’s roof, one can also perhaps just make out a fragment of what appears to be a tall, narrow cor-ten steel-clad ‘bridge’ linking the two sides of the Memorial 5.00m above the railroad tracks.)

Yet the reflecting pool also provides a sign that this courtyard can be accessed. It does so because the pool wraps around a narrow line of water steps which begin their descent into the courtyard from near the outer edge of the pool. At the courtyard level (3.40m below grade) the water empties into a narrow (1.50m wide) reflecting channel that runs the entire length of both facades and beyond to where, at the south end of the Memorial, the channel itself serves to signal the visitor standing at grade, a slightly different sign in this regard.

![Figure 20. Model: South Elevation](image)

Here a railing around a deep, narrow cut in the ground beckons to the visitor. As one approaches, only an narrow view is afforded obliquely across the Memorial’s two facades and into the entrance courtyard, but when one peers down into the cut in the ground, the reflecting channel is visible at the bottom.

The use of water in the design is also intended to combine with both natural and artificial light in such a way as to bring about a sense of the dematerialization of matter. In daylight, the reflecting pool and channel help to soften the severity of the Memorial’s exterior form by reflecting sunlight from the rippling surface of the water onto the walls; at night, floodlights housed below the surface of the water project light up through the moving water and against
Apart from the oblique views across the facades afforded from either end of the Memorial, along the eastern edge of the site the visitor’s view of the exterior courtyard and the front facades are blocked by a thick (0.80m) 3.40m high black concrete wall. However, the wall also serves to signal the visitor as to where the Memorial’s entrance is located. The public sidewalk runs directly adjacent to the exterior of this wall and the top edge of the wall parallels the descent of the sidewalk beneath the railway overpass. At a point along on the north side of the underpass, a few meters along the sidewalk, the wall is pierced by a small (0.15m) square opening at a height of about 1.25m. This allows a tantalizing glimpse across to the Memorial.

Similarly, along the south side of the underpass, the wall is pierced in two places. The first opening is a few meters down the sidewalk towards the underpass and takes the form of a notch, 0.20m, wide that starts at the top of the wall and stops about 1.75m above the level of the sidewalk. This allows the visitor only a view across to the upper third of the Memorial's facade, where an identically proportioned window is cut into the concrete. A few meters more down the sidewalk (towards the underpass) there is another opening, identical in size and height to the one at the north end of the wall. Like its companion, this opening too allows only a narrow view across to the Memorial.

\[10\] The reflecting pool and water channels are radiantly heated from below and can therefore serve to reflect light year-round.
Following the sidewalk (from either end) further along the wall and down into the underpass—a vertical compression—the visitor arrives at a 3.00m wide break in the wall which is the entrance into the below-grade courtyard. Passing through the entrance—a horizontal compression—which is located precisely at the half-way point of the underpass and on into the courtyard, the visitor remains beneath the overpass but can see the space of the courtyard to either side opening horizontally along the facades of both volumes of the Memorial and vertically to the sky—a simultaneous vertical and lateral horizontal expansion/release. It is this 'descending into the earth' to enter the Archive and Memorial that begins to establish it as a space of absence.

The entrance courtyard extends the entire length of the Memorial and continues a few meters beyond on either side; it is slightly more than 6.00m in width—including the reflecting channel—and approximately 108.00m in length. It (the courtyard) also helps establish the Memorial as a 'space apart' by isolating the visitor visually and aurally from the sights and sounds of the surrounding city. The sound of water cascading down and over the steps from the reflecting pool 3.40m above, coupled with the high, thick walls which surround the courtyard, combine to mask the sounds and sight of traffic etc. (though not the sound and vibration of the railroad, which will sometimes thunder overhead—a reminder that we cannot ever completely escape the human world and its impact on us).

If the visitor should choose to walk out from beneath the railway overpass and emerge into the open courtyard on either side, they will notice that a hollowing along the interior elevation of the perimeter wall has formed a long bench facing the Memorial. This bench provides the visitor with a location and an occasion for reflection and temporary respite in this 'space apart' from the noise and bustle of the world.

If the visitor should then choose to sit on the bench (on the either side of the overpass) they will find themselves facing one of the Memorial's facades and will perhaps notice that the walls are not as completely blank as they may have thought. Immediately above the water level of the reflective channel and running horizontally the length of the facade, is a narrow (0.15m high x 0.20m deep) cut in the wall. The shadow created by this cut serves to visually lighten the sense of mass and weight of the facades, causing them to appear to 'float', ever so slightly, above the water. Facing the Memorial too, the visitor will notice that immediately
above the aforementioned cut and starting a few meters from the each outside edge of the railway overpass (above), there is a narrow window opening (0.40m high) cut into the wall that runs horizontally for (approx.) 12.00m. Through this opening one might perhaps glimpse people’s feet as they walk along inside the Memorial. Finally, from the south end of the courtyard, a visitor will gain a clear view of the narrow vertical opening (0.20m wide x 3.75m high) cut into the upper side of that facade and grasp its relationship to the (aforementioned) corresponding notch in the perimeter wall.

