Challenging Architectural Expiration: A transformative re-purposing of the Enterprise Foundry

by

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A thesis submitted to the Faculty of Graduate and
Postdoctoral Affairs in partial fulfillment of the
requirements for the degree of

Master of Architecture
in
M.ARCH (Professional)

Library and Archives
Canada

Published Heritage
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395 Wellington Street
Ottawa ON K1A 0N4
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Bibliothèque et
Archives Canada

Direction du
Patrimoine de l'édition

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file *Votre référence*
ISBN: 978-0-494-81723-0
Our file *Notre référence*
ISBN: 978-0-494-81723-0

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ABSTRACT

The act of preserving architectural artefacts is normally reserved for constructions of cultural status. The masonry buildings of the industrial era in Canada, devoid of “value,” offer an uninhibited palette for architectural re-invention and thus a greater potential for active intervention, innovative re-programming, and recovery of social relevance, than “valuable” heritage buildings. That they are often abandoned should not be seen as an indication that they are ill suited for preservation. By contesting the idea that programmatic obsolescence in ordinary buildings signifies expiration, we effectively take charge of the potential to create rich and layered architectural storytelling within a built context where temporal layering and complexity are increasingly difficult to find. This thesis explores the possibilities of conserving and repurposing buildings of the ordinary industrial category. In a larger movement, this thesis considers a path for recuperating long-standing architectural values so often absent in contemporary construction: solidity and permanence.

ACKNOWLEDGMENTS

I wish to wholeheartedly thank Professor Janine Debanné for her inspiration, guidance, and invaluable editing, all of which enabled this thesis to become what it is. I would also like to extend genuine thanks to all of my classmates and friends, in particular Richard Anderson and Vanessa Worrell, whose efforts were of great assistance during the completion of this work.

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INTRODUCTION

Re-Evaluating Architectural Expiration

firmitas • simultaneously signifying permanence and durability, *firmitas* is used throughout this thesis to refer to the ability of a building endure over time, enabling it to serve as a repository of cultural values and memories

(Vitruvius, M H Morgan, 17)

What has become of Architecture's *firmitas*? In the context of contemporary society's fast paced cycles of change and renewal, expedience and obsolescence, the traditional meaning of Architecture as a solid and stable cultural place holder has shifted. Ours is a society gripped by short lived trends with little tolerance for the outdated. We replace rather than repair that which has either become worn or unfashionable. While we like to believe that architecture stands as an exception to this pattern, the reality of our contemporary built context indicates otherwise. In Canada and throughout the world, the architectural landscape is replete with cheaply built constructions of the recent past that have already run their course of usefulness, and upon which age and weathering processes have a humiliating rather than ennobling effect. In turn, we choose to salvage and restore older and more solidly built structures infrequently, and often only when these structures belong to noble categories such as churches or cultural institutions, the ordinary industrial building considered too banal to warrant the expense of restoration. Canadian landscapes, both rural and urban, feature many abandoned masonry industrial buildings of the past century. Owners and municipalities have left these to decay once they have lost their usefulness. But might not we be missing opportunities to create rich and layered architectural landscapes by overlooking this category of ordinary but solidly built masonry industrial buildings, simply due to the cost and effort required to renovate?

This thesis will examine a variety of consequences to the loss of *firmitas* -- herein referring to the solidity and endurance of buildings -- in architecture. The first chapter of this thesis outlines the reasoning behind, and the reactions to, the increasingly transient nature of contemporary architecture. The second chapter examines re-use practices in architecture which offer alternatives to abandonment. The question of the suitability of conservation and preservation of buildings of minimal stylistic or cultural significance will here be central. Possible transformations of traditional preservation

methodologies--as codified by various heritage acts- are suggested, in which the focus might be shifted away from buildings already understood to be valuable, instead addressing the question of protection and re-imagination of ordinary utilitarian buildings. This thesis suggests the potential of a dialogue between the established tenets of preservation and the novelty of contemporary intervention. It pursues an approach specifically geared towards the re-programming of buildings ordinary enough to be overlooked and for which renovations are not normally considered given the availability of a quicker and less costly option. Effectively introducing a greater potential for adaptation and innovative re-programming, a dynamic language of reuse might be achieved which not only extends a building's life span, but simultaneously provides a novel experience that surpasses any perceptions of obsolescence associated with the existing architecture. The third chapter examines the industrial landscape as an architectural typology that is not only widely perceived as architecturally mundane, but that also features the most commonly abandoned building types within the North American context. The old factory here emerges as not only in need of social response, but as ideally suited to transformative re-purposing. The thesis will culminate with an architectural proposition to recover and re-identify the Enterprise Foundry in Sackville New Brunswick. Addressing the common North American scenario of small town de-industrialization and the architectural waste that is left behind, the project attempts to re-connect a semi abandoned, but once significant industrial building, to its surrounding community, and to re-inscribe it into the present day fabric. A combination of selective demolition, re-interpretations, and new insertions are applied in the overhauling of the facility. Attempting to partially preserve the foundry's historic identity while simultaneously subduing its overtly industrial overtones in order to appeal to the contemporary understanding of value, the design transforms the forgotten factory into a community landmark.

CHAPTER 1

Living In A Material World: A look at Architectural Obsolescence

1.1 *Architectural Obsolescence and the Origins of Transitory Building*

Fig 1 - Joseph Paxton's Crystal Palace (1851) was erected for the Great Exhibition in London's Hyde Park. It was designed to function for the duration of the fair and was completely dismantled and relocated at the Exhibition's end.

Exploring the nature of contemporary built landscapes, architectural Theoretician Antoine Picon, describes urban fabric as being increasingly driven by the rhythms of mass consumption:

Even in the absence of an overall finality, most elements of [the city's] composition- infrastructure, buildings, billboards- were conceived with a very precise goal in mind. That which works wears itself out and stops being useful.¹

The acceptance of obsolescence to which Picon refers is by no means new to architectural thought. (Fig 1) Rooted in a conceptual approach to architecture wherein affordable production is valued above longevity, the perception of buildings as products can be traced back to the modernist schools of the early twentieth century. The modern movement pursued an interest in shorter lifespan architecture as part of a broader social project that included the democratization of building. Its buildings rejected the solidity of past architecture in favor of responding to more punctual needs. According to Le Corbusier, a truly modern context could be best maintained if architecture was routinely replaced to keep up with advancing technologies.²

Carried forward a century, these ideas still heavily permeate today's architectural practice. With accelerated schedules and light weight construction, short-lived architecture defines the contemporary urban fabric in North America. This temporization of building is not devoid of merit – the lightweight building can respond to a myriad of situations quickly; however, its widespread dominance over solidity

1 Picon, Antoine. "Anxious Landscapes: From ruin to rust." *Grey Room*, 76.

2 Le Corbusier. *Towards a New Architecture*, 229-89.

Fig 2. - Oculus of the Pantheon, Rome. Originally commissioned by Agrippa, the Pantheon suffered damage from several fires and was completely rebuilt by Hadrian between AD 118-128, keeping the original inscription above the entrance. Despite centuries of change, conflict and upheaval, the Pantheon remains one of Rome's great attractions.

Fig 3. - Edward Burtynsky's Oil series: Breezwood Pennsylvania. Burtynsky's Breezwood Photograph exemplifies the kind of landscape which results from the prioritization of affordability and condensed construction schedules.

and permanence within the built environment gives rise to a number of legitimate concerns. Environmentally, the continually increased exploitation of resources necessitated by rapid architectural turn-over must be recognized as detrimental. Culturally, though more abstract and difficult to assess, the consequences associated with a transitory built condition weigh upon us with equal urgency.

1.2 The loss of *Firmitas*

As expressed by conservationist Johannes Cramer, "the very permanence of buildings makes them predestined for use as bearers and points of orientation in individual and collective memory."³ (Fig - 2) The very permanence with which Cramer credits architecture has become increasingly absent from contemporary building. (Fig.3) By relinquishing architecture's *firmitas*, it must be acknowledged that we simultaneously jeopardize a significant vessel for propagating cultural memory for posterity. If our traditional holders of memory are eliminated, what then becomes of our collective identity? Posing this very question, a number of architects and theoreticians have critically responded to the modernist disregard for permanence, elaborating on the risks of eliminating *firmitas* from architecture.

Confident that monumentality was in fact key to creating powerful and influential architecture, Architect Louis Kahn, though a self proclaimed modernist, actively advocated permanence and solidity in new architecture. Arguing that in order to truly situate a user the building must itself be situated, Kahn developed a monumentality and rootedness for architecture of his time and context. Kahn believed in creating monuments which could act as enduring cultural placeholders endowed with the ability to locate the dweller.⁴ For Kahn, architecture's locatedness carried the power to bring about social awareness.

³ Cramer, Johannes. *Architecture in Existing Fabric*, 18.

⁴ Goldhagen, Sarah. *Louis Kahn's Situated Modernism*, 199.

Fig 4 – Aldo Rossi's *citta analoga* (1966))

Fig 5 – The traces of a demolished building still cling to this factory wall, showing its shape and telling of its destruction.

A contemporary of Kahn's, Aldo Rossi, also took objection to modernism's rejection of monumentality. Like Kahn, Rossi valued architecture's ability to proffer cultural identity through time. Reflecting upon the importance of the city plan as repository of collective memory and social relationships, Rossi came to the conclusion that architecture must be entrenched in historical urban relationships. (Fig.4) The complexity of relationships between buildings of different eras, styles, and schools of design are responsible, according to Rossi, for giving a city and its citizens a complete identity. In cities where the built fabric is unvaried and dating from the same period, urban relationships lack complexity and become flat. Rossi's *Analogous City* thus approaches the urban realm in a collagistic fashion that embraces the layering of time periods, social ritual, and human life in the city.⁵

In his book *What Time is This Place*, urban planner and theorist Kevin Lynch, who has written extensively on the question of preserving historic buildings, links the perceivable traces of time to a greater impression of cultural fullness. Lynch argues that without tangible references through which to recognize the vastness and duration of our collective identity, it is difficult to understand or feel a part of it. The depth of historical time is made comprehensible through a visible accretion of signs of past events. Lynch suggests the need for a complete collection of external props able to assist in the temporal organization of memory.⁶ Lynch also argues that these residual traces of past events or 'props'--referring to the physical remnants which link us to another time -- must adopt multiple forms, architecture being one of them. Lynch's thesis -- that while written accounts provide factual historic details, it is primarily through the interaction with physical traces that we are able to develop a deeper relationship with something which has otherwise disappeared -- strongly endorses the built realm. Stories tell us where we have been, while tangible traces *show* us, viscerally linking us to a past that feels real. (Fig.5)

5 Rossi, Aldo. *The Architecture of the City*.

6 Lynch, Kevin. *What Time is This Place*, 123.

In stating that “*A portion of the past being saved as good promises that the future will so save the present,*”⁷ Lynch alludes to a connection between our treatment of the past and the predicted treatment of the present by future generations. In discussing the benefits of imbuing buildings with longevity, Lynch also alludes to a sort of existential comfort that results from the anticipated endurance of one’s own contributions. The continuity of social memory is threatened, Lynch suggests, when we treat the past with casual disregard. The subconscious understanding that our efforts are likely slated for a trash heap might lead to decreased responsibility towards our own creations.

