

ALL THAT IS SOLID:
A CELLULOID EXPLORATION OF BRUTALIST ARCHITECTURE

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Abstract

All That Is Solid is an experimental film that investigates Brutalist architecture through the decayed surface of black and white celluloid. The film features three locations: Robarts Library, The University of Toronto Scarborough campus (UTSC) and the Ross building at York University. All are prominent examples of Brutalist architecture on university campuses. Footage of the buildings has been degraded using photochemical processes that result in unique patterns of decay. The decay processes are used to draw material and aesthetic connections between concrete and celluloid. By distressing and dissolving images of massive buildings, the film explores how time breaks down all materials, even solid concrete. The film also explores the shifting reactions and responses to the buildings, from their initial praise by the architectural community as cutting edge and futuristic, to the intense public backlash that followed shortly after they were built.

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Evolution of the Project

All That Is Solid has undergone a number of major changes in the past year. Initially the project integrated documentary, experimental and dramatic elements, including decayed film, archival imagery and performance art. After conducting tests with an actress, gathering archival material and creating mini versions of the project, it became difficult to find connections between all of these potential sections. Many of these sections could have evolved into stand-alone works and trying to reconcile them proved impossible.

The central component of *All That Is Solid* is super 16mm black and white footage of the three Brutalist buildings and their slow transition into decay. After careful consideration over the summer, I decided to scale back the project and only work with these visual elements and a soundtrack. I was interested in conveying the conceptual underpinnings of the project through various decay techniques and sound effects.

By relying heavily on visual elements, *All That Is Solid* evolved into a structuralist / materialist film. By working with decayed imagery, the material properties of the filmstrip were now a major subject of the film. This type of filmmaking flourished in North America the 1960s and 70s, at the same time these buildings were opened, forming an interesting connection between the film's style and content.

By working with decayed imagery the film suggests how the buildings have evolved over time, from the optimistic visions of architects and school administrators to the public backlash that occurred shortly after they were built. At each location, long tracking shots slowly reveal the scale of these monolithic edifices. These shots explore multiple angles and features of the buildings to convey how their architects might have imagined them. As the camera tracks along the buildings, they begin to decay. Footage from each location was subject to a different decay technique, causing the image to degrade in three different ways. These decay techniques and the soundtrack reflect the shifting reactions to the buildings over time as well as the material connections between concrete and celluloid.

Sound was also a way for me to work with these ideas of flux and change. In earlier versions of the film, the soundtrack consisted primarily of musical elements, but after receiving feedback from my committee, I removed some of the drone sections and added audio recordings taken from each location.

Audio recordings of students talking and walking along the pathways between the buildings were featured at various points throughout the film. These recordings can be heard at the beginning of the film, during shots of black emulsion clouds that flicker across the screen. This image and sound pairing sets the tone for later parts of the film, where empty architectural spaces are played

against the sounds of campus life. While the audio elements and film's sound design will be discussed in greater detail in a later section of the paper, both field recordings and musical sections comprise the final soundtrack.

Artistic Process – Visuals

The film was processed at Colorlab. One workprint was struck for decaying purposes. This print was spliced onto three separate reels, one for each location. Each reel was decayed using a different process. Roberts Library was decayed using the mordancage technique, York University was boiled and reticulated, and UTSC was soaked in bleach.

Both the negative and decayed prints were scanned frame-by-frame in high definition using a 2K raw data film scanner, producing a digital copy of the footage for editing purposes. This allowed me to have both pristine and decayed digital copies of the footage to work with.

By decaying the film I wanted to create the sense that these massive concrete buildings were melting and dissolving. I chose techniques that would dramatically erode the film's emulsion and act on the structure of the image. The decay breaks down the heavy angular forms of the buildings, making them appear to shift, fall apart and disappear.

Over the past year I conducted extensive research and experimented with a number of film decay techniques and processes. These included burying strips of film in wet soil; soaking them in household bleach; and using substances such as salt, olive oil and spray varnish as resists. While these techniques yielded a number of interesting patterns and textures, they only acted on the image in random sections and spots, without effectively dissolving the emulsion.

