One Hand Occupies the Void

by
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AUTHOR’S DECLARATION

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.
The interconnected nature of void and matter and form is implied in architecture, but rarely explicitly expressed. Since the void is neither form nor material, it is difficult to define, but it occupies a critical role in urban development as the counterpart to the urban mass. The narrative of the modern city can be told through the presence of urban voids: the transposition of material and built form resulting in two typologies of the void, the found and the formal. The first exploration of the found void is dedicated to the analysis of the clay pit, the companion of bricks, which is often ignored as an unwanted by-product of the construction process. This deliberate exclusion from the urban narrative is reversed once it is rehabilitated as a formal void, which is valued as an element of urban development. The second exploration analyses the condition of the formal void, using the ceramic vessel to construct a domesticated spatial model of the monumental public space. The identity of the city is therefore analysed by making visible the imperceptible void through the documentation of traces and boundaries.

The found void is a by-product of the city’s development and is not planned; it can also be described as a procedural void whose physical impact is rarely, if ever, considered as a positive influence on the growth of the city. From the economic point of view, its temporary use produces resources that transform the urban fabric, but the found void itself requires reintegration into the city either through erasure or reversal to solid. The analysis of the former, now filled-in, 19th-century clay quarry in east Toronto serves as the first
investigation of the urban void, where the industrial process of clay extraction acts as a force that influences the form of the quarry and also the surrounding neighbourhood.

The formal void is a tool that transforms the city through the imposition of a hierarchical structure derived from a deliberate absence within the existing fabric. The valorization of the formal void as a solution to congestion and chaos in the built-up urban structure is based on its perception, even now, as an ideal space that promotes circulation, light, and air. The analysis of an alternative vision of Paris conceived by Pierre Patte in 1765 expresses the interjection of the void into a pre-existing urban fabric and how its form is connected to the buildings that it displaces.

The practice of throwing clay on a wheel depicts the reciprocity between matter, form, and void: clay is shaped into a hollow vessel through the interaction of the body. The found void, as a fragment evolving over time, is compared to the process of throwing and analysed according to the redistribution of the material around the perceptible void. For the formal void, the final pieces are used as models to express the circulation and tension that becomes evident when conceptual forms are given material bodies. This process occupies the intersection between the theory of the void and the material of the clay medium and thereby offers a critical solution to the architectural paradox that engages the nature of the profession and the approach to space itself.
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I have much appreciation for potter Michael Collins, from whom I learned the practical skills, patience, and inspiration that comes from working clay directly with your hands. Thank you to all the other potters along the way, who have been kind enough to share their craft with me.

It is hard learning to define the scope of a project, especially in a school where the possibilities appear limitless. The freedom to explore is daunting. And so I cannot emphasize enough the impact of having friends and family who supported and challenged me at all points throughout this journey. I am fortunate that every person in my life is someone I admire.
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- M.C. Richards, Centering in Pottery, Poetry, and Person

**PREFACE**

After throwing one hundred cylinders, it was only when finishing the hundredth-and-first that I was finally satisfied with my result. Many earlier pieces had collapsed, more were lopsided, and a few unfortunate ones had the tell-tale twist that exposed the uneven pressure of fingers during the pull. While there are a number of forms that are difficult to get right without the entire piece falling off balance, a uniform series is even more frustrating to achieve. The condition of forming clay on the wheel using your fingers means that a myriad of factors influence the final outcome. There are the quantifiable concerns of humidity, temperature, type of clay (though it’s surprising to note that the plasticity of clay still cannot be accurately measured). And then there is also the attitude of the potter that day, whether the hands are impatient or hurried, the confidence of practiced gestures. Even when things seem to be in order, even after practicing daily and moving through the motions time and again, everything may fall apart. That’s the nature of making individual objects with an imperfect body.

I started seriously practicing pottery in November of 2015, just two months after coming back to school to do my thesis. At that point, the subject of my work was still incredibly hazy and I flitted from one corner of study to another with no evident purpose or focus. I had a number of recurring thoughts of working with ceramics, but it was only after a critical group meeting led by Anne that I found the fortitude to push myself headlong into the process of learning
to throw. I certainly did not know what I was getting myself into, though more seasoned potters with whom I discussed my plans were clearly aware.

While chatting with one such potter and sipping tea from one of her handmade mugs (when you’re part of the potter community, you end up with such a lovely collection of vessels), she questioned me gently, “So you’re going to learn to become a potter, then you’re going to do your thesis?”

I responded, perhaps a bit brashly at what I interpreted as a reproachful question, “I suppose so, but then again, I can probably get the basics down in a couple months. And the process will probably be a big part of it too.” I certainly did not get the basics down within the next few months, and the documentation of process was the last part to go into this book.

I suppose, though, that this early over-confidence is what led me to such a strange and unforeseen place, a point that was obscured on the initial line of trajectory. After plodding my way up the steep learning curve, I can say that the humility that characterizes many potters comes from the consistent failure due to the multiple factors I described in the beginning of this text. A lot of these influences were taught to me as feelings rather than fact—that is to say that the humidity was never measured in the studio, but rather it felt like we should leave the pieces out overnight to dry until the morning; and I was never told the dimensions or curvature of a bowl, but told to feel the natural inclination of the clay to flare outwards.

This method of haptic learning remains both frustrating and liberating, and is at odds with the intellectual rhetoric of many academic institutions. The danger of working too deeply in abstract thought is the possibility of losing the memory of sensation and forgetting how to learn from feeling.
ineffable concepts as space, and even more specifically, an idea as primeval and controversial as the void, we have a tendency to attempt to lasso their chaotic nature and harness it using words and lines, to distill their character into rules and theories and diagrams. If we rely only on this intellectualization, what we are doing is strangling the very thing that we are trying to convey, reducing it to a blue-faced shadow of itself. But by relaxing our tight grip on concepts we don’t fully understand, the full and wondrous nature of formlessness can be captured and communicated. Just feel the body relax, allow the mind to wander, and let the hands move.
INTRODUCTION
Introduction

To fall in the void as I fell: none of you knows what that means... I went down into the void, to the most absolute bottom conceivable, and once there I saw that the extreme limit must have been much, much farther below, very remote, and I went on falling, to reach it.

- Yves Klein

FORMLESSNESS

It seems to me that although much of what we occupy is empty space, we are more concerned with the few objects in it. Indeed, our preoccupation with tactile objects has been a defining marker of human civilization—there are many positive adjectives to describe a pleasing object, but fewer to describe the void. And yet the void features heavily in our conception of the world, whether it was denied as an aberration of nature or exalted as a challenge of philosophy.

The void and its presence have defined the trajectory of the modern city, reacting to the prevailing theory of urban planning and influencing the form of the urban fabric in return. From the perspective of the urbanist, the void serves as an identifying spatial marker that indicates the developmental age of the city. This thesis considers the role of the urban void as both a conceptual tool and a perceptual experience. For the purposes of the investigation, two instances of the urban void are examined, each belonging to a different city and era, and both analysed through the medium of clay. While the city’s relationship with clay and void has been documented separately as elements of the urban fabric, their connected nature has not yet been examined as an influence on urban development. There are two condition of the urban void that are documented in this thesis: the found void and the formal void. The found void is a by-product of urbanization that appears in the early stages of the city as it is built up; it is a temporary and interstitial fragment that gradually solidifies as the urban fabric is completed. After the densification of the urban fabric, the formal void is proposed as a
solution to issues of space, circulation, and hierarchy; it is an action of interjecting void into the solidity of the city. The interdependency between the presence of voids, the redistribution of material, and the development of the urban form comprises the underlying narrative of this thesis.

Regarding the found void, it refers to the concave space that results from that extraction of material resource within the urban limits that is displaced to build up the surrounding city. This term takes its cue from the art movement of “found object” that is predicated on the undisguised use of commonplace objects not typically considered art, but which are presented in such a way as to challenge conventions through the identification of context and object history. After the processes of extraction are exhausted, the resultant concave space is a readymade site for the reinstertion of program (often recreational or residential) into the newly built urban fabric. The found void exists within the everyday of the city and is rarely documented or intellectualized for purposes of architectural expression. It is a temporary state of the urban fabric that is eventually rehabilitated in order to fit within the program of the ideal city.

Fig. 1.01
Collapse. Photograph, thrown porcelain vessel, punctured and collapsed.
The particular found void that I am discussing was once located on the east end of Toronto along the length of Greenwood Avenue and was associated with the clay industry. As the city was expanding at the turn of the 19th century, this area was the location of a substantial clay deposit and served as the home of more than a few brickworks. Though mostly forgotten in the collective memory of Toronto, and almost completely obfuscated by the existing program, the site’s material and urban history had a significant impact on Toronto’s construction. This particular site of transformation in a city that, by all accounts, is relatively young, exhibits three stages of the found void: the displacement of material from the void to its inverse, the city; the abandonment of the void and separation from the bounding urban structure; and finally the cover-up as the void is rehabilitated and removed from memory. The first phase of analysis employs the throwing of ceramic objects as an analogy for the redistribution of matter at the then-active extraction site. Then, the abandoned clay pit is documented through historic photographs and in section, depicting the boundary conditions segregating void from built neighbourhood. Finally, the most recent aerial and photographic images express the erasure of the void as it is covered with infill and productive program, and the section expresses the smoothed space of the “finished city.” For the found void, an interstitial and temporary spatial condition, its value and identity is measured in quantifiable matter by the city. The focus of the first chapter of research considers the reciprocal physical and social forces that act upon both the material and the void.
The relationship between found and formal voids and the redistribution of matter.
In contrast to the found void, the formal void is an ideal space in the modern, developed city. It first appeared in the theories of urban planning that aimed to modernize traditional cities where the dense urban fabric did not fit with the modern concepts of circulation and containment. The void acted as a harbinger of modernity, reconstructing the form of the cityscape especially in areas that had an urban structure that was already established and densified. In Europe, where crowded and unorganized streets dominated the city centers, the urban void promised the reemergence of the connection between powerful architecture and their adjoining public spaces. This theory of the monumental void was also later exported to newer cities in North America, where the Beaux Art principles of hierarchy embodied by grand public spaces and axes subverted the typified grid street plan. The focus of this particular exploration, however, is firmly pointed towards the source of the formal void and its development in France as a theory of urban planning conceived during the Enlightenment.