While each approaching the question somewhat differently, Kahn Rossi and Lynch all perceived that architecture’s potential to act as a carrier of cultural significance resides in its ability to communicate with posterity. While it is generally acknowledged that not every building must act in this capacity, the overall loss of *firmitas* in architecture should concern us.

Fig.6—Edward Burtynsky’s *Manufactured Landscapes: China Recycling #8*. This image of Plastic toy parts in Guandong illustrates the extent of the material waste that is produced by consumerist cultures of today.

1.3 *Anxious Landscapes: The affects of rubbish on the cultural psyche*

While the concerns of Kahn, Rossi and Lynch pertain to issues which threaten the social comfort of generations to come, there are also those theoreticians who comment on a more immediate discomfort that is experienced in the face of obsolescence within the contemporary built landscape. (Fig.6) Describing the experience of urban peripheries as ‘disturbing,’ architectural theoretician Antoine Picon attributes a collective anxiety to what he describes as an increasing obliteration of nature in the face of human made artifacts, as made obvious through obsolescence:

⁷ Lynch, Kevin. *What Time is This Place*, 40.

Fig. 7 – Piranesi's *Carcere* etchings, Plate VII State 4 (1770-1835).

Fig. 8 – A cracked window in the abandoned Packard Plant in Detroit - decommissioned in 1956 - looks out over a sea of obsolete and abandoned architecture

Obsolescence is not exactly the same thing as death, the progressive and dignified death that came to objects of yesteryear. In traditional landscapes, the productions of man, his constructions in particular, surrendered themselves progressively to nature in the form of ruin. The ruin reintegrated, in successive stages, the traces of human activity into the cycle of nature. There is nothing of the sort in the contemporary city, where objects, if they don't disappear all in one go, as if by magic, are instead relegated to obsolescence, a bit like the living dead who endlessly haunt the landscape, preventing it from ever becoming peaceful again. We have gone from ruin to rust, from trace to waste.⁸

Making reference to Piranesi's 'Carcere' prison etchings, (Fig.7) wherein the impression of confinement is communicated via a seemingly endless constructed landscape offering no glimpse of the exterior world, Picon links a deep feeling of unease to a landscape where nature is obscured by architecture. Describing humans as confined in the middle of [their] production as if within a prison,⁹ Picon likens our awareness of the dominance of built fabric over nature to a trap that separates us from nature. This feeling of being divided from nature in turn leads to a feeling of dehumanization. This reaction of discomfort is compounded by the fact that in many locations-- particularly in previously industrial areas-- much of the architecture surrounding us has ceased to serve its original programmatic function and has subsequently been decommissioned or abandoned. These manifestations of decay do nothing but remind us of obsolescence and the cycles of decay that characterize our society. (Fig.8)

Sociologist Michael Thompson's study of social reactions to rubbish support Picon's correlation between anxiety and the presence of waste. Thompson's research finds that the sight of things that have become useless and relegated to the category of waste triggers a

8 Picon, Antoine. "Anxious Landscapes: From ruin to rust." *Grey Room*, 76.

9 Ibid, 79.

powerful desire to conceal them from notice. This is due to the fact, according to Thompson, that when we are unable to ignore waste, we are forced to acknowledge the presence of what we socially condemn, and so are made uncomfortable.¹⁰ At a point where the sheer volume of abandoned architecture within all major developed landscapes is impossible to ignore, both Thompson and Picon underscore the adverse effects resulting from disposable architecture.

1.4 *Nostalgia for ruin: The danger inherent in romanticization of the ruin*

In his article, *Nostalgia for Ruin*, historian and theorist Andreas Huyssen looks at what has become of our social perception of the ruin and how this has affected our reactions towards rust, ageing, and decay:

As commodities, things in general don't age well. They become obsolete, are thrown out, or recycled. Buildings are torn down or restored. The chance for things to age and become ruin has diminished in the age of turbo capitalism, ironically in step with the continuing rise in the average age of the populace.¹¹

Connecting the current architectural context to a perceived absence of authenticity, Huyssen goes on to explore the attempts made to address this absence. Huyssen suggests throughout the article that along the way we have developed a nostalgia for ruins themselves due to the authenticity they are perceived to embody. Huyssen aptly points out the risks equated with over romanticizing decay: fabric of deteriorated or destroyed condition becomes fetishized. If the ruin traditionally referred to ancient structures in a state of graceful return to nature--as when stone crumbles to return to some semblance of its original state--, the current notion of ruin includes even the most dilapidated rusting corpses. This romanticized perception has resulted in numerous campaigns to photograph and artistically

10 Thompson, Micheal. *Rubbish Theory: The creation and destruction of value*, 1-12.

11 Huyssen, Andreas. "Nostalgia for Ruins." *Grey Room*, 10.

represent deteriorated fabrics, which has simultaneously distorted significance of this type of ruin. As seen in rustbelt cities like Detroit, a strong case in point, valuing the ruinous from an aesthetic point of view is an act that completely ignores the ruin's true economic and social causes and repercussions. While many photographers and artist are hypnotised by the haunting abandoned quality of this legendary urban center, the truth of the situation is far from idyllic or picturesque. These artists have arguably done nothing but provide outsiders and city residents with voyeuristic and specular reminders of the decay of their urban center. (Fig.9)

1.5 *So What is to be Done?*

The concern for a rehabilitation of *firmitas* in architecture is invigorated by growing concerns for the environmental consequences of prolonged exploitation of our natural world. The risks associated with the rampant abandonment of built fabric are significant. The time has come to consider changing our approach towards architectural obsolescence. By casting off the programmatically obsolete, and assuming the blank slate to be the best starting point, we not only waste existing built potential, but simultaneously add to the proliferation of rust throughout the landscape. The 20th century pattern of finding architectural progress in novelty is due for a tune up; after years of looking first and foremost to the future for answers, perhaps it is time to reconsider what we might glean by taken a second look backwards, to what we have already created.

Fig. 9 – The Lee Plaza Luxury residential hotel Detroit, closed in the 1990s.

CHAPTER 2

Re-Use: An Answer to Architectural Temporization and Waste

Fig. 10 – Viollet le Duc's project for a market place, using dramatically exposed ironwork.

Fig. 11 – Ruskin etching illustrating the character which can only be achieved through the graceful and honest aging of architecture.

conservation • All the processes of looking after a place so as to retain its cultural significance.

restoration • returning a building or parts of it to a form in which it appeared as some point in the past.

(Orbasli, 211-13)

2.1 A Brief History of Conservation, Restoration and Reuse in Architecture

The idea of re-purposing existing buildings is by no means new. Propelled by a momentum dating back to the nineteenth century, the practice of consciously intervening upon existing buildings with the intent of preserving historic significance is one which can be traced back to popular trends of Gothic revival and restoration. Central to these movements, French architect Eugène Emmanuel Viollet-le-Duc wrote of the duty of the architect as being “not to create, but to analyze, combine, and appropriate the traditional forms at their disposal.”¹² Attempting to preserve the educational value embodied in existing architecture, Viollet-le-Duc advocated the adaptation of historic material to illustrate more precisely and clearly what was perceived to be their original design intent. His work often entailed restoring gothic buildings and intervening on more recent additions based on notions of purity of style.¹³ Not infrequently, his operations resulted in “recovering” states which may never have existed. (Fig. 10)

In retaliation to Viollet le Duc's confident and aggressive approach, his contemporary John Ruskin described this type of refurbishment as “the most total destruction which a building can suffer: a destruction out of which no remnants can be gathered: a destruction accompanied with false description of the thing destroyed.”¹⁴ Attributing the truest value of architecture to its traces of passing time- the staining, crumbling and wearing away of material- Ruskin's writing gave rise to a new process of conservation, wherein the condition of the buildings, including any signs of aging, were to be carefully preserved during rehabilitation. (Fig.11)

12 Viollet le Duc, Eugène-Emmanuel. *Discourses on Architecture*, 170.

13 Orbasli, Aylin. *Architectural Conservation*, 17.

14 Ruskin, John. *Seven Lamps of Architecture*, 353.

Having been established as the two primary means of working within existing fabrics, restoration and conservation both continued to be employed throughout the following century. The idea of featuring insertions of stylistically modern interventions into existing buildings only came later. Exemplified in the work of notable Italian Architect Carlo Scarpa, this new trend of hybrid re-use projects led the way for many projects to come. (Fig.12)

Embracing the value of re-inhabiting old buildings, restoration, conservation and re-purposing continue to be active branches of architecture which contribute significantly to the maintenance of historically significant landmarks. However, unimportant and unremarkable older buildings fall outside their scope of operations. What, then, is to become of this large portion of our built heritage which is not aesthetically extraordinary or historically prominent? (Fig.13)

As a building's decay makes its appearance increasingly undesirable, the perception of value and potential are decreased, and with them, its perceived entitlement to preservation. More often than not efforts are deemed to be better invested elsewhere and existing facilities are abandoned. It must be said that the locations of these older facilities, at times far from urban centers, aggravates the problem: what is the point of salvaging a structure that is not in the right location? Still more generally, why are we so reluctant to entertain the possibility that buried under the decay, there lies potential for revival? Might not these cast offs - though mismatched with traditional goals of conservation and restoration - possess their own unique value, different from that found within a typical conservation project?