The three final techniques that I chose to work with were mordancage, reticulation, and soaking the film in a bath of diluted reversal bleach. Each of these techniques gives unique results. They create dramatic effects in the overall image by breaking down the structure of the film's emulsion and as a result, the buildings appear to transform into patterns, textures, and shapes.

I was introduced to the mordancage and reticulation techniques at a workshop taught by Kevin Rice at the Liaison of Independent Filmmakers of Toronto (LIFT). Kevin works with *Process Reversal*, a small artist film lab and collective in Boulder, Colorado. The mordancage technique involves creating a type of photochemical bleach that loosens film's emulsion in layers, starting with the darkest areas that have the highest silver density. The resulting imagery has textures that range from bubbles to fabric blowing in the wind. In order to keep the bubbling or fabric-like patterns intact, the filmstrips must be handled very carefully as the emulsion is incredibly soft and can be easily stripped away. This technique was applied to the footage of Robarts Library. The mordancage effect

transforms the sharp edges of the triangular-shaped building into flowing, flickering lines, making its rough concrete surfaces appear to blister and peel away.

The reticulation process involves boiling film in water to break down the emulsion. Once the emulsion is very soft and pliable, the filmstrip is placed in a stop bath of ice water to halt the effects of the boiling, re-solidifying the emulsion. It is during this re-solidification that patterns form within the emulsion. For this project I boiled filmstrips continuously for at least 30 minutes until the emulsion began to soften. After experimenting with the reticulation technique a number of times I realized that the stop bath wasn't effective and instead started freezing the film. I took filmstrips out of the boiling water, put them into plastic bags and froze them for 10 to 15 minutes. As a result, dramatic frost-like patterns were etched into the emulsion and into the image itself. I also experimented with removing the softened emulsion with my finger. I took the filmstrips out of the boiling water, and while the emulsion was still very soft, I rubbed away certain parts of the image, leaving the base clear. This technique softened the image, and in some areas, made the footage appear as though it was melting. Freezing the freshly boiled film made the harsh, geometric forms of the Ross building morph into organic patterns resembling brains or intestines.

The third decay process that I worked with involved soaking filmstrips in diluted reversal bleach, also known as R9. I experimented with different levels of

concentration and found that a solution of three parts water and one part bleach worked best. Filmstrips were soaked in the bleach solution for roughly thirty seconds to a minute or until I could see certain areas of the image begin to fade away. I watched the filmstrips carefully while they were in the solution to make sure that the bleach did not strip the entire image off. This solution created ghostly images and the lightest areas were stripped away leaving only the darkest shapes and outlines. The decayed footage of UTSC looks as though it has been burned away by blasts of light.

While working with these techniques I was interested in creating natural transitions in the footage, so that the filmstrip itself would shift from pristine to decayed. I achieved this effect by only decaying certain sections of the filmstrips, and leaving other spots, such as the beginning or end, untouched. I gathered sections of the filmstrips that I wanted to remain clean into small bundles using a clothespin, and dunked the remaining sections into the chemistry or boiling water. These direct-on-film transitions from pristine to decayed, happened over 2 to 3 frames, making them appear to occur more naturally than if I had tried to create transitions using digital effects or filters.

Artistic Process – Sound

The film's soundtrack consists of two major elements: audio recordings taken from all three locations and music. The musical sections were created by

experimental musician and composer Nick Storrington. Storrington used a number of instruments to create the soundtrack including a Yamaha stage piano, electric mandola, electric bass, glockenspiel and electric cello. He also used the sounds taken from the optical track of the decayed film footage and fed them through a thumb piano, cymbal and cookie-tin using a transducer speaker.

I wanted to incorporate decay and degradation in the soundtrack and subject sound elements to a similar treatment as the images. Instruments such as the piano and cello were recorded, played back and re-recorded multiple times on cassette tape. As more generations were created, this process altered the sounds significantly, in some instances adding resonance and hiss. The sounds that resulted were softened and distorted, corresponding with the decayed images.

Audio degradation was also used to age the recordings, making them sound similar to those created in the early 1960s. This sound treatment was used to complement the buildings, which were created in the same era.