One of the cities that underwent this process of modernization-through-void was Paris, which saw its chaotic streetscape criticized time and again by philosophers, architects, and writers prior to the drastic changes in the 19th century. Paris served as the laboratory for numerous Enlightenment proposals that sought to cut into the solidity of the urban structure and open up circulatory routes that were said to promote hygiene (of body and mind) and order (societal and martial). According to Enlightenment ideals in the 18th century, the archetypal city required rational circulation and aesthetic appeal. The introduction of intentional voids in the form of public squares truly expresses the transition from medieval to modern. These ideal qualities are well represented in the 1765 map “Partie du plan générale de Paris” drawn by Pierre Patte, which cut geometric voids into the density of existing buildings to bring reprieve through the exposure of empty space. This plan depicts an archipelago of voids of public space opening up a city that had already been built-up and

“solidified”: excavations in the new ground plane of the dense urban slab. These voids appeared as though hollowed out of the urban blocks, while simultaneously emphasized as individual objects that stood out, in bold outline, from the background of the city.

While the term “void” has been used since the eighteenth century, it has still been fraught with ambiguous definitions and philosophical contention regarding the importance of the word and its use in the fields of architecture and urbanism. These contentions are similar to those that have been applied to the relatively new term of “space,” and thereby expose the inherent biases that characterize the popularity of any specific architectural vocabulary. As a great number of texts have already ruminated on the nature and meaning of these terms, the purpose of this thesis is not to provide a definition of the void.

Rather, the intention is to present instances of the void typologies that exist at points of urban development and clarify the relationship between the urban void and urbanization. The analysis of the city is revealed through a study of what is not there, rather than by the forms and landmarks that dominate the skyline. This approach is borne from a reading of George Bataille’s philosophical construct of the informe. The publication Documents was the first published location of Bataille’s 15-sentence description of informe.

Fig. 1.04
Hourglass. Photograph, thrown porcelain vessel.
Questions of Space
Bernard Tschumi

1.0 Is space a material thing in which all material things are to be located?
1.1 Is space a material thing, does it have boundaries?
1.11 If space has boundaries, is there another space outside those boundaries?
1.12 If space does not have boundaries, do things then extend infinitely?
1.121 As every finite extent of space is infinitely divisible (since every space can contain smaller spaces), can an infinite collection of spaces then form a finite space?
1.13 In any case, if space is an extension of matter, can one part of space be distinguished from another?
1.2 If space is not matter, is it merely the sum of all spatial relations between material things?
1.3 If space is neither matter nor a set of objective relations between things, is it something subjective with which the mind categorises things?
1.31 If the structure of the mind imposes an a priori form (that precedes all experience) to the perception of the external world, is space such a form?
1.32 If space is such a form, does it have precedence over all other perception?
1.4 If, etymologically, 'defining' space is both making space distinct and stating the precise nature of space, is this an essential paradox of space?
1.5 Architecturally, if defining space is making space distinct, does making space distinct 'define' space?
1.51 If architecture is the art of making space distinct, is it also the art of stating the precise nature of space?

Fig. 1.05
Photocopy of the first page of Bernard Tschumi’s "Questions of Space."
A dictionary begins when it no longer gives the meaning of words, but their tasks. Thus *formless* is not only an adjective having a given meaning, but a term that serves to bring things down in the world, generally requiring that each thing have its form. What it designates has no rights in any sense and gets itself squashed everywhere, like a spider or an earthworm. In fact, for academic men to be happy, the universe would have to take shape. All of philosophy has no other goal: it is a matter of giving a frock coat to what is, a mathematical frock coat. On the other hand, affirming that the universe resembles nothing and is only formless amounts to saying that the universe is something like a spider or spit.  

This passage was not marked or highlighted in any way, and was located in what would, by most standards, be considered an overlooked corner of most publications. The use of the dictionary form in *Documents* served as a rally against the academic world, and its very form was subverted through redundancies, lack of alphabetization, absurdity of words, and incompleteness. The deliberate eschewing of symbolism and definition leaves the *informe* a purely operational existence that is “a performative, like obscene words.”
Sixty years after its publication, the *informe*, or formless, was taken up by Yves Alain-Bois and Rosalind Krauss as an operation in the reconfiguration of twentieth-century art. Based on this concise definition and other writings of Bataille, Bois and Krauss asserted four domains that occupied the realm of the *informe*: horizontality, base materialism, pulse, and entropy.¹ Each of the two sections in this thesis attempts to address two of these qualities depending on their relevance to each analysis. In the development of the found void in Greenwood, the exploration is considered through the lenses of base materialism, the destruction of the distinction between form and matter; and entropy, the degradation of matter and increasing disorder within a system as it tends towards an overall sameness. At this site, the form of the ground plane is intrinsically linked to the material of clay, and so the processes that extract and shift clay from one place to another directly affects the form of the site. Meanwhile, the development of urban form displaces the clay and transforms it from a raw material to brick, changing its chemical and physical character, and blurring the line between natural and artificial. In the lapse of time documented by aerial photographs, the gradual disorder of the site is made obvious as the chaos of the extraction process meets its resolution with the filled-in site and banal subdivision and

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transit hub. As for Patte’s “Partie du plan générale de Paris,” the other two concepts of horizontality and pulse are analysed through artistic practice. Horizontality opposes the dominance of the visual that is represented by the vertical (as in the prototypical presentation of drawings and images hung on walls), while pulse attempts to redefine the visual with an uneasy connection to the body through haptic experience and explicit temporality. Through the translation to ceramic objects, the vertical-visual plan of Paris is turned 90 degrees and presented on the plane of the floor—returned, in a sense, to the ground from whence it came. At the same time, the disjunction between the domestic object and monumental plan subverts visual expectations, as the plan is reconciled with tactile clay models that contain traces of temporal and haptic process of throwing. Just as ceramic vessels in the home are left on surfaces such as tables and shelves, these objects deliberately occupy the same horizontal plane.

Fig. 1.08
*Half-open.* Photograph, thrown black stoneware vessel.
Absence, a synonym of void, is difficult to define architecturally, precisely because architectonic terms refer to walls, floors, and other solid elements. At the same time, absence is a necessary condition for potential and movement – without empty space, progression of buildings and bodies becomes impossible. If I were to attempt a clarification of the void, the closest taxonomy would be boundary and traces. According to Simone Pizzagalli in the essay accompanying his Masters thesis, the difference between the conceptual and experiential void is their relationship to architectonic elements of the boundary and trace.\textsuperscript{9} In the first instance, the void comes into being when a blank area is circumscribed by a boundary, resulting in “an undefined, empty and disconnected otherness”, whereas the void perceived through traces is “tangible as something inseparable form the formal development of its accommodating structure.”\textsuperscript{10} By distinguishing the different voids manifested by the defining elements of the boundary and trace, Pizzagalli lays the groundwork for further extending the taxonomy of the void. The presentation of the void taxonomy as a spectrum between boundary and trace may provide an understanding of the importance of both characteristics in the urban void. If the boundary is typically assigned to the

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{double_circle.jpg}
\caption{Double circle. Photograph, thrown black stoneware vessels.}
\end{figure}


\textsuperscript{10} Simone Pizzagalli, “Spaces, Poetics, and Voids.”
conceptual void, then the number zero can be considered its ultimate expression. Its primary representation is through the inscription of a circle on a flat surface, a border reduced to its simplest form. At the same time, zero as a mathematical concept is meant to convey a total intangible absence. On the other end, the purely spatial void is represented by the black hole. Its boundary, the event horizon, is indistinguishable to the eye and has been manipulated such that it is an undefined gradient rather than a dividing line. The perception of the void is only achieved through the documentation of its traces—the effect of its attractive force on the movement of nearby objects, space, and light. In the terms of this thesis, the boundary is the edge condition of the void and traces result from movement that leaves physical markings in the material of the void. Of course, there are very few purely conceptual or experiential voids, and therefore urban voids exhibit both boundary and traces. In the following studies on found and formal voids, the mediums of mapping and clay are used to examine the idiosyncratic configurations of boundary and trace.

11. See Figure 1.10 for a detailed breakdown of the void taxonomy regarding boundary and traces.
Table 1.10

<table>
<thead>
<tr>
<th>boundary</th>
<th>conceptual void</th>
<th>urban void</th>
<th>traces</th>
</tr>
</thead>
<tbody>
<tr>
<td>pure boundary that exists as a single two-dimensional line</td>
<td>defined by the border that separates matter and nothingness, limits of the void are evident</td>
<td>border is uncertain and constantly shifting as a result of changes (economic, social, political, etc.)</td>
<td>boundary is disintegrated into an event horizon, impossible to define</td>
</tr>
<tr>
<td>devoid of traces, can be placed or not placed anywhere</td>
<td>traces are secondary or even hidden to emphasize the “appearance” of absence</td>
<td>defined by an assemblage of traces and residuum that communicate spatial development</td>
<td>only perceived by the traces of the movement of objects attracted by its force</td>
</tr>
</tbody>
</table>

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*Fig. 1.10*

Taxonomy of the void according to the attributes of boundary and traces
Pots, like all other forms of art, are human expressions: pleasure, pain or indifference before them depends upon their natures, and their natures are inevitably projections of the minds of their creators.