Fig 12 – Carlo Scarpa, Castelvechio (1973)
Fig 13 – Windows in The Enterprise foundry

2.2 Conservation: What is Conserved? What is lost?

“Preservation is not simply the saving of old things but the maintaining of a response to those things.”

- Kevin Lynch¹⁵

Fig. 14 – The Parliamentary library, re-opened in May 2006 after extensive reconstructions, paid close attention to the original design intent, even selecting paint colors in accordance with original design.

With origins rooted in the preservation of historic movements, it is not surprising that architectural conservation projects are often treated with the delicacy of museum displays. Attempting to insulate against any further impacts that time might have upon historic details, conservation actions are aimed at preserving the existing fabric in as close to its current condition as possible. As illustrated by conservationist Johannes Cramer, maintaining the maximum degree of material authenticity is crucial, as every detail holds clues to the past of the building; traces of aging which can be linked to cultural identity.¹⁶ Treated by preservationists and heritage enthusiasts as something to be painstakingly archived, the existing context is often only selectively mixed with contemporary design, so as not to cloud the clarity of ‘then’ with the presence of ‘now’. Seeking to halt the natural progression of change and decay, the preserved or restored building is removed from the realm of ordinary susceptibility to change and is transformed into historic artifact. Ottawa’s parliament hill, with its constant restorations, illustrates the idea of an architectural ‘relic’. These neo-Gothic buildings are made to be preserved for posterity, conveying a static reference to a historic context understood as familiar. (Fig.14)

Exploring humans’ assumptions and behaviours upon entering recognized urban settings, Kevin Lynch points out that “like law and custom, environment tells us how to act without requiring of us a conscious choice.”¹⁷ The more familiar the architectural environment, the more predetermined the response to the space is likely to be. As Lynch points out, we are likely to be reverent within a church because we understand it to be a place of worship. This reaction to our

15 Lynch, Kevin. *What time is this place*, 53.

16 Cramer, Johannes. *Architecture in Existing Fabric*, 24.

17 Lynch, Kevin. *What time is this place*, 40.

environment is a simple re-enactment of patterns of behavior associated with particular recognizable settings.¹⁸ Lynch's belief in the strength of our automatic responses implies that a visceral and immediate emotional reaction to a building with which we are familiar might be subdued by our preconceived expectations. Our reactions might be equally affected if opinions have been formed prior to visiting a well known building-- via academic texts, photographs or other means of architectural representation. While the aesthetic quality of the Bauhaus school by Walter Gropius, for example, will elicit a response from visitors, this response will be heavily dictated by an awareness of historic context and an understanding of the desired reaction sought by the architect. As Lynch argues, the more we expect of a specific experience, the less likely we are to genuinely feel it. In relation to the repair and reuse of older buildings, Lynch's theory is valuable. It would suggest that as soon as architectural components which are deemed too valuable to compromise are frozen in any one condition, their experiential quality begins to change as our expectations of them become more static. While this can be considered as a worthwhile trade off when restoring extraordinary heritage architecture, the widespread application of such preservation operations are likely to homogenize our experiences of buildings, rendering them stale and predictable. There is a tendency for traditional conservation to relegate existing built fabrics to the category of historic record. But might there be alternatives buried within a more flexible process of re-use, more apt to recover and truly re-open the older construction to the present? What would be required to provoke, beyond academic approval, a primordial and emotive response?

2.3 *Viscerality and Emotive Responses: Finding Place in Preservation for Overlooked Architecture*

When anticipated architectural experiences are challenged, our responses are forced to come from a deeper sensory observation. In her book *Situated Modernism*, Sarah Goldhagen repeatedly explores the connection between Louis Kahn's use of techniques like

¹⁸ Lynch, Kevin. *What time is this place*, 40.

Fig. 15 – Hamar Bispegaard Museum by Sverre Fehn in Hamar Norway uses Scarpa like insertions to transform a medieval site into a museum.

Fig. 16 – In the Darling Foundry (2002) re-purposing, Atelier in Situ uses the thoughtful integration of new and old to create powerful architectural contrast.

structural ambiguity, and his desire to provide the user with a deeper architectural experience. When established expectations regarding tectonics cease to make sense, the user is forced to understand the space through experience. Goldhagen elaborates on the deeper contextual understanding that might be gained from this type of experience, which could in turn lead to the social change which Kahn believed architecture to be capable of.

In the restoration works of Carlo Scarpa, the visitor's experience is productively dislodged from expectation through material contrasts. The provision of an entirely unfamiliar setting - new materials, new assemblies and new grounding - sets the old away from the new and heightens the experience. The power of Scarpa's works lie in the interplay of the new, and that which we recognize 'from before'. By taking what is implicit and presenting it in a way which opposes our understanding of it, a slippage occurs between what we know and what we experience, connecting us more openly to our encounter. Many other restoration architects follow this method, including Sverre Fehn in his Hamar Museum, (Fig.15) and more recently Atelier in Situ in their repurposing of several Montreal industrial buildings - to be discussed later in this thesis. (Fig.16)

When designing within an existing architectural context, the inevitable programmatic associations and social implications which may seem oppressive at times, might also be understood as a means of creating the phenomenological awakening. The re-purposing of an established structure provides the opportunity to take all of the assumptions which taint the perceived identity of that building and turn them inside out. By deleting, transforming and making insertions, the architectural character of a building might be completely re-interpreted thereby giving the existing fabric a chance to regain its novelty. While this process actively interacts with and changes the existing fabric, it can simultaneously act as a form of flexible preservation, maintaining aspects of the old within its re-adaptation. The selective preservation of small historic components within a greater context of overall change is one which aligns with a process encouraged by Kevin Lynch in his discussion on the preservation of cultural continuity:

We need not be so concerned about perfect conformity to past form, but ought rather to seek to use remains to enhance the complexity and significance of the present scene. The contrast of old and new, the accumulated concentration of the most significant elements of various periods gone by, even when they are only fragmentary reminders of them, will in time produce a landscape whose depth no one period can equal.¹⁹

In the vast majority of traditional conservation cases, the unfettered alteration of historic details with only selective preservation, as suggested above, would likely be viewed with much trepidation. When dealing with significant cultural architectural artifacts, the idea of radically altering the character of the architecture contradicts the very source of the buildings' value. But while a more radically transformative approach may be ill-suited to valued buildings, perhaps it is appropriate for the re-purposing of buildings which are perceived as value-less. When it comes to renovation approaches, the relative un-importance of the subject building offers a liberating opportunity. The lack of official merit might be taken advantage of to truly liberate the design from restriction, without the fear of destroying perceived value. In the unimportant building, the potential for adaptation and innovative re-programming is in fact increased. Addressing the landscape of waste with active intervention, rather than abandonment, the re-appropriation of foresaken architecture resists the idea that only the exquisite is worth preserving.

19 Lynch, Kevin. *What time is this place*, 57.

CHAPTER 3

Factory

3.1 *Defining 'Valueless' Fabric*

In attempting to create a distinction between those works which are considered influential and those that are deemed valueless, it is important to first clarify that the term 'valueless'. As it is understood here, 'valueless' does not refer to a true exhaustion of potential, but rather, to the building's non-status in its cultural context. For this thesis's purposes, the valueless building is one which is either too ordinary to stand out as exemplary, too tainted in association to be considered for re-inhabitation/programmatic adaptation, or too aesthetically mundane to seek its preservation as art or artifact (Fig.17) These are buildings which have been culturally passed over to an extent that tampering and transformation become inoffensive. On the other hand, valueless-ness here does not negate the responsibility to recognize and preserve aspects of merit to be found within the existing fabric. Among the vast and varied building types which might be used to exemplify the state of valueless-ness outlined above, a particularly pertinent example can be made of the industrial fabric from the past two centuries. Proliferating vast tracts of built landscapes, factory buildings are large and imposing, yet rarely perceived as architecturally important.

Fig. 17 – The Enterprise foundry moulding shop- completed at the turn of the century- would be considered architecturally mundane by most, despite its interesting heritage.

3 2 *The Industrial Landscape The architecturally apathetic building*

Fascinated by all means of facilitating the manufacturing process, industrial technology has historically held a place of esteem within social perception. Even within our contemporary context we marvel at clever and efficient machines. In stark contrast to the enthusiasm for the design of industrial technology, the design of the architecture which houses these Goliaths of production is often overlooked as being functional and dull. Focused on product and process, a factory rarely addresses design concerns beyond those relating directly to efficiency. Architect and Professor Hans Kammerer describes the factory using the simple terms ‘a machine with a sheet metal roof over it’. Unlike other architectural works, factories set themselves apart by being largely unconcerned with aesthetics. Making an example of our popular and longstanding desire to locate factories peripherally, away from the city center, Kammerer substantiates our disdain towards industrial landscapes by illustrating both our distaste for programmatic elements—the traffic, noise and dirt—and our apathy towards their aesthetics—the large, plain structures that disregard style and fashion. If we are honest, suggests Kammerer, ‘we have to admit that industrial building is an irritant, both architecturally and in terms of urban planning, that we tolerate because of necessity’²⁰—tolerate, as Kammerer states, not treasure. Though Kammerer’s assessment applies more to the large and uninteresting corrugated boxes that dot industrial parks and less to city centers with an interesting and historic industrial landscape, his comments reflect an existing passivity towards the adoption of abandoned factories. When industrial remains are located centrally they do have the ability to become trendy, as shown by numerous re-purposing projects throughout the world in the last thirty years. However, where they are located away from urban centers, willingness to invest in re-purposing decreases. When added factors like the potential need for soil remediation are taken into consideration, the desire to re-use these buildings tends to be subdued in all but the most central or popular areas.

20 Kammerer, Hans “Industrial Construction and the Architect,”
Building for Industry, 40

Fig. 18 – The erecting shop in an Ohio tool works (1896) was designed to accommodate machinery and production above all else.

works • “The term used to denote a manufacturing operation during the nineteenth century. An engineering term of British origin, the works initially referred to civil engineering projects, such as fortifications, docks and bridges, and then included the buildings and equipment of industrial establishment. Americans adopted the term *gasworks* and *brickworks* as well as *the works*, which they applied to compound facilities, such as ironworks, and to mechanized operations, like machine works. Indeed Americans adopted the term for nearly all types of manufacturing operations.”