In addition to the musical elements, audio was recorded at all three locations, capturing the sounds of students as they chatted and walked along pathways between buildings. Recordings were also taken from empty hallways in at the UTSC, which had its own natural drone, the result of allowing air to rush into the space through an open door.

Recordings of footsteps and distant murmuring are featured at many points within the first two sections of the film. These recordings of people milling about the campuses were placed under non-decayed footage of both York and UTSC, where they stand in bold contrast to the large empty concrete spaces.

Related Films and Artisanal Practices

In the 1960s and 70s, experimental filmmakers began to work with film in a highly formal way, exploring how the structure of film itself and its ability to convey time and space could become the subject matter for their work. In his film *Mothlight* (1963), Stan Brakhage pasted moth wings and bits of nature directly onto clear strips of film. The film is made up of rapidly flickering images of wings, twigs and leaves that appear to dance across the screen, no image lasting longer than a few frames. By working with materials in this way Brakhage wanted to evoke the life cycle and perspective of a moth. Brakhage described the film as, “What a moth might see from birth to death if black were white and white were black,” (89). Through his direct-on-film approach with *Mothlight*, Brakhage places importance on the structure of the filmstrip. The film’s surface area, its ability to allow light to pass through it and illuminate the moth wings and the speed at which it runs through a projector are all key elements which inform its subject matter and how it is experienced by the viewer.

All That Is Solid also takes this structuralist approach through the use of decay techniques. As with Brakhage's *Mothlight*, my techniques draw attention to the structure of film itself and the fact that the image is contained within a layer of gelatin that can be manipulated. The decayed footage has been slowed down, which draws attention to each of the film frames and how the patterns of decay change from one frame to the next.

I also conducted extensive research into contemporary experimental filmmakers whose practices involve artisanal techniques. I was particularly interested in the work of Louise Bourque, Jürgen Reble and Carl Brown, filmmakers who use techniques such as chemical and physical degradation to create their films. Also of interest to me were the different conceptual and philosophical motivations behind each filmmaker's use of these techniques.

Carl Brown's filmmaking practice involves manipulating film stock using dye, chemistry and the sabbatier/solarization effect. Brown is interested in conveying particular moments and physical gestures through these techniques, creating an index of his own personal contact with the film. By working in this manner, Brown seeks to infuse the images with traces of his soul and energy.

It became apparent that the pulsing halo of the Sabattier Effect (a result of exposing the film for short periods of time while it was in the developer) could be worked into the looping process. I could create a depth of field beyond the original footage. This depth of field was visible after the original motion had been slowed down. The halo or glow became something that would gradually work its way across the image's highlights. By creating my own depth of field, the abstract shot became more and more my vision. I converted what I saw into what I felt. This was a very important event. I had found a foundation to work, and express myself, from. (Brown)

Brown's film *Urban Fire* (1982) is made up of a series of abstract, looped, black and white images. Set to a grinding electronic soundtrack, streaky black shapes flicker vertically across the screen, as though we are watching them on an old television set. Footage has been re-photographed at a slow speed on an optical printer, hand processed and treated to bleach baths to achieve these visual effects.

Louise Bourque's films are often centered around re-worked footage of her family and childhood home. Bourque uses techniques such as burial, scratching, tinting and toning to convey her emotional connections to these images and how these feelings change over time. In her film *Imprint* (1997), vintage super 8 footage of her family and their home is treated to a number of different processes. Over the course of the film, the same thirty seconds of footage is bleached, buried in soil, tinted in bright colours, scratched and punched with holes.

Bourque uses these destructive processes in her films as a way of working through feelings and memories that are in a constant state of flux. The changing textures and shapes on the emulsion make visible the fleeting, ephemeral and obscured nature of the memories and feelings they are connected to.