- Bernard Leach, A Potter's Book

### METHODOLOGY

Our first encounters with the void were discussed in a whisper, within the context of creation myths that attempted to explain what existed before us. When the story reaches the explanation of our own existence, the void gains an accomplice: clay. Sumerians believed the clay was mixed with blood; in China, the yellow clay was strengthened with a reinforcing rope; the Nile God in Egypt used a potter’s wheel. According to the three Abrahamic religions, clay was collected to form the body and this android figure was given life through breath.

> Then the LORD God formed a man from the dust of the ground and breathed into his nostrils the breath of life, and the man became a living being.
> [Genesis 2:7, NIV]

The creation of humans was a two-step process that can be simplified as 1) make a hollow ceramic vessel and 2) animate the figure through breath. In Peter Sloterdijk’s musings on the void, he describes this ceramicist-deity as “representative of the oldest technological culture, whose main emphasis is on ceramic skills.” He points out that the medium of clay was the obvious choice for the creation of man as the ground was the source for both form and sustenance; that is to say, the vessel and its contents. Furthermore, the passage from Genesis identifies the importance of the hollow vessel: an internal void was necessary in order to receive the breath of life. While humans have been capable of forming hollow vessels

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for centuries, the technology of this metaceramics suggests that once we learn how to gather breath, then the only pre-requisite to creating life is the void.\textsuperscript{14}

Clay is one of the oldest and most basic materials and our propensity for using it to shape objects is as old as human existence. Of course, the obvious assumption when discussing clay in terms of architecture is that the ceramic objects are bricks. While bricks do feature in the first exploration, the crux of the analysis is dedicated to its counterpart, the clay pit, and the analogy of throwing is engaged to discuss the process of material redistribution. Then in the second exploration, clay is domesticated in the form of the ceramic vessel that is presented as a translation of the urban square. In ceramics, the tandem action of forming the interior and exterior of the vessel necessitates an acknowledgment of the duality between solid and void. One hand occupies the void while the other expresses form. Can this same hierarchy be found in the architectural void?

\textit{Fig. 1.11}

\textit{Nested forms.} Photograph, cluster of two thrown porcelain objects.

\textsuperscript{14} Ibid.
With the addition of the vertical dimension, figure-ground representation is projected as a mass-void configuration. The same experimentation with graphic convention of the figure-ground was also applied to the three-dimensional void, resulting in projects such as architect Luigi Moretti’s 1950s plaster castings of Renaissance architectural interiors that transformed empty space into solid objects. The one-to-one reversal of the internal void to solid volume subverted the expected spatial quality of famous buildings, giving materiality to the invisible but offering little critique on the spatial void itself. This object series was, in the end, limited by the casting method, which requires that there exist both the mould and form. When the mould is the reproduction of an existing building, with nothing simplified or emphasized, the resultant cast also retains the limited qualities of a reproduction.

In contrast, the void models proposed in this thesis manipulate the two-dimensional void through abstraction and transposition into “functional” object. The process involved in the production of these void models rejects the presupposed formwork that is required for casting—rather, the ceramic objects are made using traditional
thrown (and built) techniques. The significance of this method is the clarity of its process: the wheel-thrown object is formed from a specific volume of clay that is shaped in a fluid motion to enclose air/void within a bounding form. From an initial mass of clay, the possible configurations of form, volume, and number of voids are endless. These void models straddle the distinction between architectural and artistic practice and produce a form of spatial warping, as described by Anthony Vidler:

Artists, rather than simply extending their terms of reference to the three-dimensional, take on the questions of architecture as an integral and critical part of their work in installations that seek to criticize the traditional terms of art. Architects, in a parallel way, are exploring the processes and forms of art, often on the terms set out by artists, in order to escape the rigid codes of functionalism and formalism. This intersection has engendered a kind of “intermediary art”, comprised of objects that, while situated ostensibly in one practice, require the interpretive terms of another for their explication.  

The expanded field is therefore open to modes of representation that move beyond two dimensions, and also beyond the typified models of depicting the architectural process. The combination of the form, derived from a visual analysis of the city, and the material, which maintains its domestic associations, results in ceramic objects with uncertain functions and meanings. Experiments such as these—that is to say, those that employ alternative materials and methodologies as part of an architectural critique—contribute to the dissolution of the boundary between architectural study and artistic practices traditionally beyond the scope of architecture.
Fig. 1.13
Shadows between three forms. Photograph, cluster of three thrown porcelain objects.
Fig. 1.14
Documentation of the throwing process, centering and pulling into a double-walled cylinder.
Fig. 1.15
Documentation of the throwing process, folding the double-wall into a closed form
FOUND VOID

Greenwood, 1884-1991
Fig. 2.16
Aerial, 1947

Fig. 2.19
Aerial, 1957

Fig. 2.22
Aerial, 1963

Fig. 2.17
Aerial, 1950

Fig. 2.20
Aerial, 1960

Fig. 2.23
Aerial, 1964

Fig. 2.18
Aerial, 1953

Fig. 2.21
Aerial, 1962

Fig. 2.24
Aerial, 1965
Here negative space can be more important than what’s constructed from its deported material elsewhere. The gravel pit, like other mining holes, is the reverse image of the cityscape it creates—extraction in aid of erection.

- Lucy R. Lippard, Undermining

**DISTANCE OVER TIME**

Greenwood’s material history is a narrative that embodies the displacement of extracted matter from the void to the form of the growing vertical city. The historic materiality of Toronto is attributed to the iconic red and yellow brick that was often extracted from deposits within the city limits and its periphery. Particularly in the case of Greenwood, where the surrounding buildings not only bounded the resource quarry but also infringed on its extents, the correlation between the found void and the urban form impacted the development of the city. While entire length of Greenwood Avenue from Danforth Avenue to Dundas Street East functioned as part of the system of industrial brickyards, the following analysis focuses on the timeline of two particular deposits bounded at the south by the railway before Gerrard Street East. By depicting this region as a closed system of urbanization, the relationship between the residuum and recipient of the process of extraction challenges the distinction between nature and culture.

Back in the 1880s, the street was originally named Greenwood’s Lane, after local resident Mr. Greenwood who used to own a hotel on the corner of what is now Queen St. and Greenwood. A fluctuating number of brickworks were established along the stretch of Greenwood Avenue between the years of 1860s to 1920s because it was one of the rare points where it was profitable to harvest the massive interglacial clay deposit that extended up to 30 metres deep beneath the surface of the ground. Both deposits on either side of Greenwood carried the red-burning clay that was considered highly desirable and used in a fair number of Toronto’s iconic brick
Fig. 2.25
Aerial, 1966

Fig. 2.26
Aerial, 1967

Fig. 2.27
Aerial, 1968

Fig. 2.28
Aerial, 1969

Fig. 2.29
Aerial, 1970

Fig. 2.30
Aerial, 1975

Fig. 2.29
Aerial, 1981

Fig. 2.32
Aerial, 1985

Fig. 2.33
Aerial, 1991
buildings. The clay also comprised the banks of the now-buried Hastings creek, which stretched to Ashridges Bay and cut a deep ravine south of Gerrard Street East. This creek had an impact on the form of the neighbourhood, not due to its material resource, but because the difficulty of developing the soggy, uneven terrain delayed subdivision development until 1921, when it was finally buried in the sewer system. Subsumed by the industrial processes, the natural formation became part of another extraction site that temporarily obstructed development south of Gerrard, such that it permitted the zoning of another spatial void, this time in the form of a city-approved Greenwood Park. Though this specific park lies beyond the scope of this study, it foreshadows the same trajectory that occurred to the urban voids at the site of analysis in later years.

Tracking the changing state of Greenwood Avenue through the decades is most easily accomplished using the archival Toronto General Directories. The earliest edition available online is the Brown's 1861 edition. Marked with an asterisk, we see the first indications of brick makers of Greenwood Avenue. By 1908, the directories list nine brickyards under the category of 'Brick Manufacturers', including John Price and Joseph Russell, as well as Walter Morley (whose name appears to fluctuate each year depending on the neatness of the documenter's writing). This period saw the greatest concentration of nine brick industries along Greenwood Avenue, which implies that the speed of extraction and amount of material moved was also at an all time high. Though the quarries were initially separate, it was likely that during these years the clay pits conjoined and reached their maximum width and length on the lots (since the residential area was already encroaching), though the depth likely continued to increase for the next decade. The 1913 Toronto directory shows that six of the brickworks were operating, while the 1922 list indicates that only three remained (many having moved to other sites in the city). The last brickyard, belonging to John Price, closed in 1962.17

THE DISPLACEMENT
1884-1946

As the extents of the clay quarry expanded and eventually combined into one large resource pit, the extracted material reconstructed entirely the appearance and program of the surface. The site expresses, in both elevation and plan, the notion of base materiality, which is the concept that there is no division between form and matter. The direct flow of clay at the site, and the short distance of travel, saw the immediate chemical and physical transformation of form and matter. The clay was pressed and fired into bricks, and this economic demand for building material determined the ragged edges and volumetric depth of the quarries. The growth of the void and city in juxtaposition with images of the process of throwing expresses this redistribution of material. Simultaneously, the growth of the surrounding residential fabric began to infringe on the bounds of the extraction site and obstruct access to the rest of the clay deposit. The prim neighbourhood was characterized by rows of traditional brick houses made from the clay of the deposits nearby. This explicit interdependency between form and matter was driven by the value of resource extraction but eventually led to the closure of industry at this site.