(Hunter Bradley, 269)

In her book which examines the origins and history of industrial construction, architectural historian and preservationist Betsy Hunter Bradley discusses the early works as being first and foremost concerned with efficiency and the ability to support the needs of the large machinery housed within. Bradley points out that it was not uncommon for early factories to be designed by owners and engineers, making them among the first large-scale buildings to be considered products of engineering, rather than architecture; architects for their part tended to have little interest in factory design. With some exceptions, such as Sigfried Giedion, who early on identified industrial works as epicenters of the modern movement in architecture, and Albert Kahn, whose practice was largely determined by factory design for Henry Ford, historians of architecture and architects have largely overlooked the factory. As Hunter Bradley points out, “the literature of the mid nineteenth century tended to focus on design and operation of new machines and production methods rather than on the buildings that housed them.”²¹ Unworthy of the designation ‘architecture’, and not as impressive as the machinery it contained, factory buildings rode the line between the two. Society at large remained only marginally concerned with how a company chose to build its factories; this indifference would set the tone towards industrial building for the next two centuries. (Fig.18)

3.3 *Apathy Towards The industrial Landscape: An architectural opportunity*

For all of the reasons mentioned above, industrial architecture offers highly flexible renovations possibilities. Neither stylish nor comfortable, the disaffected industrial building is unlikely to meet with disapproval or argument from community groups when renovations are proposed. What is more, these renovations can occur in relative anonymity, excused from critique. In this sense, they can only pleasantly surprise the community when completed. As for architectural modifications, these can enjoy unfettered freedom of

21 Hunter Bradley, Betsy. *The Works: The industrial architecture of the United States*, 8.

3.4 *Potential for Transformative Re-purposing*

Fig. 20 – Sawtooth roof at Northwestern Terra Cotta Co. (1911) designed to maximize natural lighting and ventilation

The public forgives the factory's appearance as long as productivity continues. Once these buildings have ceased to perform and are decommissioned, their lack of 'beauty' can be the first step towards their decline. In the face of code compliance, outdated heating and electrical systems, and the possibility of soil contamination, an ordinary and crude building does not immediately seem worth the effort or investment. This combination of factors provide ample reason for owners and communities to abandon the idea of large scale preservation or re-use, and allow industrial building to fall into decay. Though seemingly a problem, this kind of social indifference simultaneously generates possibility. Providing an existing context wherein little is sacred, and any intrusion is possible, industrial fabric provides the ultimate opportunity for transformative re-use.

If preservation officials at the municipal level have regularly undervalued the ordinary factory, and if communities have at times ignored them, this does not mean that these buildings are un-useable or that difficulties are insurmountable. The integrity of the fabric itself is not intrinsically deficient in terms of accommodating reuse. The 'valueless' factory is in fact well suited to adaptation - something that many, beginning with artist groups, have recognized. The factory is unburdened with symbolic charge and its tectonic language is often conceived to provide open spaces, resistant to heavy wear. In older cases, industrial buildings also boast increased natural light and ventilation. (Fig.20) All of these are qualities desirable within contemporary construction. In more historic buildings, value can also be found in the craftsmanship and material properties of the brick, wood, steel structures and finishes of 19th and early 20th century construction. Well suited to continued and varied use, factories seem to want only investment and effort to be widely inducted into the sphere of architectural value.

Examples of factory re-purposing already dot the architectural landscape in Canadian cities and abroad. Often beginning with buildings considered too plain, too run down, or too recent to be classified as untouchable, the decision of what to keep, what to demolish, how to intervene, and how to define and treat historic content is left up to the designer. With an unpredictable breadth of design variations possible for the same existing context, results might include any number of surprising or unorthodox interventions. While certain projects may entail little more than cleaning of the old factory, others might involve a major physical transformation of the fabric as it exists. Attesting to the potential of working within an existing context, each solution, no matter which approach is adopted, is able to create an unexpected environment simply by challenging our expectation of the 'industrial space.'

3.5 *From Factory to Forum: Precedents for industrial re-purposing*

Fig. 21 – Design Perspective (1930) of Giles Gilbert Scott's Bankside Power Station, Battersea A.

Architects Herzog and de Meuron recognize the possibility of freedom and flexibility when working within a socially overlooked existing fabric. Having completed two vastly divergent transformations of two separate power stations into exciting and contemporary art spaces, the Swiss team has managed, through completely divergent methodologies, to repeatedly transform expired industrial buildings into world renowned architecture.

The rehousing of Tate Modern art gallery in London, completed in 2000, entailed, the transformation of the Formidable Bankside Power station, built in the 1950s. (Fig.21) This project is a perfect illustration of calm synchronicity between a pre-existing industrial shell and a contemporary intervention. Herzog and de Meuron's project is conceived in such a way that the character of the powerstation is heightened rather than obliterated. The contemporary gallery offers visitors the opportunity to experience the old power station through a modern lens. Leaving the exterior largely unaltered, additions which have been added, like the glassy two story 'light beam' on the roof, provide a clearly contemporary touch which is somehow in correspondence with the existing built language. Making an effort to

maintain and work with many of the power station's existing spatial qualities, particularly the anomalous sense of scale, Herzog and de Meuron use the setting's strangeness to the advantage of the art experience. Often intervening in such a way that the transitional shock between new and old is calmed, additions will on occasion even be ambiguously mistakable for existing fabric.²² Despite this smooth fusion, the presence of contemporary construction is clear and prevalent. Having re-done the majority of the interior with a clean and modern aesthetic, the architects do not attempt to mimic past construction but instead propose a language that does not oppose or contradict that of the power station. Providing a smooth interpretation of the old power station, the Tate Modern is new fabric within an old shell. The old architecture not only roots and envelopes, but deeply informs the articulation of each new element. (Fig 22-23)

Fig 22 – Section through the re-purposed turbine hall of the Tate Modern (2000), Herzog and de Meuron

22 Ryan, Raymond. "Transformation " Building Tate Modern· Herzog & De Meuron Transforming Giles Gilbert Scott, 29

Fig. 23 – Interior image of the re-purposed turbine hall of the Tate Modern (2000), Herzog and de Meuron.

Madrid's Caixa Forum, in stark contrast to the Tate modern- and the vast majority of other projects designed using existing fabric- is a re-use project that takes the existing building and proceeds to utterly transform it, lifting it up, hollowing it out, cutting it apart, and filling it in until only barely recognizable traces of its past life remain. Located in the former Central Electrica de Mediodia, Herzog and de Meuron's cultural center, completed in 2008, quintuples the former area of the electrical plant, adding two subterranean levels, and building a two story rusted cast iron box above the existing roof line. In what has been called a 'surgical operation' the roof and floor have been sliced away to leave the exterior walls floating, as if unsupported, above a plaza and below grade entry.²³ Filling in the majority of its former windows, the old brick building is even further distanced from its previous appearance, taking on the allure of a garment that the new structure might simply have put on. Unlike the graceful homage paid by the Tate modern to its host shell, the Caixa Forum asserts itself as an unapologetically contemporary design which incorporates existing fabric as a design element, rather than a memento. Making its own rules about the preservation and representation of historic content, the forum redefines re-use as a truly flexible incorporation of the existing -- one which does not necessarily reflect its previous architectural language. (Fig.24-25)

Fig. 24 – Cross section through Caixa Forum (2008), Herzog and de Meuron

23 Cohn, David. "Herzog & de Meuron.." *Architectural Record*, 109.

Fig. 25 – Exterior photograph of Caixa Forum (2008), Herzog and de Meuron.

Fig. 26 – Interior column detail in Zone Building (1997) by Atelier In Situ.

Montreal design firm Atelier In Situ approaches their industrial re-use projects with a graceful yet assertive attitude towards the industrial building. Their methodology celebrates the beauty to be found in the factory by framing it with visually strong contrasting elements which help articulate and clarify the re-programming of the space. In 1997, Atelier in Situ undertook the transformation of a turn of the century boat building factory nestled quietly on the edge of Montreal's old port, into The 'Zone' Building, a headquarters for multimedia company, Discreet Logic. Atelier in Situ's design respects the building's 'natural logic' and maintains the factory's luminous transparency throughout, while keeping peripheral circulation open and fluid.²⁴ The architects chose to leave certain elements, such as a large painted wall sign and old steel columns, in the state they found them in. The historic character and beauty of the factory are celebrated rather than removed. Using strategically located insertions which we may call 'structuring insertions,' the architects clarify and facilitate the new use inside the old building. Specifically, a new narrow and dense service box is inserted into the grand factory production hall. The cathedral like hall is able to become a highly usable work place with large open work areas and necessary supporting spaces. The idea is not to assimilate new and old but to create a contrast between the two, allowing one to frame the other. Through the interaction between existing and contemporary constructions, a rich and complex environment is created wherein a layered understanding of time and place becomes possible. (Fig. 26-27)

Fig. 27 – Entrance of Zone Building (1997) by Atelier In Situ.

Fig. 28 – Richard Serra *Torqued Ellipse* (2001) at Dia: Beacon transforms the warehouse space within which it sits.

Dia: Beacon, unlike many of the previous precedents, relies on minimal intervention to realize the transformation from box printing facility to contemporary art space. Maintaining the vast majority of the old Nabisco architectural language intact, an overall cleaning out and neutralizing of the industrial space on the Hudson river was among the most significant modifications performed by Open Office architects and collaborative partner and Artist Robert Irwin. While certain architectural adjustments were necessary to facilitate programmatic accommodation, the design team's overall aim was to keep the focus of the gallery primarily upon the art, rather than the architecture.²⁵ Working closely with exhibiting artists and the Dia foundation, the accommodation of the visually powerful installations provides all the contemporary touches needed to bring the old factory into the future. Relying upon a toned down preservation of existing architectural characteristics, Dia: Beacon allows the program- the art- to dominate the space and create the perceived transformation- as can be seen through the powerful domination of Richard Serra's imposing *Torqued Ellipse*. (Fig.28) The sculpture is able to fully occupy the architecture, completing its transformation from factory to contemporary art space where perception is up for re-interpretation.