It has to do with our mortality as well. It's these things that are lost, things that are ephemeral, things that we try to hold on to that are just slipping by, and also the things that we let go of that we might be attached to, the things we are attached to that we let go of. And because there's just this kind of movement as we try to navigate this whole human experience, I guess (chuckles). The things we struggle with and that we have a hard time to even begin to put in words. (Bourque)

Jürgen Reble works with found footage using a number of decay techniques including burial in soil and water, allowing bacteria and moisture to eat away at the gelatin in the emulsion. In his recent work he decays film using chemistry and salts to create more controlled effects. The results are finely textured, shimmering images. His piece *Instabile Materie* (1995) is an example of a film that uses chemically altered images. The film begins with clouds of shimmering, metallic grains. As it progresses we see fleeting images that at first glance resemble a rock surface but which slowly morph into human faces, arms and legs.

For Reble, working with these techniques is about bringing new life to what he considers dead, almost meaningless images. Like an alchemist who turns metal

into gold, Reble applies chemistry to bring out the beautiful textures that are hidden inside the layers of the filmstrip.

The conservation of films is rejected altogether in favour of a single act of sacrifice. There is an essential need to bring back film to being an event in a time when the eye is overwhelmed by meaningless images....For my new film *Das goldene Tor* I copied computer animated images onto film and then decomposed them with chemicals. In this way you can reanimate lifeless images. But also the old images are far from being used up. Changes in quality and editing can give new meaning to old images which have nothing in common with the previous meaning. (Reble)

Concrete and Celluloid

Concrete and celluloid share many similarities in terms of their material qualities and the processes used to create them. Through the use of decay techniques, *All That Is Solid* explores this material relationship between concrete and celluloid.

Concrete forms as a result of a chemical reaction between an aggregate and cement when they are mixed with water. The surface of concrete has a texture similar to stone and is marked with the small rocks, sand and other materials it is made of. Since concrete is a hardened liquid, it takes on the texture of the materials used in the casting process. Brutalist architects were interested in keeping the surface of their concrete buildings raw and unfinished and in many instances the imprints from the wooden boards used in the casting process were left on the surface of the buildings.

Film's emulsion is also a hardened liquid. It is made up of silver particles suspended in a layer of gelatin that has been adhered to a polyester base. Similar to the formation of concrete, the image on the filmstrip is developed through a chemical process. Photochemistry transforms the silver particles into the tiny grains that make up an image.

While concrete is an incredibly strong material it is also vulnerable to environmental decay. Most concrete structures are formed around re-enforced steel bars called rebar. Moisture can cause rebar to rust, weakening the structure from the inside, creating cracks that can potentially spread throughout the entire building. Celluloid film is also vulnerable to environmental factors, including heat and moisture. If film is stored in humid conditions, over time it will begin to warp and shrink, especially older film stocks. The decay processes I worked with explore the many ways in which these environmental factors can affect film. The reticulation technique, which involves submerging film in boiling water, demonstrates one of the many ways heat and moisture combine to decay film.

The raw, rough surface of Brutalist buildings evokes a sense of tactility. Brutalist buildings were designed to emphasize surface elements and structural details. By designing buildings this way architects intended to leave the building and its materials in their raw state, choosing not to smooth out the rough, uneven surface of walls. The decayed surface of celluloid with its mottled and varied

textures also evokes a handcrafted aesthetic. These artisanal techniques emphasize the material qualities of film, calling attention to the organic gelatin material of the film image that can easily be manipulated using chemical or physical means.

History of Brutalism

Brutalism is a type of modern architecture that flourished through the 1950s to the 1970s. The term 'Brutalist' is applied to buildings crafted, for the most part, from concrete and characterized by their massive imposing structures and angular forms. Brutalism draws stylistic influences from the French *béton brut*, a phrase used by Swiss French architect Le Corbusier to describe the raw concrete surfaces of his buildings. Le Corbusier started working with *béton brut* during the construction of Unité D'Habitation, a large-scale housing development in Marseilles, France completed in 1952. Due to the postwar shortage of skilled labor in France, the concrete surfaces of the buildings were not properly finished. As a result, the concrete walls of the building were left imprinted with the marks of the wooden boards used in the casting process. Le Corbusier embraced the results and began working with raw concrete surfaces to convey a sense of the pre-industrial in his designs.