Centered directly below the railway overpass, at the point where the facades of the two volumes of the Memorial connect, is the entrance to the Genetic Archive and Memorial. In form, this opening continues the language of cuts (or punches) utilized for other openings in the structure and again involves a sequence of compression-expansion-compression-expansion. The entrance is located a further 0.35m below courtyard level and, to the visitor, initially reads as a dark gap or hole (2.00m wide) in the facade behind which they discover a 1.50m deep by 4.00m wide vestibule formed between the skin of the facade and two automatic sliding glass doors. The vestibule utilizes an air curtain instead of a double set of doors for insulation and environmental containment, and the use of sliding glass doors prefigures the lateral horizontal spatial expansion that will occur as the visitor emerges into the entrance foyer.

The reception desk is centered in the foyer and, to either side, is the expanse of the Memorial’s internal volumes. At the reception desk the visitor has a choice: to go to the right (north) and enter the Genetic Archive or to turn to the left (south) and access a Cafeteria (on the same level) or the Reading Room (one floor up). Here too they may experience the noise and vibration of a train rolling overhead and realize that the ceiling of this space is also the railway overpass.

Assuming the visitor wishes to visit the Genetic Archive, at the far right-hand side of the reception area they will discover the beginning of a cor-ten steel ramp. The ‘floor’ of the ramp is transparent—being constructed of steel mesh. The ramp ascends quite gradually and proceeds directly into the main volume of the Archive—a large, open, almost nave-like space—where, continuing its gradual ascent, it runs the length of the space (about 40.00m) before turning 180° and returning to the opposite end. The ceiling and floor of this space (and the reception area as well) has the same black-dyed concrete finish as the exterior of
the Memorial. Along both sides of the space, stainless-steel shelving runs vertically from floor to ceiling (10.00m). This is divided into over twenty-five hundred individual niches containing the insulated, liquid nitrogen-filled stainless-steel flasks that store the genetic samples. Each niche measures 0.50m high by 0.50m wide by 0.35m deep and open at the back onto a long (40.00m), narrow (1.50m) service volume. Each of these two volumes contains three levels of service walkways for use by Archive personnel to access the storage flasks. The walkway floors are of transparent steel mesh and, cut through the roof overhead, are skylights the exact width and length of the service volumes. Daylight can thus percolate through the various levels of mesh flooring and shine out into the main volume of the Archive through the open backed niches: indeed, this diffuse daylight is the sole illumination for the main Archive volume.\footnote{The service volumes will also have supplementary artificial lighting that would be used to illuminate both the service walkways and the Archive main volume if necessary: i.e. on dark days and in the evening.}

This light also plays a role in reminding the visitor of the transience of life and the ongoing loss of genetic diversity in the ecosystem such that if a species (whose DNA is stored in the Archive) becomes extinct in the wild, the front of the corresponding niche is sealed off by a light-proof door. The amount of light entering the main volume of the Archive is thereby reduced, and the visitor will find the space correspondingly darker. Perhaps too the visitor will reflect that, in the Archive, light undergoes a kind of transubstantiation into presence, becoming an analogue for life—for the Being of life—or for its passing away.
Continuing along and up the ramp, the visitor will notice that it's edge runs parallel to the niches at a distance of 1.20m. Because of this, the visitor can clearly observe each storage flask and, engraved upon it, the name/s of the species whose DNA is therein contained. However, at that distance, the flasks remain just barely out of the visitor's reach, echoing the condition of our contemporary humanity's frustrated metaphysical passion to somehow 'regain touch with' or 'hang on to' the rapidly vanishing fragments of a shattered natural world.

Though each strand of the ramp (there are six) rises only gradually over its 40m run, the visitor will require some time and expense of effort to complete their directed promenade back and forth, on and up through the Archive space. This is intentional and recalls not only the trials on the path of the traditional spiritual pilgrimage, the labor of the spiritual quest, but also echoes the processional ambulatory of many early Christian martyria, baptistery's and pilgrimage sites, as well as penitential labyrinth patterns found in the floors of many Gothic cathedrals such as Chartres and Reims. (cf. SP, pp. 27-30, 118-19)

Over the final meters of their journey along the ramp within the Archive volume, the visitor experiences a compression as they gradually rise up and through a cut along the roof and into a space that, as the ramp continues to rise above the level of the storage niches, becomes increasingly dark and possesses very different acoustic and spatial qualities. At this point the visitor may realize that they are now entering the narrow, steel-clad volume bridging the railroad tracks between the two volumes of the Memorial. At any rate, in the dimming light (there are no lights inside this space and the only illumination is from ambient reflection from the Archive space behind) they will discover that the ramp has leveled out and now runs between two giant trusses. As well, because the surrounding space has narrowed to 1.20m wide by approx. 3.00m high and is composed of steel, footsteps and other noises will sound audibly different than what was experienced inside the concrete

12 Here one may recall that traditionally the path is associated with the journey from the known into the unknown. (cf. SP, p. 40)
volume of the Archive.