Fig. 2.34
Time-lapse of the process of redistributing clay during centering and opening

Fig. 2.35
Maps of the development of the neighbourhood from 1884-1924.
Fig. 2.36
Excavation of the found void and subsequent redistribution of material into the surrounding urban fabric.
Fig. 2.37
Development of the found void after depletion of material resource.
The declining number of brickyards that occupied length of Greenwood was the result of a number of conditions. While the clay resources were, of course, much smaller after decades of continuous excavation, they were not actually fully depleted. The greater issue was the construction of the residential houses, built from the clay of the site, that were located on lots that sat directly on top of the clay deposits close to Danforth and thus obstructed access. Furthermore, the increasing population of residents occupying these subdivisions began to complain about the proximity of these brickyards and their accompanying noise, smog, and stench. It not only restricted the growth of the existing industry but also forced some of the closer companies to move away due to stricter zoning guidelines. These challenges caused a number of these brickworks to seek business elsewhere in the city where zoning and resource access were more favourable.

But the damage had already been done. By the 1960s, the clay deposits had been exhausted of their (accessible) material and abandoned by industry, leaving massive sloping pits five to seven stories deep. Aerial photos of the area from this time period show the curved depressions and rough striations of the scraped earth. On the east side of Greenwood, the clay deposit was particularly deep and the startling shadows of the photographs expose the crater. These images show a perspective of the abandoned clay deposits that resemble massive wounds on the surface of the earth. The comparison of these abandoned clay pits to wounds is not merely a dramatic analogy. The violence of brickmaking, which used dynamite and digging tools to break apart the material from the ground, left a hard clay surface that was resistant to the growth of new vegetation (leading to a journalistic turn-of-phrase “as bald as a brick-yard”).
Abandonment of the found void and analysis of the types of boundaries separating the void from the surrounding neighbourhood.
Fig. 2.39  
Shudell Ave., East end 1927
End of pavement, Shudell Ave., 1927

Fig. 2.41  
East end of Shudell Ave., 1927

Fig. 2.42  
Greenwood Ave. Fill, 1949

Fig. 2.43  
Greenwood Ave. Fill, 1949

Fig. 2.44  
Toronto Brick Coy's Pit  
Below Felstead Ave. 1928
Fig. 2.45
Shrinking found void during reintegration into the urban fabric
For two decades after the abandonment of the brickyards, the immense pit west of Greenwood was used as dumping grounds for the city's refuse. Known colloquially as Harper's Dump, the Greenwood Avenue Fill served as one of the main landfills for the city of Toronto. Trash was thrown in haphazardly, below the sight line of the street and therefore out of mind. It must have been a disappointment for the residents, to have the chaos of industry replaced by an equally offensive, if quieter, program. When the Toronto Transit Commission purchased the western deposit in 1962, the trash was leveled out and earth was imported from one of the construction sites downtown to serve as infill. A hand-written note “Future east-west subway yards” underscores the drastic change in appearance from the previous year's aerial image. The new smooth surface depicts the sanitation of the raw, material void in order to fit the ideals of a residential neighbourhood. In a way, this simple note emphasizes the void as a site of potential, indicating the eventual the abandoned pit into a transportation yard. The storage and maintenance facility became operational in 1965 at the same time the first segment of the Bloor-Danforth line was opened and continues to serve all the subway cars along the line. It acts as one of the major cores of the urban circulation network, replacing the flow of material with the flow of people.  

The eastern site remained untouched up until 1965, and the aerial photograph shows an apparent smoothening of the slopes and the appearance of two man-made impressions that resemble lakes. By 1966, these, too, are covered up and the infill of soil has brought the site back to the level of the street. In its place, there is currently a small local playing field and quiet subdivision of duplexes, a far cry from the yawning pit that once swallowed the land.
Rehabilitation and infill of the found voids to serve programs of recreation and transportation.
Fig. 2.47
TTC Oakvale Green Space, approach from Shudell Ave.

Fig. 2.48
Backyards bordering the TTC Oakvale Green Space.

Fig. 2.49
Greenwood TTC Subway Yard, view from Oakvale Ave.

Fig. 2.50
Rooftop of maintenance complex at the subway yard.

Fig. 2.51
Brick duplexes built on top of the former eastern quarry.

Fig. 2.52
Concrete stairs left over from burying Greenwood Ave.
On both sides of Greenwood were brickyards, and we used to play there weekends. The west one is now T.T.C. yards, and the eastern section is now a subdivision of houses. I have sometimes wondered whether the eastern one, since it was a deep hole, extending nearly over to the fence at Monarch Park, would find any of the houses sinking.

- Ken Smith, The East End: Personal Recollections of Toronto, Brochure 8

FOUND TO FORMAL

In the earliest stages of the construction of a city, particularly when it was still trying to fill the extents of its limits, land value is derived from building up the urban fabric. Buildings, first and foremost, defined the presence of the streets and the identification of the city. The value placed on raw materials led to the appearance of extraction landscapes, areas that were defined primarily by material composition and industrial production. In these industrial landscapes in particular, the clear valuation of the object and matter is repeatedly expressed. The void that results from these processes has no less form and are no less significant than the removed material—but it is still seen as a negative and unfortunate consequence of industry. The resulting voids, which fall under the category of “landscapes associated with the residuum of closed systems” described by Albert Pope, are inherently and highly entropic. Entropy is a measure of the disorder of the system; that is to say, all the possible configurations that exist within a given system. It reduces a system to sameness and is irreversible: like a melting ice cube in a glass of water turning thoroughly lukewarm. Every site of industrial process that involves extraction of material for urban development (ie. quarries, strip mines) breaks down the distinction between cultural and natural. “The disorganization inherent in such extraction,” Pope elaborates, “produces a violence in the residuum that contradicts an already feeble construction of nature.”

When an extraction pit is located within the bounds of a city, it further challenges the distinction beyond the extents of a typical quarry. The “blurring of opposites is actual or material” in such an entropic site, which is to say that it exhibits a clear physical overlap between man-made constructs and the natural resource. After the exhaustion of valuable materials, these extraction points are deserted but their entropic nature does not diminish even through disuse. In her essay “Desert Testing”, Alessandra Ponte references voids that are the abandoned interstitial zones within the urban fabric whose repetitive formlessness was recorded by the likes of Edward Ruscha and Gordon Matta-Clark through photographic documentation. She argues that these sites are expressions of the disequilibrium of the urban core, which, in turn, necessitate the recycling of interstitial spaces in order to counter the imbalance caused the “entropic proliferation of wasteland”. Although these zones are often viewed through a lens of undesirability and falsehood, Ponte notes that Ruscha's documentation of these sites was neither reverential nor judgemental. While agreeing with the tone of Ruscha’s natural stance, since I am not seeking to memorialize these extraction sites nor condemn the city for their reuse, my position extends beyond strict documentation into analysis. To consider the inflection that the void has on the city during its development, and conversely, the influence of the urban attitude on the rehabilitation of the void. The series of historic aerial imagery therefore serves as the basis for forming an accurate timeline that exposes the interaction between the city and void, and this dialogue is represented in section.
Unlike extraction sites that are located out in the hinterlands, urban quarries are absorbed into the urban fabric as the city expands beyond its initial extents. The presence of the void is dependent on temporary program, and the depletion of the deposit then signals a new phase of the urban void; it is covered up or rehabilitated to better fit within the context of the surrounding fabric.

The trajectory from unwanted to treasured urban void emphasizes that the perception of the void is often based, in part large, on socio-political context. While economic advantage of the local resource extraction is often considered a factor in the development of the city, the impact of the physical void itself is ignored or otherwise criticized. As a 1992 report on the state of extraction sites in Toronto summarizes: the existence of the found voids forced urban sprawl to develop around the site, thereby maintaining pockets of open parcels for future development.24 These voids become sites of infinite potential; their reuse was put towards the development of the city towards an ideal state. In metropolitan Toronto, though some former extraction sites were assimilated into the surrounding residential, institutional, or commercial fabric, almost half of the found voids were rehabilitated as recreational areas and parks: in other words, formal voids.25

Unlike the found void where value is dependent on the depletion of a finite material resource, the profitability of the formal void is qualitative and based on its perceived productivity in the city. While the eastern void has effectively been erased and buried under an unassuming block of brick duplexes and neighbourhood park space (a dramatic feat given the sheer depth of the deposit), the other site is indicative of the perceptual shift of the urban void depending on its productivity within the capitalist city. After this particular deposit was

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exhausted of minerals and relegated to a landfill, the void remained outside the narrative of the city as residents resolutely rallied against its presence. Even when the area was contributing to the working of the urban system, its program was considered undesirable and therefore external to the neighbourhood. Only when the void was rehabilitated as a transportation ground was it recognized as part of the productive network of the city’s circulation and acceded by the residents of the area, even though the depth and scale remained the same. In this sense, the development of these voids in Toronto has much in common with modern urban planning schemes predicated on opening up the city into a series of voids, which found its early origins in the composite maps of the Enlightenment in Paris.
Fig. 2.53
Map of the rehabilitated extraction sites in Toronto. (Refer to index on p. 116.)
FORMAL VOID

Alternate Paris, 1765
Fig. 3.54
Complete set of ceramic void models, hand-thrown in black stoneware.
Fig. 3.55
Pierre Patte, “Partie du plan général de Paris” (1765)
To enclose a space is the object of building; when we build we do but detach a convenient quality of space, seclude it and protect it, and all architecture springs from that necessity. But aesthetically space is even more supreme. The architect models in space as a sculptor in clay. He designs his space as a work of art.