798: The Thriving artist community of Dashanzi in north eastern Beijing, embodies what might be considered the most elementary of all forms of re-use: the simple re-inhabitation. Occupied by government manufacturing until the 1990s, this 1950s Chinese military manufacturing complex was designed by east German architects and funded by Soviet WWII reparations dollars. This communist stronghold has since been converted to a radical creative haven. The independent artist community of 798 is currently home to countless artists, restaurateurs, shop owners and a varied assortment of other creative pioneers. The switching over of 798 began shortly following the decommissioning of the large factory, when a local art school had the idea of renting a small area within the vast and unused complex to house its sculpture studio. This appropriation of the space occurred

Fig. 29 – 798 art district has moved into the old factory, programmatically taking over spaces without bothering to remove the traces of its past from the walls.

in 1995. Quickly followed by a group of independent artists in search of affordable studio accommodations, the community slowly began to grow. With no official alterations having been made to any interior or exterior space, artists and tenants simply moved in and began working with what was there, installing their own embellishments among the faded oversized red characters which to this day shout communist slogans from ceilings and peeling walls. (Fig.29) Having never truly invested in an overhauling of the complex, the new tenants simply work with the remainders of industry, using the buildings' overpowering ideological references as a contrasting foil for their new activities. Haphazardly claiming the space for their own, the artist groups' programmatic re-inhabitations have transformed 798 from a place of controlled labour to a place of free expression.

3.6 *The power of a second chance*

From the complete physical transformation of the Caxia Forum, to the renegade re-inhabitation of Beijing's 798 art district, the factory-turned-art-space challenges the verdict of insufficiency so often assigned to disaffected industrial buildings. Using the abandoned factory's quiet anonymity to the design's advantage, architects have demonstrated that old buildings are able to provide unsurpassed settings for the display of art. The forsaken context here empowered transformation, rather than restricting it. The application of unrestricted and unpredictable solutions lead to architecturally rich changes, while giving value to historic industrial inheritance. Industrial re-purposing creates dynamic and resonant public realms out of previously unacknowledged buildings, substantiating the claim that a second architectural chance is worth giving.

CHAPTER 4

The Enterprise Foundry

4.1 *The Factory on the Marsh*

The Enterprise foundry, in Sackville New Brunswick, established in the early 20th century for the production of cast iron stoves, exemplifies the common fate of independent factory buildings across Canada, following the decline in local industry. No longer fully occupied, its buildings have begun to show the signs of decay characteristic of the neglect associated with obsolescence. Its weathered red brick, cracked window panes, and rusted over door frames give it a ghostly air of abandonment, despite the limited production which continues beneath portions of its slightly sagging roofs. Articulated as a collection of solid red brick buildings, the large low complex occupies a site less than a kilometer South of the town center, directly overlooking the vast salt water marshes which surround the small community of Sackville New Brunswick. This border site, which connects marsh to town is imbued with historic and environmental significance, though

Fig. 31 – Enterprise foundry, window looking into the moulding shop.

neither have played an active role in shaping the architecture of the foundry. The buildings are austere designed to provide efficiency above style, and contain no features which communicate any awareness of the unique and powerful site upon which they are built. Though this simplified architectural articulation served the foundry well in times of peak manufacturing, the decline of productivity has left these brick boxes looking forsaken and isolated from the greater context; without programmatic animation, the architecture appears dead and boring. Once an active and affluent force within its small community, the foundry has become just another industrial shadow, undervalued and disconnected from its world. (Fig. 31-32) Despite its state of neglect, the foundry has the tremendous advantage of being located in close proximity to the town center, making its re-purposing not only desirable but also viable.

The following chapter examines the foundry's history and social significance from its inception in the mid 1850s to the present. A proposition for re-programming will be outlined in response to both its current context as well as its historic significance. Chapter Five will then present an architectural proposition of restoration and re-purposing.

Fig. 32 – Enterprise foundry

4.2 *From Giant to Ghost*

The Enterprise foundry was Established by local Farmers in 1852. One of the first industrial operations to open in the town of Sackville New Brunswick, the foundry quickly became a significant employer within the community. The cast iron stove manufacturer's quick success was facilitated by its proximity to various transport arteries - including a local warf and rail line (Fig. 33) - that allowed for widespread distribution of product both within Canada and the United States.

After a severe fire in 1908 destroyed the existing facilities, the foundry was quickly rebuilt using the common industrial style of the time: red brick buildings, large evenly spaced windows, and state of the art machinery. Commerce forged ahead and the ensuing years saw the industrial complex triple in size, as work spaces and warehouses sprung up to meet increasing spatial demands. (Fig. 34-37)

Fig. 33 – Historic map of Sackville locating the foundry in relation to both local wharf and rail

Fig. 34 – Enterprise foundry (c.1900) before the first fire.

Fig. 35 – Enterprise foundry (c.1930) reconstruction following the fire.

Fig. 36 – Enterprise foundry (1965) additional expansions to the existing facilities due to increased production demands.

Fig. 37 – H.H. Mott Architect's original drawings for the reconstruction of the Enterprise foundry following the fire. Drawings are signed and dated 1908

Fig. 38— Rusted cast iron stove outside the Enterprise foundry.

In the late 20th century, the foundry faced a significant drop in profitability as demand for local manufacturing was eclipsed by the more affordable option of outsourcing. Even combining forces with a competing foundry in the mid 1980s was not enough to pull the factory out of its decline. Annual production levels fell from hundreds of stoves to dozens and jobs were reduced from over four hundred positions in the seventies, to roughly forty today. What were once active houses of production became quiet empty shells. Economic disparity precluded the maintenance of any building which was not in use and so large portions of the complex fell into disrepair and decay. Too mundane to be considered aesthetically interesting and too large to be conveniently re-inhabited as it stands, the foundry does little to attract the interest of local tenants. Built for efficiency, the dormant factory lacks clear purpose relative to the local community and so it sits largely unnoticed. (Fig. 38)

Despite its seeming *inutilité*, the Enterprise foundry is among the last remaining built traces of the town's 20th century industrial economy. In the event of the foundry's demolition, the tangible connection to this interesting period of local history risks being compromised, if not destroyed. In order to preserve this history, preservation of the foundry is advisable; however, simple preservation will not address its under use. Unless the public utility of the foundry can be increased, its decline will likely deepen. In order to truly regain local relevance, the aging factory must be integrated into the greater contemporary context, both architecturally and programmatically; it must begin responding to present day needs and desires.

Fig 39— Site plan showing the Location of the Enterprise foundry within current day sackville

4.3 *Re-Advertise. Re-kindle: the programmatic adjustment of the foundry*

Fig. 40 – The Sackville waterfowl park is one of the communities primary tourist attractions, offering a number of boardwalks and walking trails through the wetland. It is also the base from which CWS researchers operate.

In order for the foundry to contribute to community life, it should take into consideration the priorities which guide that community. Sackville's present day economic and cultural character are strongly influenced by its two predominant employers: Mount Allison University (MTA), one of Canada's preeminent undergraduate institutions, and the Canadian Wildlife Service (CWS) research center. (Fig. 40) These two organizations complement each other well and provide the community with an atypically varied demographic. The constant influx of students from around the world keeps the town young and in a state of constant change. Professors and staff who become permanent residents provide the community with ongoing influences from a variety of backgrounds and interests. Independent local artisans and performers are able to flourish through the support of the university community and in return provide a vibrant cultural arts community, welcoming to university students from fine arts and music programs. The presence of the CWS draws attention to the unique significance of the town's geographic location, awakening the population's increased awareness of natural context. Biologists of many specializations, both permanent and visiting, introduce exciting research projects to the area, furthering the enthusiasm for discovery and understanding of the natural world. The enriched diversity which results from this unique combination of influences additionally contributes to local vibrancy by attracting tourism; the town also benefits from a prominent location on a major transportation artery through the eastern provinces.

The local interests which direct Sackville's contemporary priorities have been established as varied, however, none of the town's current development initiatives seem concerned with the re-establishment of industrial productivity. Of the diverse groups active in the the area, the majority are involved in education, arts, and environmental awareness. In order to functionally re-imbue the foundry with relevance, these priorities must be considered and used to determine a proper re-programming. 37

The primary goal of re-programming the foundry ought to be to re-institute public participation and investment within the existing facility. For this to occur a collaboration between the foundry's owner and one or several major institutions in Sackville would be essential. The success of a repurposing project at the Enterprise foundry would necessarily rely on solid economic anchors to ensure long-term maintenance and stewardship of the historic buildings and any contemporary interventions upon them. The cost of soil remediation should it be required, code compliance, and systems updates, would render the economics of such a proposal more challenging and dictate the necessity of external support. While the precise economic terms of this proposition fall outside of the scope of this thesis - the focus being primarily upon the architectural language of "re-purposing," healing and recovery - the project's feasibility must still be taken into consideration. For this reason, the project assumes the involvement of established local institutions, in order to provide the necessary community cooperation needed for the project's success.

4.4 *Introducing Programmatic Variety*

As mentioned above, the primary goal of re-programming the foundry must be to re-institute public participation and investment in the existing facility. In order to attract the interest and participation from the community, the facility must be drawn out of obscurity and made to be perceived as useful. The most effective means of achieving this is to maximize and diversify the possibilities for inhabitation and re-programming. This necessity for new program should not however exclude the possibility of the existing foundry functions to remain in operation. The foundry, though largely unrecognized, is still a presence in Sackville and customers from the region and beyond continue to place orders for specialty stoves produced there. The Enterprise foundry's relevance to the contemporary context is certain, however, with renewal, it could become much more central within the community. A renovation would allow the community to recognize the foundry's value more fully, rather than passing it over.

The Enterprise foundry, in its current form, appears dead. Its closed off windows and flat brick facades hide what little activity continues within. The appearance of obsolescence discourages locals from investigating into the foundry's meaning, and breeds the understanding that the factory has little to offer the community. This is a misconception. Behind closed doors, Enterprise continues to produce specialized stoves according to traditional cast iron moulding- a technique that is not only rare, but fascinating to watch. The foundry, one of the last to continue to use these traditional techniques, is imbued with the potential not only for education, but also for the presentation and communication of tradition and heritage to the greater community. A renovation that would highlight the uniqueness of this cottage industry and open it up to public observation, would make the foundry a distinguishing feature within the community. Its stove manufacturing could be associated with artistry, rather than industry. (Fig. 41-42)

Fig. 41– Worker manufacturing a stove in the Enterprise foundry.