Walking further along between the trusses, at the midpoint of the bridge, the visitor reaches what could be interpreted as the climax of the Memorial, a momentary point where they are immersed in near-total darkness—a sensory compression where sight is dimmed, sounds are altered and even the vibration of a train passing below is more sensed than felt. Here the visitor may reflect that they originally entered the ‘space apart’ of the Memorial by descending into the earth, but now the ramp has served as a kind of ‘staircase’ to heaven and—as long as the darkness lasts—find themselves momentarily in another, different, ‘space apart’. This place is intended as a kind of transitory pause for reflection, a place of inwardness on the visitor’s progress through the phenomenological narrative of the Memorial. It is a place that T.S. Eliot describes as being “[a]t the still point of the turning world...where past and future are gathered.”

Walking on from this point the visitor begins to notice that further along the path it is beginning to grow light again. All at once the ramp begins a gentle incline down from between the trusses and out into the south volume of the Memorial. Looking left, the visitor sees that they are slowly beginning to emerge into a bright, light-filled interior space, which is the Reading Room (6.00m wide by 25.00m long). To the right, the steel truss and its cor-ten cladding gradually gives way to a glass curtain wall. Through it, the visitor sees an open, interior courtyard below and, above it, a long, narrow wedge of sky framed between the top edge of the curtain wall and the crest of the Memorial’s 10.35m back wall. As they descend the strands of the ramp and onto the floor of the Reading Room, the visitor will perhaps ponder the age-old analogy between light and knowledge—enlightenment—and be moved to linger a little longer among the books.

Alongside the glass curtain wall of the Reading Room, the visitor finds a wide ‘object’ staircase that they can take to reach the reception level and the exit one floor below. The staircase is made of cor-ten steel and vibrates hollowly as they descend, its sonority helping reacquaint the visitor with the quiddity and the sheer presentness of their existence.

---


14 There is also an elevator located at the north end of the reading room to assist with handicapped access.
At the bottom of the stairs the visitor faces a choice: if they wish some refreshment before leaving the Memorial, there is a cafeteria located at the south end of the room (opposite the direction of the staircase) or, if they prefer, the reception desk is directly ahead of them and they can exit the Memorial by proceeding directly ahead past the reception desk, through the sliding glass doors they originally entered and back out into the entrance courtyard. The visitor thus exits exactly in reverse of their entrance, gradually emerging from the ‘space apart’ of the Memorial and ascending back to grade and into the cultural and social space of their life and the city. They have followed (and completed), like pilgrims in an earlier age, a circular path and experienced not just a physical journey but perhaps too a journey of the spirit.\(^{15}\)

**BURNT NORTON (Excerpt)**

At the still point of the turning world. Neither flesh nor fleshless:
Neither from nor towards: at the still point, there the dance is.
But neither arrest nor movement. And do not call it fixity,
Where past and future are gathered. Neither movement from nor towards,
Neither ascent nor decline. Except for the point, the still point.
There would be no dance, and there is only the dance.
I can only say, there we have been: but I cannot say where.
And I cannot say, how long, for that is to place it in time.
The inner freedom from the practical desire,
The release from action and suffering, release from the inner
And the outer compulsion, yet surrounded
By a grace of sense, a white light still and moving,
*Erhebung* without motion, concentration
Without elimination, both a new world
And the old made explicit, understood
In the completion of its partial ecstasy,
The resolution of its partial horror.

T.S. Eliot

---

\(^{15}\) Thomas Barrie points out that the embodiment in architecture of the circular path “perhaps grew out of archetypal devotional and religious acts.” He goes on to say that “it symbolizes a respectful and gradual approach to the divine. One walks around the sacred center, close but not too close, and in some cases the center is never reached....The circumambulating path also suggests unity because of how the path and place simultaneously create each other. The sacred place and the path to it form an integral whole.” (SP, p. 125)

As well, in reference to the relation between architecture as path and architecture conceived as place, Dagobert Frey writes that: “All architecture is a structuring of space by means of a goal or path.” (SP, p. 39)
BIBLIOGRAPHY

BOOKS


BIBLIOGRAPHY


BIBLIOGRAPHY


ARTICLES AND PERIODICALS:


BIBLIOGRAPHY