- Geoffrey Scott

**APPROACHING THE LIMIT**

Despite referencing actual dimensions and geographic points, an urban proposal depicts a city that does not exist. Yet once drawn, the drawing is an overlay that presents a double-image of the overlap between the real and potential city. As though in a mirrored room, Paris has been reflected hundreds of time in increasingly varied idealistic ways. By 1765, the city had been growing organically for centuries and had a convoluted urban plan punctuated by isolated monuments, yet to undergo the surgical overhaul of Haussmann. That is not to say that there had not already been previous attempts to re-imagine the spaces of the city. For decades prior, writers such as Voltaire and Quatremère de Quincy complained about the narrowness and confusion of the streets, which were said to harbour filth and illness. Their suggestions focused not only on the expansion of public squares in front of notable buildings, they also involved the rebuilding of thoroughfares that were straight, wide, and connected the major public plazas. Very few of these early proposals were ever detailed comprehensively as proper plans and most exist primarily as written critiques and descriptions.

However, one proposal that was particularly well documented both through drawing and text is Pierre Patte’s “Partie du plan générale de Paris”. Completed in 1765, this particular map of Paris appears in many current essays discussing the origins and role of the void in the urbanization of the modern city and for good reason: it is one of the first instances where these rational ideals are presented as one. As described by Stephen Lauf, the curator of the online...
Fig. 3.56
Fragmented building fabric in Paris prior to 1800; the new ground plane. (1:750 000)
collection *Quondam*: “Patte’s composite plan of the many discrete and diverse design alternatives for an 18th century urban square housing an equestrian statue of Louis XV is nothing less than a virtual Paris, a Paris based on both fact and fancy, yet also a Paris ripe with potential.” This document is unique because rather than showing a single proposal for one isolated project (in a time when plans tended to depict even urban proposals as distinct objects-in-a-field), this map was an assemblage of a number of projects. It is a composite of Paris that depicts all proposals for a competition held in 1748 and was originally published as part of an illustrated book titled *Eriges en France à la gloire de Louis XV*, which included detailed drawings and descriptions of each proposal. As the title of the collection suggests, this unconventional map sprung from a distinctly monarchical source: the search for the optimal site to install King Louis XV’s equestrian statue.

According to Pier Vittorio Aureli, this particular map best exemplifies the invention and adoption of the void as a monumental urban figure in the realm of the public sphere. These voids were considered integral to the healthy, continued development of the city because they provided the luxuries of space and circulation. There are three main reasons that explain why Patte’s map is particularly emblematic of the introduction of the void into the urban fabric. First, as previously stated, the map was one of the first comprehensive plans that proposed a radical transformation of an existing city by conjoining separate proposals into one. The wide scope and spatial extents of the map serves as a prototype of sorts for the contemporary large-scape urban plan. Secondly, though duly consolidated, this urban plan remains impossible to fully realize, as a number of projects overlap in the same locations around the city. Both these factors contribute to the third notable characteristic—

28. Ibid.
K
Designed by M. Goupi.
“...this architect had imagined opening passages, where one would place gates, so that one could glimpse the statue of Louis XIV in the Place de Vendôme simultaneously with that of Louis XV all along this direction.” (p.199)

L
Designed by M. Aubri [sic: Aubry], architect of the King and Inspector General of the Streets of Paris.
“Four great hotels occupy two façades on the right and left, and, which in turn, form on the quay an avant-corps. This square is closed off at the back by a grand façade penetrated in the centre by an arcade, that leads directly to the Rue du Bac.” (p.200)

Fig. 3.58
Projects K and L. "Partie du plan générale de Paris."

Fig. 3.57
Detail of Void Set No. 1.
the map lies at the intersection of real and imagined, and therefore exemplifies the most powerful characteristic of the void: potential. While the found void manifests as an unintentional opportunity for the interjection of program into an urban fabric, the formal void has the agency to design the multitude of possible social relationships that are generated within open public space. Patte’s composite map of public spaces is, at its core, an image that expresses the potential of the void to transform both the percept and affect of the city.

In Anthony Vidler’s essay “The Scenes of the Street,” he discusses the early urban critiques of Abbé Marc-Antoine Laugier, who analogized the ideal city plan as one based on the seventeenth-century pleasure park of Le Nôtre.31 Perfectly geometrical and formally conceived, the large parks were the closest approximation to the fantasy of utopic towns that were designed in isolation, where the existing terrain was considered a blank slate and a fully realized plan was “imposed on nature from above.”32 This was a clear expression of applying reason to landscape that dominated much of Enlightenment thought at the time, and made its mark on the development of an approach towards city planning.33 The assertion that the urban landscape can be designed using the same methods seen in the classical park serves as an apt parallel between the treatment of the found void and the formal void. Vidler notes that by equating the landscape garden to the existing city meant that the built urban form was therefore perceived as a kind of natural phenomenon (he specifies a forest) or “seen as the ground for the architect’s invention.”34 With respect to representation, this implies that the built figures of the buildings become the new datum line of the ground plane, and that the voids subsequently introduced are extracted from this backdrop and emerge as the new figures. Even more significantly, the comparison of the existing city to ground


32. Ibid., 29.

33. Ibid.

34. Ibid.
b

Designed by M. Pitrou.
“This architect’s idea, in placing the statue of the King, not only in the center of his people, but also in the place where one finds assembled the cathedral, the court of law, and the city hall, is extremely advantageous...”
(p.190)

D

Designed by M. Rousset.
“M. Rousset, architect of the King, had also proposed two projects for the Grève quartier. One was simpler, where he preserved in part the old city hall, and the other richer. It is this latter project about which we speak.”
(p.192)

E

Designed by M. Chevotet.

Fig. 3.59
Projects B, D, and E. "Partie du plan générale de Paris."

Fig. 3.60
Detail of Void Set No. 2.
Formal

suggests a parallel between the formal void, which is derived from theory, and the found void that is based on material.

Continuing this conceptual trajectory over a decade after Laugier’s proposal for the rational Enlightenment city, Pierre Patte’s map of Paris was one of the first documents depicting the excavation of large-scale voids in an existing city. While the Greenwood brickyards saw the extraction of the material landscape, here, in Paris, the mass of the city blocks served as the new “ground plane” for excavation. The patterns of the traditional urban fabric were rendered unfamiliar through the deliberate surgical cutouts of white voids, which transfigured the Paris of monumental buildings into an archipelago of monumental voids.35

The individual nature of each project, each attributed to a different architect, could suggest that the map was never intended as a comprehensive approach to urban planning. However, in the same essay, Anthony Vidler argues that a comprehensive urban scheme was precisely Patte’s ambition. As mentioned, the map was one of the illustrations in the book Erigés en France à la gloire de Louis XV that included texts describing each proposal and critiquing their architectural treatment. One chapter of the collection is loosely translated as “The embellishments of Paris, general reflections on the means that could be employed to embellish this city in its totality,” and “render it as comfortable as it was agreeable.”36 Clearly, the title of this section indicates that Patte’s ultimate argument was for the design of a unified city plan to replace the convoluted, unhygienic streets of the medieval streets. His map therefore showcased the potential of the city to be transformed, through the introduction of open public spaces that would reconstruct the structure and experience of the urban centre.

35. Coming almost full circle, as the voids of public space were technically opening up to the original ground plane.

O

Designed by M. de l'Estrade.
“...two diagonal streets comprise the building of the city hall, that permit glimpses of the monument erected for his Majesty from two different spots along the Conty quay...”
(p.208)

P

(unknown architect)
Designed for the Croix-Rouge.
Description of the square and the name of the architect not found.

R

Designed by M. Polard.
“Thanks to all these alignments (of the streets), there is no doubt that this square would have many openings and be regularly traversed.”
(p.205)

Fig. 3.61
Projects O, P, and R. "Partie du plan générale de Paris."

Fig. 3.62
Detail of Void Set No. 3.
These void spaces and connecting streets were expressions of the city’s new urban directive of congregation and circulation. The rise of the “negative monument”, as opposed to the massive structures that were once the dominant symbols of power, indicated the importance of the urban void as both a modern political tool and spatial experience. The map was not an accurate depiction of the old Paris or the contemporary urban field; rather, it expressed the ideals of a future modernized city. As a result, it remained a firmly idealistic proposal that depicted an instantaneous moment in time, distanced from the actual city’s development. This stands in contrast to the mapping of Greenwood, where the representation of topographic development over time is accurate to the reality of the site. However, the final rehabilitation of the void also demonstrates, within its own context, the strength of the desire to shape the city according to an ideal vision.

The particularity of Patte’s representation emphasized the form of the voids within the homogeneous urban blocks, and reduced the mass of the surrounding buildings into the solid line of the façade. The focus on the monumental void and the streets that filtered into it prioritized the negative concave space rather than the urban block. The rational street system was designed to control the flow of bodies, with all the hierarchical and militaristic implications it suggests, while prioritizing the dominance of the eye. A subjugating gaze was, and remains, a continuation of the trend that began with the introduction of perspectival drawing in the Renaissance, which attributes the virtue of objectivity to the sense of sight and the falsehood of subjectivity to bodily experience. The technology of maps as the primary method of depicting cities (at this point on the cusp of modernization) reinforced the prominence of the qualities of accuracy, rationality, and objectivity.

38. Ibid.
39. Ibid, 156.
By tracing the outlines of each void and using the same thickness of line that Patte used in the original map, the unique form of each isolated void is demarcated. Between the various projects, there is an implicit connection or triangulation afforded by the radiating avenues. This assemblage suggests a multifocal composition in the urban terrain, one that is predicated on the new scale of the void typology.