Fig 42 – Moulding by hand is a practice which is becoming increasingly rare given its time consuming and precise nature. The Enterprise foundry is among the last to manufacture their stoves using this traditional method.

In the design proposition here presented, a variety of supporting programs are introduced into the foundry as a means of achieving the desired increase in public presence, and providing the aforementioned economic support necessary to ensure the successful renovation and upkeep of the facility. By grouping functions together, a critical mass is created and financial responsibility is shared between a number of organizations. In keeping with the mood of independent creativity and commitment to the propagation of local cultural knowledge in Sackville, this thesis proposes that the foundry become the site of a local arts collective. The program is not intended to be limited to the traditional 'arts', but is meant to embrace an overall spirit of creativity. Intentionally open ended, the programmatic requirements of the collective are intended to suggest inclusivity rather than exclusivity. The aim is to renovate and repurpose the old factory with a view to creating a centre for the development and expression of local identity. The suggested tenants for the foundry arts collective have been specifically chosen from among established local organizations. Each of the organizations metaphorically invited to inhabit the renewed Enterprise foundry, as proposed by this thesis project, already possesses a strong presence within the community and, in some cases, are actively searching for new accommodations. This proposition thus matches the dying space within the foundry with the spatial needs of valued community organizations. The long-term economic stability which results from an environment of collective support between programs must be of benefit not only to the foundry but to all participating programs. Finally, by combining funding which might otherwise have gone into a variety of new constructions and putting it towards the architectural re-articulation of the Enterprise foundry, the quality of the transformation is able to increase.

4.5 *Re-inhabiting the Foundry: The Architectural Program*

The following presents the architectural program put forth by this thesis, to guide the design proposition. A case is here made for the theoretical selection of tenants, and their new respective positions within the re-purposed foundry complex are briefly described. The design project itself will be described in greater detail in Chapter Five.

Live Bait Professional Theater company: A Story Teller

Established in 1988, the Live Bait Theater Company has been an integral player in the Sackville arts for over twenty years. Catering to audiences both young and old, the productions over a season vary to include typical theater productions, stand up comedy, music shows, musicals, and dinner theater. Produced and performed by local company members, many of the Live Bait's shows are actually written by members of the surrounding areas and recount tales of local history and culture. In addition to professional productions, the Company also offers a series of 'Young Company workshops' for local school children of all ages. This youth workshop not only offers the opportunity to learn about theater, but also to perform in shows for which tickets are sold throughout the community. Having always had a lively summer season, Live Bait is currently expanding to include winter shows as part of their program. Looking to ameliorate their facilities in order to better accommodate their continued growth, Live Bait is an ideal candidate for the Enterprise foundry re-inhabitation. In the proposed design, the theater company is housed in the large structure located at the entrance to the foundry, closest to the town. The prominent town-facing facade of the foundry provides a beacon for the site and a venue for the dissemination of local lore. The theater foyer, performance hall, and supporting spaces are situated within a building which combines new and old fabric. New and old walls frame each other alternately, creating a series of proscenia and spaces which are constantly introducing new thresholds between new and old, stage and audience, production and performance. (Fig. 43-44)

Local Farmers' Market: A Purveyor Of Creation

Drawing farmers, artisans, and anyone else from across the region with something to sell, the farmers' market facilitates the distribution of local products to community inhabitants. With no one site allotted to its permanent situation, the market has changed locations repeatedly over the years and could benefit from a more stable location which would allow for more operational flexibility. This design proposition locates the farmers' market in the heart of the re-inhabited foundry. Removing the corrugated storage buildings adjacent to the market's

new site, a courtyard is opened up which can be used for outdoor selling in good weather. The second largest program within the foundry proposition, the market not only establishes the foundry as an economic entity, but also embodies a connection between contemporary agricultural practice and the greater agrarian tradition of the marsh. With large and flexible spaces available for use within the existing foundry buildings, the market can here avail itself of a mixture of permanent and flexible sales spaces. These are alternately suited to merchants wishing to sell on a daily basis or to farmer requiring only a weekend stall. There is also the opportunity for a small permanent grocery store to be established, in order to maintain regular business. The new market space is designed with a flexible open concept able to be transformed on non-market days into a local event space. With a semi-operable South wall leading out into the adjacent outdoor space, the potential to expand out of doors when weather is pleasant provides the ultimate flexibility for the market to grow and adapt to seasonal changes.

Within the market, an additional permanent restaurant program is suggested. Intended to primarily serve as a coffee, snack, lunch or dinner spot for employees and visitors within the foundry complex, the restaurant is simultaneously geared towards fulfilling the catering needs of the Theater (particularly the dinner theater program) and various event spaces within the collective. This proposition locates the restaurant within the realm of the farmers' market, creating the opportunity to feature seasonally influenced local menus and specials, working in collaboration with market vendors. (Fig. 45)

Dance Studios: An Outlet for Emotion

Previously located within the town's now demolished community hall, the dance studio traditionally hosted a variety of community dance, yoga and fitness activities. The latter's disappearance has left a gap in community life, and residents of the region are pursuing a location that caters to the organization of community dance and movement classes or events. In addition to community based classes, this space might also operate in collaboration with Mount Allison University athletics and fitness programs. This proposition

Fig 43 – Exterior perspective of the main pedestrian axis at the theatre entrance

Fig 44 - Interior perspective of the theatre lobby

Fig 45 - Interior Perspective of the market

places the dance studios in the Southern edge of the site overlooking the marsh. The dance studio, with its program rooted in both stillness and movement, provides the perfect echo to the intrinsic rhythms of the marsh. Establishing a visual connection between the studios and the open marshes, the design nurtures an embodied connection to the landscape. The spatial continuity between the studios and the vast and unimpeded landscape attempts to wash away residual sensations of confinement, and to create an ideal environment for free movement. (Fig. 46)

Spaces for Lease

The least defined of the foundry programs, the spaces for lease, are articulated as studios able to accommodate of a variety of different activities, from musical practice to light industrial manufacturing. Responding to the demand for affordable work spaces expressed by a growing community of local artisans and performers, these studios attempt to draw in a wide variety of creative endeavors, so enriching the vibrancy of the foundry. The design proposition provides each studio with both a private and public facade so that studios may double as a retail or exhibition space.

Community or Research 'Marsh garden'

This design proposes a community and research garden located in the mediating space between the foundry and the marsh. This would become an extension of the arts collective which actively echoes the agricultural traditions of the marsh discovered so long ago, while simultaneously encouraging the continued exploration of potential yet to be realized. Weaving together the ground plane of the marsh and that of the foundry, the garden becomes a place wherein one might engage with the earth in an interactive experience. Potentially organized as a collaboration between CWS, MTA and the community, the garden might be divided into plots for community garden, experimental agriculture, and marsh vegetation studies. The mediating space between the foundry and the marsh would become a place shared between multiple users and put towards multiple uses: Not only an interesting landscape through which to wander, the garden would also contribute to the study and discovery of the marsh. (Fig. 47)

Fig 46 – Interior perspective of the dance studios

Fig 47 Exterior community-research gardens

4.6 *The Marsh*

Fig. 48 – Remains of the old Sackville wharf, now landlocked.

Fig. 49 – Aboiteaux were long wooden channels which were built into traditional Acadian Dyke systems. These behaved as one way water gates which would allow for the drainage of water from one side only. These opened towards the salt marsh allowing for runoff to drain from farm fields while stopping the inundation of crops by salty tide water.

Throughout the description of local identity and programmatic relevance, the subject of the marsh has repeatedly been raised as one of great local importance. While economic and social influence on local identity have been previously discussed, the key to fully understanding the community lies in its location. The Tantramar marshes have been central to development in the area for nearly four hundred years. First settled by Acadian farmers in the 1600s, the area's history of European settlement is one of the oldest in the country. The vast marsh saw advanced farming innovation, conflict between the French and English, bloody battles and the growth of an active shipping trade, all before the town of Sackville was fully established. Continuing to contribute to local development, the marsh provides inspiration not only for research, but also for a number of creative endeavors. The marsh has inspired countless songs, stories, plays and books over time. With each generation that came to stand on the same swirling edge of solidity, the diversity of perceived potential was vast, but the intrinsic draw to live within and harness the spirit of the marsh remained constant.

Despite the long and weathering effect of time on memory, the marsh has managed to capture traces of this long history, and preserved them so that they might be experienced today. One need not go to history books or photographs to understand that merchant culture was once booming on the bay, as the remnants of a full size wharf can clearly be seen growing out of the grasses. (Fig. 48) Acadian farming techniques need not be studied in a museum, for the very same dykes which once stopped the flooding of farmland continue to hold back salt tides even today. (Fig. 49) It becomes clear that the marsh itself holds the key to its own archive, housing its own relics within their proper environment, so much stronger in context than images and words. These traces communicate unfailingly and connect us to our collective past, enlightening all the various faces of the marsh, past and present , which might otherwise fade into oblivion.

Situated on the very doorstep of all of this local history and culture, the foundry's disconnection from the marsh seems a tremendous waste. Though programmatic re-imagining is likely to re-kindle the connection between foundry and community, by extending that connection to incorporate the marsh, a deeper historic and environmental experience might be achieved. If the foundry is able to explore and re-interpret its own industrial past while simultaneously tapping into the rich history of the marsh lands, a deeper more temporally complex tapestry of local identity is created. As the story told by the foundry deepens, so does its importance within the local identity. It is by achieving this depth of local significance that the factory's architecture truly begins to act as one of the cultural placeholders to which Louis Kahn, Aldo Rossi and Kevin Lynch, discussed earlier, assigned such importance.