*Fig. 3.63*

Outline of voids isolated from “Partie du Plan général de Paris.”
If the plan had been realized, these would have been the 18th century buildings that fell within the bounds of the public spaces. The geometry of the cuts, buildings sliced according to an invisible yet precise border, exemplify the notion of excavating a solid urban mass. These fragments of Paris appear more isolated than the voids themselves, scattered and suspended on an unyielding field of white.

*Fig. 3.64*
Projected extracted urban fabric according to the proposed public squares shown in “Partie du Plan général de Paris.”
Fig. 3.65
Complete Void Set series. Ceramic models of void spaces from the map.
Could one not shoot a passionate film of the city plan of Paris? Of the development of its different forms in temporal succession? Of the condensation of a century-long movement of streets, boulevards, passages, squares, in the space of half an hour?
- Walter Benjamin, Das Passagen-Werk

**ARCHIPELAGO OF VOIDS**

Though the series does not include all the voids in the map, three groupings of voids are chosen and represented for their complexity and interlinked circulation. Therefore, there are three *Void Sets*, presented in the order of increasing complexity. The isolated forms of the formal voids are represented as orthographic plans with the typified routes of circulation emphasized in red. They are accompanied by photographs of the clay-and-copper objects that document the configuration from a number of perspectives. Each section also features text discussing the method by which this transposition of the void relates to the concepts of horizontality and pulse.

*Hand-thrown and hand-built black stoneware clay.*
*Threaded with 3/8 in. O.D. copper pipes.*

*Dimensions of individual pieces ranging from 15cm to 20cm.*
*Lengths of copper pipes ranging from 30cm to 50cm.*

*Cone 6 approximate shrinkage at 12-14%.*
Seven objects feature full and partial toroids with a rectangular section, resulting in a hollow rectangular-section ring. The hidden void revolves around the central hole, thereby resembling the internal volume of the buildings surrounding the public square. In so doing, the shape of the formal void is expressed by the piece without reducing the complexity of the urban void and its surrounding context. These forms were thrown *in one complete piece* on the wheel from set lumps of clay ranging from 1.2 pounds to 1.8 pounds. Each form has a sloped base to give the impression of each object being elevated off the ground. The double-walled form was subsequently cut and punctured to allow the attachment of hand-rolled hollow spouts.

Two objects incorporate hollow rectangular forms that reflect the shape of the particular public spaces. Their internal void still reflects the volume of the buildings, but they are exposed on the sides of each piece. Each piece was hand-built from a single sheet of clay rolled out to about 1cm thickness.
VOID SET NO. 1

*Simplest configuration of two void objects, connected by a single piercing circulatory route.*

The transposition of the urban void from drawn map to ceramic object is an exercise in horizontality. The current dominance of the image contributes to a flattening of spatial experience, which was used to great effect by modernists such as le Corbusier for the dissemination of culture. So the representation of the void through tactile object is a deliberate rejection of reliance on image and integration with the vertical. Engagement with the horizontal occupies a distinctly corporeal realm, both in the interaction of the object and viewer (who must lean over and look down in order to perceive the “whole picture”) and in the object itself that retains the markings of forces, of gravity and the hands. By leaving the objects on the ground plane, the act of looking down shifts the orientation of an established and oft-represented map. Horizontality forces movement of the entire body and not just of the eye—the head dips down, the feet move to gain a different perspective, perhaps someone even squats down to get a closer look.
Fig. 3.67  (facing)
Void Set No. 1, overview
Fig. 3.68
Void Set No. 1, in position
Fig. 3.69
Void Set No. 1, in corner
VOID SET NO. 2

Configuration of three void objects, connected by a single straight circulatory route that has three different forms of contact.

The subversion of the visual is further extended with the emphasis of temporality. This falls under the category of pulse, a term that is difficult to navigate because it was coined by Yve-Alain Bois and Rosalind Krauss according to their reading on Bataille’s philosophy of the disruption of the carnal—probably referencing his involvement in the popularization of the word “abject” in the nineties that resulted in the multitude of artworks involving parts dissociated from the body. While the void models do not elicit visceral disgust (in fact, they are quite aesthetically pleasing objects), the closest approximation of the uncanny is the unfamiliar juxtaposition between the intimate, represented by the domestic vessel, and the monumental, apparent in the map of grand public spaces dominated by equestrian statues. Since “pulse” did not feature in Bataille’s own vocabulary, the concept is perhaps better understood through the examples of modern art referenced by Krauss in her definition that have a focus on timeline and framing, especially as exhibited in art films.

Fig. 3.71  (facing)
Void Set No. 2, overview
void set no. 2
Fig. 3.72
Void Set No. 2, in position
Fig. 3.73
Void Set No. 2, view in corner
Pulse is exemplified in Richard Serra’s film Hand Catching Lead (1971) that depicts a hand opening and closing, trying to catch pieces of lead falling down into the space of the image. The contrast between the fixed frame and the demonstration of process is the method by which the impact of forces on the form (leaving traces on the material surface) and act of making were exhibited.41

To summarize, pulse refers to the inherent temporality of the process of making objects that involve the intervention of the body. Throwing is therefore the perfect expression of the pulsation of process, as there is rhythm found not only in the gestures of the hands interacting with the revolution of the wheel, but also in the overall timeline since the state of the clay-then-ceramic object changes by the hour. With the steady movement of the wheel, the stable figure, and the shifting pressure of the hands, the conceptual voids of the map were rendered in a medium that explicitly references the body. The objects, since they were made of a plastic soft material, were incredibly susceptible to the pressure of gravity. In fact, the objects were thrown upside-down on the wheel and left to dry in the same position so that the delicate hidden lip of the sloped base would not be crushed. The entire process of throwing clay on the wheel is an exercise of force: the struggle against gravity, the tendency for centrifugal distortion, resistance of the body. Therefore every ceramic object is an index of traces and bodily movement that subverts the ideal state of the vertical.

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Fig. 3.75
Void Set No. 3, overview
Fig. 3.76
Void Set No. 3, in position
Fig. 3.77
Void Set No. 3, corner facing
Fig. 3.78
Complete Void Set series, against black.
EPILOGUE

The Architectural Paradox, Revisited
It is said, but this is not certain, that beginning in 1654 he always thought there was an abyss on his left side.

- Maurice Barrès, 1909

THE ARCHITECTURAL PARADOX, REVISITED

While our architectural interventions are based on the assumption of permanence, the indeterminacy of form is obvious across the scales of the built environment. The constant changes in urban form are responding to the shifting dimensions of materiality and space that contribute to the continual growth of the city and influence the condition of urban voids within its limits. After all, despite the association of negativity with empty space, to the point of instigating psychological phobia, unoccupied space is paradoxically the most liberating condition for progress.

The presence of the void, a seemingly contradictory statement, refers to an area where the expected density of the bounding framework is absent. The tension between presence and absence indicates the reciprocal relationship between form, material, and void. Through the lens of the medium of clay, this may be expressed as an act of displacement or redistribution. Though these two terms have been used fairly interchangeably so far, the choice of their usage in fact reflects an implicit bias of interpretation regarding perceived violence and disorder. The distinction is revealed in the two following sculptures by Nobuo Sekine that concern the interconnectedness of presence and absence.

The seminal project *Phase – Mother Earth* marked the start of the Mono-ha art movement, which explored the intermingling of nature and industrial processes through sculpture. This earthwork was installed by Sekine in 1968 at the Suma Rikyu Park in Kobe.
Fig. 4.79
and recreated in 2012 for a retrospective in LA), and featured an earth-cement cylinder with a height of 220cm and a diameter of 270cm placed directly behind a hole with a depth of 220cm and a diameter of 270cm. The corresponding exact dimensions of the cylinder and hole were integral to this conceptual experiment dealing with the phenomenon of space and awareness of its materiality. By aligning the extracted material with the source, Nobuo confronts the viewer with the physical evidence of displacement and challenges notions of assigned value, prompting further questions concerning the nature of source material, particularly in excavated sites, and the reciprocal nature of void and matter.

In later years, Sekine updated the name of the series to “Phase of Nothingness” (Kusō) to indicate a “liberated state of phase” of dealing with the similar ideas in another form. The redistribution of material, form, and space was particularly evident in Phase of Nothingness: Oilclay, which was presented in 1969 as the installation of tons of raw oil-clay in a gallery room. While the mass of the clay had a looming dominance in the space, visitors were encouraged to shape the clay and transform it as they passed through the room, thereby undercutting the sculpture’s apparent permanence. It resulted in a constantly shifting mass of material and space that reflected the movement of bodies and time, an artwork that could only be described as “dimensions variable.” Simon Groom comments on the state of the oil-clay in the room:

“Simply presented in its natural state, the huge mass of clay seems to exist in a constant state of tension between our awareness of its overwhelmingly physical presence and our conscious desire to form it, whether mentally through the profusion of possible forms it may suggest, or physically, drawn as we are to the tactile nature of the material in its infinite malleability.”

This installation expressed our inherent desire to shape matter, while simultaneously exposing the inherent ephemerality of form (despite our attempts at designing for permanence). The interstitial passages between the massive blocks of clay, constantly shifting in relation to the formed material, suggested the “psychological power of space considered as a fluid, boundary effacing, always displaced and displacing medium.” This fluidity is reflected in the series title “Phase” (Isō), a term that Sekine borrowed from the mathematical field of topology, which examines non-Euclidian spatial geometry that maintains its properties under the force of deformation. This is to say that form, matter, and space are considered infinitely malleable and can be manipulated without addition or subtraction, i.e., through the act of redistribution. By limiting the scope of the following text to the particular configurations of the urban void, the interconnectedness of these three elements can be examined within the context of the city.