CHAPTER 5

Creating a Connection: The Architectural Transformation of the Enterprise Foundry and its Re-Inscription into the Landscape

5.1 *Re-imagining the Foundry*

The architectural re-imagining of the Enterprise foundry is first and foremost an attempt at re-imbuing the architecture of a forgotten and forsaken local landmark with relevance within the community. The project is architecturally articulated as a combination of selective demolitions, preservations, re-interpretations, and additions. By strategically framing the existing fabric in such a way that its historic identity becomes more immediately recognizable, the relevance of the building as a cultural landmark is made more palpable. The design also attempts to mend the schisms which have lead to the foundry's current isolation from its greater context. Parts of the foundry are removed to strengthen internal spatial relationships and connections to the surrounding neighborhood, while new additions are introduced, bringing the architectural narrative beyond the historic tale, to include important contemporary aspects of site and community. Creating a continuous narrative which transcends any one era, the foundry becomes a changing and adaptive project which contributes to the maintenance of local identity. The project also saves the foundry from abandonment and destruction

5.2 *Assuming an Overall Tone: Conservation vs semi-conservation*

A central question in this proposition was the nature and tone of the modifications which were to be exercised upon the existing factory compound. Should the re-purposing project radically modify the historic buildings, transforming the site into a visible landmark? Should it make only subtle alterations upon the existing fabric, keeping the profile of the original buildings? How much is enough, and how much too much? This proposition meditates on this very question, attempting to find the balance best suited to this particular site. In the case of re-purposing the Enterprise foundry, this proposition elects to maintain the originally modest profile of the foundry - in keeping with the humble tone of its surroundings- but to simultaneously act with

conviction upon the existing fabric. With only selective elements being preserved, existing buildings were removed and altered as needed in order to create optimal spatial relationships, external connections, and overall atmosphere. While new interventions are quiet in their design, their materiality - largely light wood clad constructions of varying opacities - and precise placement create a rich contrast with the heavy brick of the old factory. The new architecture frames and highlights building elements so they are read as independent artifacts, full of memory and character. Though the overall height of the complex is kept low, the roof lines are subtly rejuvenated by a series of new roofs and mediating clerestory windows. Springing from the existing slopes but projecting upward, these new roofs depart from existing timber undercarriages and create new heights, new spatiality, and new light sources. The old is retained while a new architecture is born. This project proposes the approach of semi-conservation: a dance between the old building and new that incorporates insertion, breaching, alteration and preservation.

5.3 *Stitching Together of Marsh and Town*

Addressing the current rift between foundry and landscape, the integration of marsh into building becomes the primary means of bridging the gap between the existing fabric and its greater context. The preliminary gesture upon the existing foundry - an accumulation of buildings dating from different times - assesses the currently cluttered site and selectively removes fabric. These removals are used to clarify the site plan and open up lost connections, allowing for the creation of new spatial relationships and reciprocities. Through the removal of three small sheds, the currently blocked North-South axis which passes through the site is re-opened and a visual connection established between the main road and the marsh. A central spine is created which acts as the main pedestrian circulation, around which the various programmatic element are organized. The journey from town to marsh is emphasized, and the boundary between the two becomes extended and blurred. Thus, demolition becomes instrumental in re-activating topographical and cultural connections. (Fig. 50-51)

Fig 50- Plan showing the existing buildings coded according to construction dates

LEGEND

- 1 **Main North South Pedestrian Axis**
Removal of sheds to open up the connection between town and marsh
- 2 **Market Courtyard**
Removal of run-down steel clad buildings to create the market courtyard and clarify the internal programmatic relationships
- 3 **Axis - Reconnect with Neighborhood**
Removal of sections of masonry buildings, and of the fabric connecting them, to clarify internal relationships and create a space surrounding the market to facilitate circulation, and vehicle access to the market
- 4 Opening up of the path through the Foundry to complete connection to the train
- 5 Beginning of boardwalk ground condition
- 6 Market courtyard
- 7 Beginning of frayed boardwalk
- 8 Community/research garden
- 9 Marsh lookout
- 10 Beginning of marsh
- 11 Green roofs
- P To Parking

Fig 51 - Plan showing the selective demolition of existing fabric

Fig.52- Aerial photograph from 1965. Green shading denotes buildings which were demolished between the years of 1965 and present day. Red denotes buildings which are removed as part of the foundry re-purposing project.

LEGEND

- 1 Main Pedestrian Axis
- 2 Market Courtyard
- 3 Theatre
- 3a Theatre-Backstage and Production
- 3b Theatre Outdoor Workshop Space
- 3c Theatre Set/Prop Workshop
- 4 Foundry
- 5 Market
- 6 Dance Studios
- 7 Rental Studios
- P To Parking

Fig.53 - Axonometric showing the cuts made within the existing fabric. Blue shadows denote areas where buildings, or portions of buildings, have been removed. Blue lines signify a cutting into the existing building.

Beginning at the top of Enterprise Street, the first encounter with the marsh is experienced from an elevated perspective. Gazing down from the top of a low rise, the visitor is able to simultaneously look upon the foundry roof and the salt water marsh stretching beyond. It is from this vantage point that new green roofs on portions of the foundry are perceived as material extensions of the grassy marsh; subtle interruptions of the vast flatness where pieces of the ground plane are elevated to the roof level. As the visitor moves closer, the vast prospect is cut off by the foundry buildings, leaving only a neatly framed view through the opening in the northern facade which brings you into the main axis of the complex. Directly to the East and West of the entrance, a planter of marsh grass and low water pool - both contained within built framework - run the width of the site. Creating a boundary condition, these delineating features give the impression of wild marsh elements contained within a building rather than of building built within the marsh.

Upon entering the main street along the North South Axis, or 'Spine', the ground is solid. Water and marsh vegetation elements are inserted into the platform, but each of these interruptions are contained so that their growth is limited by the architectural elements which surround them. Moving past the entrance plaza, the spine divides into two wide paths which run alongside either edge of the axis. These paths border a central opening, or gap, where the ground is allowed to become overgrown; less controlled than previous marsh landscaping, the vegetation still gives the impression of being informed and limited by the architecture surrounding it. Moving towards the marsh the paths to either side narrow slightly, resulting in a widening of the gap.

Upon reaching the market building, a shift occurs whereby the solid ground is replaced with boardwalk-like platforms which extend into the market courtyard to provide the ground for the outdoor market room. Allowing the limited but unmediated growth of grasses through the slots in the boardwalk, an increased proximity to the ground is perceived and with it an awareness of the quality and texture of the grass. As the boardwalk progresses towards the marsh, its layout

becomes less structured and its rigid edges begin to fray, introducing less regular landscape elements into the voids between boardwalks. The feeling that the marsh is being inserted into the architecture is replaced by the impression that the marsh has begun to inform the placement of path. Within this irregular boardwalk, the community and research gardens are inserted. As the boardwalk reaches the edge of the marsh, a lookout point is provided from which walking paths leading out to the marsh from which access to the existing Acadian dyke system is possible. Moving through the complex, the visitor's awareness of the site goes from visual, to tactile, to immersive, as they experience the architecture gradually give way to marsh.(Fig.54-55)

Influential not only in the articulation of landscaping, the creation of a connection between marsh and foundry is also used to inform the architectonic and material choices applied to the contemporary additions to the building. Substituting the currently closed, pitched roofs with elevated sloped roofs and clerestory windows, the interior spaces - previously closed to the exterior - become visually exposed to sky and marsh, experientially bringing the ambiance within the building closer to that of the marsh. When viewed from the exterior, the roofs slope gradually, not contradicting the overall flatness of the site, but gradually guiding the visitor's eye towards sky and marsh. In addition to the sloped roofs, those sections of the building which rise above the level of the existing fabric boast the aforementioned green roofs which bring the materiality of the marsh itself into the fabric of the building, seeming to bring together ground and sky (Fig. 54)

By creating an experiential connection between the existing industrial architecture and the marsh landscape, the rift between the site's past and its context is sutured. Allowing the community to re-evaluate their assessment of possible uses, the understanding of the Enterprise foundry's identity becomes flexible and well suited to the reception of new program.

Fig 54 - Axonometric drawing showing important new site axes, the development of the ground plane as you move towards the marsh, and the insertion of new roofs
The Green roofs are articulated with the same pallet as the ground plane, illustrating their relationship to it

LEGEND

- 1 Water pool boundary condition
- 2 Marsh grass moat boundary condition
- 3 Entry to main North South pedestrian axis (solid walkway)
- 4 Overgrown separation between paths
- 5 Beginning of boardwalk ground condition
- 6 Market courtyard
- 7 Beginning of frayed boardwalk
- 8 Community/research garden
- 9 Marsh lookout
- 10 Beginning of marsh
- 11 Green roofs
- P To Parking

Fig 55 Site Plan showing the ground plane shifts as you move between the foundry and the marsh
Green roofs are shown as part of the inclusion of marsh into the new building

5.4 *Old Meets New: The creation of continuous narrative through architectural re-invention*

Fig. 56– Brick detail from the foundry wall outside the Molding shop. This wall at one time acted as the connecting wall between the existing moulding shop at the old pattern making shop which has since been demolished. All that remains of the old building are these traces

Fig. 57 – Old brick walls are used as partial dividers, delineating the bar space in the new theatre lobby. Windows are maintained, but glass is removed so that the brick wall becomes permeable both windows and brick maintain their original materiality, but are surrounded by new framing, drawing attention to their qualities as decorative elements

In addition to the fusing of building and site, further actions upon the foundry attempt to take the existing architecture, perceived as un-remarkable, and frame it in such a way that its historic character becomes more clearly recognizable, yet less rooted in the generalized associations typically linked to its particular past. Strategically intersecting the existing fabric with new construction, the architecture of this proposition weaves a tapestry of old and new. The new spaces are a result of an interplay of new and old building elements. A series of moments frame, contrast and break apart the existing architecture. The foundry fabric is thus experienced as fragments which tell a story without overwhelming the space. Walking into an un-renovated warehouse, the visitor might overlook the details in view of the strength of the overall ambiance of the room. Walking into a white room with a fragment of a brick wall from that same warehouse, a visitor would notice the finish of the wall, the textures, the imperfections, the stains and cracks, as these would seem an anomalies within the clean environment. By separating the old from its whole and placing it within a situation which is in contrast to its ambiance of origin, the architecture here proposed gives attention to the old factory. Through this contrast the details within the existing fabric become obvious, brought to attention perhaps for the first time, so that they are able to tangibly relate the history of the site. These details provide a greater impression of long standing use, and even of '*firmitas*'. (Fig. 56-57)

In this proposition, the materiality of the new is never in imitation of the old, but rather stands in stark contrast to it. In the tradition of boardwalk culture- relating to the re-integration of marsh into the foundry- the use of wood is heavily applied throughout the new design elements, as are glass, gypsum and steel, each used to articulate programmatic differences. While additions are informed by the old, they reciprocally inform the re-articulation; though accommodating to certain features, additions are also used to actively intrude upon others. In the clarification of these contrasting moments between

new and old, the connections between the two become equally important. Reveals or mediating materials make connection points clearly visible, for example, where new ceiling structures are carried down onto old walls, steel caps anchor the beams to the brick, simultaneously dividing and attaching. Where new floors meet existing walls and floors, reveals are maintained to clearly signify the end of one and the beginning of the other. Where new walls intersect old walls, glass reveals leave a clear gap which allows for a rim of light and visibility to highlight the connections. In each case, the points of connection between new and old are articulated so as to highlight, rather than hide.