The city, as it grows, gains in equal parts mass and void. In the modern city, empty space has a use value that is twofold. First, the evocation of space as a right and luxury of the urban citizen suggests the commodification of space as a product that can be parceled off...
and sold at a price point. Secondly, it implies, erroneously, that space can be produced, when in fact it is part of the cycle of construction and deconstruction of the urban mass. This is to say that the link between space and material resource is an underlying condition of the city’s development, and that there is no creation \textit{ex nihilo} of space, just as matter itself has a limit and source.\textsuperscript{35} The treatment of form, matter, and void and their respective valuation change according to the conditions of the urban context. By analyzing their hierarchies, the found and formal voids can be differentiated and their influence on the framework of the city can be analyzed.

The found void is procedural and develops as a by-product of a process that values matter first, and then form, over the qualities of empty space. The site of the found void depends on the location of the greatest material resource. The notion of “greatest resource” is based on a few factors: the value of the industry in the particular era,
the ease of accessibility for extraction, and the amount of material at the site. So the hierarchy of matter and its quantifiable value is clear in the case of the found void. Of course, with the first incision into the ground, the void is already inescapable.

After the extraction of material has begun, the form becomes the second most significant consideration. However, it is not the form of the void itself that is valued, but rather the construction of the surrounding urban fabric. Even though the void is ignored during the extraction period, there is a reciprocal influence between the extents of the void and the construction of the buildings in its vicinity. Each infringes on the other, and in so doing, begins to determine a boundary or liminal space that blurs the distinction between built and excavated, cultural and natural. This condition is often accompanied by attempts to define this boundary through the erection of walls or fences that hide the offending void from the sight of the pedestrian, thereby “removing” it from the narrative of the modern city. The deliberate obfuscation of the void continues even as the densification of the urban context reaches a level of completeness that completely circumscribes the void.

Once the extraction site has been drained of its resource, the abandoned void continues to occupy the strange position of being simultaneously enveloped by and excluded from the city. This condition can be described as a terrain vague: the spatial ruptures in what is considered the productive, and therefore valuable, urban framework. Ignasi de Solá-Morales, in his eponymous essay introducing this vocabulary into urban discourse, defined the history and usage of the new term:
“It is impossible to capture in a single English word or phrase the meaning of terrain vague. The French term terrain connotes a more urban quality than the English land; thus terrain is an extension of the precisely limited ground fit for construction, for the city...

The French vague has Latin and Germanic origins. The German Woge refers to a sea swell, significantly alluding to movement, oscillation, instability, and fluctuation. Two Latin roots come together in the French vague. Vague descends from vacuus, giving us ‘vacant’ and ‘vacuum’ in English, which is to say ‘empty, unoccupied’, yet also ‘free, available, unengaged’. The relationship between the absence of use, of activity, and the sense of freedom, of expectancy, is fundamental to understanding the evocative potential of the city’s terrains vagues. Void, absence, yet also promise, the space of the possible, of expectation.

A second meaning superimposed on the French vague derives from the Latin vagus, giving ‘vague’ in English, too, in the sense of ‘indeterminate, imprecise, blurred, uncertain’. Once again the paradox of the message we receive from these indefinite and uncertain spaces is not purely negative. While the analogous terms that we have noted are generally preceded by negative particles (in-determinate, im-precise, un-certain), this absence of limit precisely contains the expectations of mobility, vagrant roving, free time, liberty.”

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Vacancy is a naturally occurring aspect of an evolving city. The “problem” of urban voids, at least found ones, is a prominent concern of some urban plans that argue that any under-used space negatively affects the growth of the city and must be immediately subsumed into the productive urban fabric. The concept of *terrain vague* reverses this perception by suggesting that these urban voids are under-appreciated because they do not contribute in the typical way to the productive gears of the city as a capitalist machine. Empty spaces, however, are not worthless even though they may appear as fragmented pieces within the urban fabric. As they do not subscribe to the prescriptive and limiting definitions of productivity, these spaces are all the more valuable because they exhibit the potential of the city. In fact, the idea of possibility embodied by the void is asserted in the introduction of Rem Koolhaas’ essay “Imagining Nothingness”:

*Where there’s nothing, everything is possible.*

*Where there is architecture, nothing (else) is possible.*

The ambiguity of (else) suggests dual meanings within one statement. In the first reading “nothing is possible,” the suggestion is that architecture makes a place static and stagnant; the physical mass of walls removes any capability of movement within that footprint. If the phrase is read, however, as “nothing else is possible,” then it seems to refer specifically to other possible architectures. Before the barest conception of a design, there are (n+1) buildings that could exist on a given site, but the nature of design development is to parse the options and select a single building to occupy the position, thereby removing the possibility of other architectures. Therefore, to be absent is to have vacancy: to permit the fostering of potential beyond what already exists. While this potential includes programs

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47. Rem Koolhaas, “Imagining Nothingness,” in *S, M, L, XL*.
that are profit-driven, the focus on “sanitization” and immediate infill of the void in order to generate visible worth is not the most effective response. The possible interventions in the space of the void provide a valuable opportunity to respond effectively to the conditions of the developed neighbourhood after its needs have been identified after a few years of use.

Perhaps the most telling example of the importance of the spatial void in the modern city is the high percentage of former resource pits that were reconfigured as formal voids in Toronto. As previously explained in the analysis of Greenwood, the rehabilitation of these types of deposits has been well developed in Ontario, due to the substantial number of urban quarries established in the 1880s and the acknowledgment of the extraction process as a temporary land use. Although the built-up urban fabric has subsumed many of the open spaces, almost half of the sites maintained their spatial emptiness as recreational program or otherwise open landscapes. Therefore, in cities where the proliferation of extraction sites within the urban limits requires comprehensive rehabilitation, the found void finds a second life as a formal void in the form of parks and recreational areas.

In contrast, when the formal void is introduced into the city plan as a dominant urban form, the hierarchy of value is inverted. As an urban element imposed upon the city, the formal void prioritizes ideal form and the spatial concept of the void over the consideration of matter. These values reflect the power of the void to intervene in a disordered city plan through the interjection of deliberate emptiness. By the Enlightenment period, the void was regarded as a revolutionary aspect of city planning because its form communicated monumentality, usurping the built landmarks of the


49. S.E. Yundt and D.B. Augaitis, *From Pits to Playgrounds*, 11.
previous centuries, and its spatial openness promoted circulation, the new directive of the modern city. The role of the formal void was therefore seen as a solution for the problems of the modern urban condition.

First, the form of the urban form conveyed monumentality through the articulation of the surrounding buildings (and often an object of prominence such as a statue). Form therefore involves the construction and design of the boundary of the void, essentially the façades that delineate its edges. While styles have changed and ornamentation has fluctuated dramatically, the elevations of the facing urban blocks have always been a priority of both the architect and the urban planner. This is evident across time periods and architectural styles, from the classicism of the Place des Victoires to the modernist Toronto City Hall. Especially in Paris during the Enlightenment, when the first proposals were made for the “systemic demolition” of the urban fabric, monumentality was considered a significant aspect of reform. As Voltaire asserted in the mid 18th-century: “monuments that cannot be seen must be revealed and new ones built for all to see.”

The radical transference of political power and symbolism to the void had an immediate and lasting impact on the nature of the urban fabric. In his analysis of Pierre Patte's map of Paris, Pier Vittorio Aureli argued that the new typology of the urban void was significant because it consolidated buildings in one cohesive urban form that was universally applicable as public space. By rejecting the monumental object for the monumental void, “political power was presented through a uniform architectural framework that, because of its regularity, could be repeated through the entire city.”


Secondary to the form of the square itself, the spatial openness of the void afforded circulation within the dense urban fabric. This was a response to the crowded conditions that characterized disorganized older cities that had expanded organically. With the installation of reproducible urban voids and their connective passages, the metropolis became a system that effectively processed the movement of people and resources. “Circulation,” Aureli concludes, “thus became the sine qua non of these emerging cities;” that is to say, the essential condition of the new modern urban fabric. The resulting framework appears like an archipelago of voids, contributing to the continual decentralization of the urban extents through the creation of new centralities.

Matter, and the source of material, had little influence on the positioning of the formal void within the city. The choice of location for a monumental public square was not predicated on the richness of resource land but rather on principles of powerful axes, desirable sightlines, and hierarchical organization. Then, the construction of site employs the use of certain specified building materials for their symbolic or ornamental function. Whether it was the use of marble to exude luxury, glass to convey transparency, concrete to express modernity, or brick to represent traditionalism, matter in the formal void has typically been a means to an end.

The experience of these monumental urban voids came with unforeseen effects on the psyche of the population. As unknown phenomena have been increasingly harnessed through scientific inquiry, we prefer to believe that our instinctive fear of nothingness has been tamped down under the scrutiny of rational thought. However, the emotional association and reflexive impulse to fill the void has
not fully disappeared, but rather re-emerges in a different form in each era. It is aptly summarized as *horror vacui*, fear of empty space, a term that Anthony Vidler borrows from art history to describe his analysis of emotional response to the void in the burgeoning modern city of the late nineteenth century. He documents the rise of mental affictions plaguing the inhabitants of the growing urban centers and the general sense of anxiety associated with urban voids in particular.