5.5 *Programmatic Articulation*

The material and architectural articulation of programmatic elements is the final strategy for informing the transformation of the foundry. Using the existing configuration of buildings to inform the basic layout, changes, new cuts and insertions are designed to accommodate and articulate the program within the existing complex. Centered around the previously discussed circulation spine, the foundry is divided into eastern and western bands, with the still active historic foundry occupying the former and community programs occupying the latter. The most prominent functions of each respective wing are positioned at the northern entrance of the axis. Thus, the theater and information/viewing room of the foundry are the first spaces encountered by the visitor. With public foyers located towards the spine and workshop areas away from the central axis, circulation is divided: service circulation and parking for inhabitants occurs around the periphery of the foundry. Main visitor parking is placed at the northern 'urban' edge of the site, foundry service and parking to the east behind the working foundry, and studio and market parking to the west, behind the market, while celebrated pedestrian access is through the center.

Running along the central axis, a public foyer continues from building to building behind which a thick inhabited 'wall' containing services separates the foyer from the main programmatic action. The market is located in the central block, and the existing structures on either side of the building are demolished, opening it up to access from all directions so that service vehicles might have quick easy access to the market via the side entrance. Linked programmatically to the outdoor courtyard and walkway gardens, the market is the sole building which is surrounded by the boardwalk ground condition.

At the southern-most edge of the site are the dance studios, located in the only spot with an entirely unimpeded view of the marshes. Opening up the solid eastern wall and replacing it with an operable system of sliding partitions, the studios provides the possibility of direct access to both marsh and courtyard- facilitating the hosting of outdoor dance classes. The most flexible spaces, the rental studios, ring the periphery of the courtyard, opening up to the public realm on one side, providing the opportunity for display of work. These same studios simultaneously open up to service access, parking and more private outdoor colonnade/workspace in the rear.

5.6 *From Forgotten Factory to Community Landmark*

Through adaptation of program, increased sensitivity to context and a careful weaving together of old and new, the foundry is transformed from a forgotten factory into an architecture capable of responding to contemporary local needs and priorities. Providing a sought-after home for local creative talents, while impeding the onslaught of decay in a formerly significant building, the new foundry addresses the problem of obsolete architecture with active transformation, rather than abandonment. Freed from the constraints of full historic preservation, the re-purposing of the foundry is able to put a combination of selective demolition, transformation and new addition into effect. Given the great degree of design flexibility, it becomes much more feasible to create a project which not only imparts community history, but simultaneously tells a contemporary story. Transforming the archaic to the current, the Enterprise foundry

becomes a rich tapestry of past and present, inhabiting the realm of change and progress rather than that of expired obsolescence. The proposition to transform and re-inhabit the Enterprise foundry strongly endorses architectural, social and cultural continuity. In the simplest of terms, the life span of the exiting architecture is extended rather than cut short.

Fig 58- Imbuing the foundry with new life

Fig.59- New Program layout for the Enterprise foundry

CONCLUSION

A Hope For The Future By Looking To The Past

Today's built landscape is overrun with constructions that make no attempt at longevity. Vitruvius's *Firmitas* – without getting into his *utilitas* and, *venustas* - has taken a back seat to what is often referred to as the "quick and dirty." Profound shifts in the economic realities of the building industry, the globalization of production, the exigencies of capitalist economy and their impact on the craft of architecture, all spell the demise of the finely crafted building. Only on rare occasions do construction budgets allow building for posterity. The lowly masonry wall, once an almost inevitable part of construction, be it utilitarian, residential, institutional or other, is today out of reach in much construction – its hand sized unit too costly and its pace of installation too slow for today's rapid building schedules. Given this situation, serious questions must be raised regarding the nature of tomorrow's architectural remains. If nothing is built to last, what will future generations have look back on? Certainly, there is a place for short lived buildings - ephemerality has defined some of architecture culture's most sacred projects - but did not Vitruvius have a point in this somewhat basic criteria, that buildings, at least some of them, should endure over time?

Given the precarious nature of *firmitas* within architecture, the value of attempting to work within existing architectural contexts that might allow for re-purposing becomes obvious. No matter how insignificant or uninteresting the architecture itself may seem, the building stock of our recent past is often much more solid, more *firm*, than the buildings we tend to fund today. As explored through-out this thesis, the opportunities which are presented when working within unwanted architecture, while under-recognized, are certainly powerful once embraced. Social and cultural indifference towards a building can actually be its ticket to a liberated transformation. What is more, the kind of creative re-imagination able to be excersied upon the unwanted building is often not possible when dealing with more esteemed architecture.

By looking beyond what we 'know' an existing building to be, the

limitations associated with its perceived utility or futility begin to melt away. As evidenced in the renovation precedents studied in this thesis, and as “Challenging Architectural Expiration” strives to illustrate, the industrial shell offers a unique form of raw possibility. And what is architecture if not a response to raw possibility? Indeed perhaps the very condition of obsolescence is also a condition for architectural imagination. By treating the existing as our canvas, one must not assume that the weaknesses of the already built must taint the new design. On the contrary, these weaknesses will simply add a depth and richness to the final result. If architecture is meant to tell a story, it would follow that the old provides a conflict to be solved, making the final story that much more engaging and powerful in its solution: a story of imperfection, second chances and continuity.

A WALK THROUGH THE FOUNDRY

The Building in Plan, Section, and Elevation

Fig 60- Plan of the foundry Black denotes existing fabric, color denotes new addition This color scheme applies to the plans throughout this section.

The Theatre

Key Plan

LEGEND

- 1 Main pedestrian axis
- 1a Water element creating boundary condition
- 2 Theatre lobby
- 3 Box office
- 4 Bar
- 5 Coat Check
- 6 Washrooms
- 7 Stairs leading up to offices and sound/light/control area
- 8 Theatre
- 8a Possible stage (when using existing walls as a proscenium)
- 8b Backstage
- 9 Flexible outdoor activity area (Potential to use for children's workshops to allow groups to be outside during the summer)
- 9a Outdoor Stage area (possibility of using old walls as proscenium)
- 10 Activity room
- 11 Costume workshop area
- 11a Costume storage
- 12 Dressing area
- 13 Greenroom
- 14 Workshop/storage for sets/props
- P To Parking

Fig 61 Plan of the theatre Theatre space is designed as a semi black box theatre, with the option to be converted into a traditional stage set up

Fig 62 - Axonometric of the theatre New construction is shaded while the existing building is shown as a line drawing

63

64

Fig.63- West elevation of the theatre, from within the main pedestrian axis Main Entrance doors are located on this facade

Fig 64 - North Elevation of the theatre Existing brick is rendered while new construction is shown as line drawing

The Market

Key Plan

LEGEND

- 1 Market
- 2 Restaurant area
- 3 Kitchen
- 4 Public washrooms
- 5 Outdoor Market Courtyard
- 6 Main pedestrian axis
- P To Parking

Fig 65- Plan of the market

Fig 66 Axonometric of the market New construction is shaded while the existing building is shown as a line drawing

67

68

Fig.67 - South elevation of the market from within the courtyard. Existing brick is rendered while new construction is shown as line drawing.

Fig 68 - West elevation of the market, from within the axis. Market courtyard can be seen adjacent to market building with display windows for rentable studio spaces visible in the background.

The Dance Studios

Fig 69- Plan of the dance studio

Fig 70 Axonometric of the dance studio New construction is shaded while the existing building is shown as a line drawing

Fig 71 - West elevation of the dance studios, seen from within the axis Existing brick is rendered while new construction is shown as line drawing

Elevation shows the marsh facing facade, complete with operable exterior panel wall to allow for dance studios to be fully opened up to an external arcade The arcade is located in the space between the new exterior wall of the dance studios and the existing masonry wall, which has been largely cut away to open up the view to the marsh The remaining brick wall is supported by a new steel lintel and new columns Existing windows in the brick facade are left as ornamentation except where the placement of new columns necessitate their removal

The Foundry

Key Plan

LEGEND

- 1 Outdoor arcade and walkway with viewing windows into showroom and outdoor furnace area.
- 2 Show room/Viewing room looking into moulding area
- 3 Outdoor furnace area
- 4 Viewing walkway looking into moulding area
- 5 Moulding and manufacturing area
- 6 Office and sales
- 7 Storage and shipping
- P Parking and loading

Fig.72 - Plan of the foundry.

Fig 73 - Axonometric of the foundry. New construction is shaded while the existing building is shown as a line drawing

74

75

Fig 74- South section/elevation of the Foundry Existing brick is rendered while new construction is shown as line drawing Section cuts through the southern manufacturing wing The old facade can be seen beyond

Fig 75- North elevation of the Foundry Existing brick is rendered while new construction is shown as line drawing

Elevation shows the public entry into the showroom and viewing areas Viewing windows along the walking path are also visible through which the outdoor furnace area can be observed

Rental Studios

Key Plan

LEGEND

- 1 Outdoor arcade/work space
- 2 Individual Rental studios c/w wc
- 2a Communal studio with lower cost shared space for rent
- 3 Small display gallery/shop
- 4 Public washrooms
- 5 Display windows
- 6 Seating and walkways
- 7 Market courtyard
- P Parking

Fig 76- Plan of the rental studios

Fig 77 Axonometric of the rental studios. New construction is shaded while the existing building is shown as a line drawing

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