According to Vidler, the “discovery” of spatial phobia coincided with the influence the metropolis exerted over the shifting social relationships. The rise of these imbalances (whether they afflicted the bourgeoisie or the working class) was a reflection of the emerging generalized fear of the modern metropolis, which implied the both a physical and pathological state. The introduction of these maladies combined psychology with the existing aesthetic criticism that was already lobbed at modernist urban planning. On the one hand, there were those who used these phobias as reasons for combating modernist urban planning, while modernists argued that these psychological fears were signs of the primitive mind that should be overcome by the logic of modernism. It was also argued that agoraphobia was not only a spatial disease but also a distinctly urban one, as open spaces in nature were perceived to be pleasing rather than terrifying. Indeed, it appeared to only affect urbanites that were subject to the debilitating conditions of modern public spaces. Camillo Sitte, a strong opponent of the modern plaza in the nineteenth century, also associated the causes of agoraphobia with the new space of urbanism and defined it as a uniquely modern ailment unheard of in traditional cities, stating that the “universal trend of the time” was the fear of open spaces.
Fig. 4.81
Alexey Titarenko, City of Shadows, 1992.
Out of the monumentality promised by ever grander and greater public squares came the rise of new spatial phobias. The discrepancy can be attributed to the misalignment of conceptual intent and perceptual experience. This paradox between ideal and real space defines the profession of architecture even now in the modern day. In 1975, Bernard Tschumi wrote an essay on the architectural paradox that employed vocabulary introduced by George Bataille to address architects of the twenty-first century that, he felt, were disillusioned by the gap between idealism and reality.

Following Bataille’s footsteps, this thesis revisits the architectural paradox and reveals an approach to the spatial void that responds to the re-emergence of material concerns in design. To give context to Bernard Tschumi’s essay and the use of the terminology Pyramid and Labyrinth, we must understand George Bataille’s philosophy of space. Bataille argued that the two types of space—ideal and real—are simultaneously interdependent and contradictory. The Pyramid refers to the conceptual space that is perceived as a whole and from a distance; this is the “architect’s space” that exists primarily in the mind of the designer and is transposed onto paper in the form of maps and diagrams. It encompasses the profession of architecture as a whole, with all its trappings and pursuits, and expresses both its power and limitations. In particular, this conceptual space exists independent of external influences and the unplanned flaws of real-world objects. What is gained by conceptual knowledge is lost in haptic understanding. The Labyrinth is the opposite: it is distinctly corporeal and defined by the interaction of the body (with all its senses) with the surrounding space and mass. It is impossible to fully express all the facets of the Labyrinth through conventional representation, as the experience of real space relies on occupation and movement of the body. In architecture and in the city, these two expressions of void exist simultaneously.
This same contradiction exists in the understanding of the void, which is a subset of space whose particular configuration conveys absence or a rupture in the surrounding framework. The void is perceptible through the architectonic element of the boundary (Pyramid) or the sensory identification of trace (Labyrinth). So, the urban void as pure concept has an unbridled potential that is unrestricted by the constraints of the built environment, but it lacks the sensation of experience. In contrast, the reality of the urban void is full of haptic feedback but appeared fragmented; our reassembled perception bears resemblance to the disjointed pieces that comprise the psychogeographic map of Guy Debord’s *Naked City*.

The spatial paradox is reaffirmed in Tschumi’s text, and he situates the confrontation between the Pyramid and Labyrinth within historical context and contemporary influence. He concludes that, due to its questioning nature, “architecture is always the expression of a lack, a shortcoming, a non-completion. It always misses something, either reality or concept.”61 The only plausible exit from this paradox is to focus on the “interior experience” of the subject, which Tschumi simplifies as “imagination.” While it seems rather unsatisfying to conclude this powerful essay with the axiom “use your imagination!” it is a distillation of the notion that, within the same mind, immediate sensory cues are collected and overall reasoning is understood simultaneously.

The intention is to acknowledge that there is a gap between the experience of the urban void and its role as a tool in the analysis of the urban fabric. The effect of the void on the psyche may even be contradictory to our intentions. In fact, the over-classification of the types of voids, in an attempt to define their particular characteristics, only further complicates the overlap between ideal and real.
It is important to remember that literature and drawings about the void, no matter their depth and detail, are not the void itself. As Foucault explains in great detail in his text on Magritte’s calligrams Ceci n’est pas une pipe, neither the word nor the image nor the sentence is equal to the object itself and so “nowhere is there a pipe.”

With this in mind, the method of this thesis combines Tschumi’s “imagination” with physical experimentation. By manipulating clay and constructing a void that resembles but is not the urban void, the resultant ceramic models are critiques and examples of spatial conditions. Through the process documented in this thesis, the material exploration of the conceptual void is completed with the interaction of the corporeal body. So it is in the mind—not a disembodied mind, but a mind attached to a sensing body—that transcends the paradox between ideal and real. The constant oscillation between the idea of the created object and the sensation of creation results in a temporary moment where the paradox is overcome, and both haptic understanding and intellectual reasoning are met in one person.

Fig. 4.82
View of the complete set of void objects.
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</tr>
<tr>
<td>Site 45</td>
<td>Licensed</td>
<td>Site 65</td>
<td>Rehabilitated, educational/residential</td>
</tr>
<tr>
<td></td>
<td><em>Metropolitan Toronto and Region Conservation Authority</em></td>
<td></td>
<td><em>George Webster Public School and housing</em></td>
</tr>
<tr>
<td>Site 46</td>
<td>Rehabilitated, other</td>
<td>Site 66</td>
<td>Abandoned</td>
</tr>
<tr>
<td></td>
<td><em>Sloped and seeded</em></td>
<td></td>
<td><em>West Hill Playfield and housing subdivision</em></td>
</tr>
<tr>
<td>Site 47</td>
<td>Rehabilitated, recreational</td>
<td>Site 67</td>
<td>Abandoned</td>
</tr>
<tr>
<td></td>
<td><em>Riverdale Park</em></td>
<td></td>
<td><em>Housing</em></td>
</tr>
<tr>
<td>Site 48</td>
<td>Rehabilitated, residential</td>
<td>Site 68</td>
<td>Abandoned</td>
</tr>
<tr>
<td></td>
<td><em>Housing</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site 49</td>
<td>Rehabilitated, recreational</td>
<td>Site 69</td>
<td>Rehabilitated, residential</td>
</tr>
<tr>
<td></td>
<td><em>Eastview Park and community center</em></td>
<td></td>
<td><em>Apartment buildings</em></td>
</tr>
<tr>
<td>Site 50</td>
<td>Rehabilitated, industrial *</td>
<td>Site 70</td>
<td>Abandoned</td>
</tr>
<tr>
<td></td>
<td><em>Toronto Transit Commission's Greenwood subway yards</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site 51</td>
<td>Rehabilitated, recreational *</td>
<td>Site 71</td>
<td>Rehabilitated, recreational</td>
</tr>
<tr>
<td></td>
<td><em>Felstead Park</em></td>
<td></td>
<td><em>Military Trail Park</em></td>
</tr>
<tr>
<td>Site 52</td>
<td>Rehabilitated, recreational/residential *</td>
<td>Site 72</td>
<td>Rehabilitated, other</td>
</tr>
<tr>
<td></td>
<td><em>Recreation area behind Saint Patrick Catholic Secondary School, housing subdivision</em></td>
<td></td>
<td><em>Former landfill</em></td>
</tr>
<tr>
<td>Site 53</td>
<td>Rehabilitated, residential</td>
<td>Site 73</td>
<td>Rehabilitated, recreational</td>
</tr>
<tr>
<td></td>
<td><em>Housing</em></td>
<td></td>
<td><em>Morningide Business Park</em></td>
</tr>
<tr>
<td>Site 54</td>
<td>Rehabilitated, recreational</td>
<td>Site 74</td>
<td>Rehabilitated, recreational</td>
</tr>
<tr>
<td></td>
<td><em>Greenwood Park</em></td>
<td></td>
<td><em>Natural park</em></td>
</tr>
<tr>
<td>Site 55</td>
<td>Rehabilitated, recreational</td>
<td>Site 75</td>
<td>Industrial aggregate, not extraction</td>
</tr>
<tr>
<td></td>
<td><em>Havenbrook Park</em></td>
<td></td>
<td><em>Miller Paving Limited and McAsphalt Industries Limited</em></td>
</tr>
<tr>
<td>Site 56</td>
<td>Rehabilitated, educational</td>
<td>Site 76</td>
<td>Abandoned</td>
</tr>
<tr>
<td></td>
<td><em>Adam Beck Public School</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site 57</td>
<td>Rehabilitated, educational/commercial</td>
<td>Site 77</td>
<td>Abandoned</td>
</tr>
<tr>
<td></td>
<td><em>Neil McNeil School, shopping mall, housing</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site 58</td>
<td>Rehabilitated, educational</td>
<td>Site 78</td>
<td>Rehabilitated, commercial</td>
</tr>
<tr>
<td></td>
<td><em>Blantyre Public School</em></td>
<td></td>
<td><em>Parking lot for Metropolitan Toronto Zoo</em></td>
</tr>
<tr>
<td>Site 59</td>
<td>Rehabilitated, residential</td>
<td>Site 79</td>
<td>Rehabilitated, commercial</td>
</tr>
<tr>
<td></td>
<td><em>Housing</em></td>
<td></td>
<td><em>Parking lot for Metropolitan Toronto Zoo</em></td>
</tr>
<tr>
<td>Site 60</td>
<td>Rehabilitated, recreational</td>
<td>Site 80</td>
<td>Rehabilitated, other</td>
</tr>
<tr>
<td></td>
<td><em>Blantyre Park</em></td>
<td></td>
<td><em>Beare Sanitary landfill site</em></td>
</tr>
<tr>
<td>Site 61</td>
<td>Abandoned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site 62</td>
<td>Rehabilitated, residential</td>
<td>Site 81</td>
<td>Rehabilitated, other</td>
</tr>
<tr>
<td></td>
<td><em>Housing</em></td>
<td></td>
<td><em>Beare Sanitary landfill site</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site 63</td>
<td>Rehabilitated, educational</td>
<td>Site 82</td>
<td>Abandoned</td>
</tr>
</tbody>
</table>