The term 'New Brutalism' was first used by British architects Peter and Alison Smithson to describe their ethical approach to architecture and urban

planning (Scalbert 3). For the Smithson's, Brutalism meant leaving materials as found, exemplified in their design of Huxton School in Norfolk, England. The school was designed so that its water pipes and electrical wires were left completely exposed. Architectural historian Reyner Banham brought the term international recognition with his 1966 book, *The New Brutalism: Ethic or Aesthetic*. He defined Brutalism as having three characteristics: "Memorability of an image, clear exhibition of a structure and valuation of materials for their inherent qualities as found." (36)

In the early 1960s the Brutalist style was adopted by North American architects. Architectural historian Marcus Whiffen gave one of the first definitions of Brutalism in 1969.

Brutalist buildings have a look of weight and massiveness that immediately sets them apart from those predominantly rectangular, flat-roofed styles. Concrete is the favorite material: it is always left exposed (248).

His definition describes Brutalist buildings by their style and use of materials. This reveals that, in a North American context, the movement had lost its ethical underpinnings and approach to planning developed by the Smithson's. North American architects wanted to emphasize the honesty of materials, using concrete in a similar way that Le Corbusier worked with *béton brut*.

At the time, concrete was an innovative material for architects to work with. Unlike brick or steel, concrete could be molded into forms and shapes. Concrete could be locally sourced and was relatively inexpensive to work with, allowing buildings to be constructed quickly. In Canada, rapid urban growth in the 1950s and 1960s meant concrete was a popular material and Brutalism became the style of choice for many government institutions and university campuses.

Brutalism and the Modernist Spirit

In his book *All That Is Solid Melts Into Air*, Marshall Berman expands upon Karl Marx's seminal text, *The Communist Manifesto* describing the experience of modernity as one that is in constant flux and change.

The innate dynamism of the modern economy, and of the culture that grows from this economy, annihilates everything that it creates- physical environments, social institutions, metaphysical ideas, artistic visions, moral values- in order to create more, to go on endlessly creating the world anew (288).

This description of modernity is similar in tone to the forward-thinking philosophies that inspired Brutalism. The Brutalist movement was born from the desire to work with basic materials in new ways and to craft buildings that supported the demands of rapidly growing urban centers.

Robarts Library, UTSC, and the Ross Building at York University are all prominent examples of architecture built in the modernist spirit. In the early 1960s, Canadian universities anticipated a massive increase in undergraduate

enrollment, resulting in the need to build large new campuses. Architects designed campus buildings and spaces that would reflect the bold visions for undergraduate education outlined by University presidents and administrators.

Brutalist buildings are large monumental structures backed by utopian philosophies that embraced the modernist idea of eliminating the past to make way for the future. For example, to construct Robarts Library, which occupies the length of a football field, it required that an entire square block of homes and stores be demolished (Friedland 336).

The University of Toronto Scarborough campus was designed to be the first post-secondary institution to use closed caption television (CCTV) as a teaching tool (Friedland 125). The buildings contained expensive production facilities and all classrooms were equipped with television monitors. When the campus opened in 1965 half of the classes were taught using videotaped lectures. William Beckel, the first dean at the Scarborough campus, had great success using televised teaching in his classes. The use of CCTV technology was embraced as the future of education and was seen as the answer to educating large numbers of students. After the school was built, changes in curriculum and student backlash soon led to the abandonment of televised teaching. The productions were unsophisticated and students felt alienated by the lack of interaction with instructors. These feelings of disconnection and alienation were also reflected in the student's response to the architecture of the

new campus buildings, which were low angular structures, with exterior and interior walls made of raw concrete.

In the early 1960s, York University expanded and the Keele campus was built to fill the needs of a growing undergraduate population. The new campus was seen as a clean slate for the university, a setting where new ideas for education could be formed. The campus was built to reflect the optimistic vision for undergraduate education outlined by its founding president Murray G. Ross. Ross articulated these plans for York in his 1961 book *The New University*:

To give special emphasis to the humanizing of man, to freeing him from those pressures which mechanize the mind, which make for routine thinking, which divorce thinking and feeling, which permit custom to dominate intelligence, which freeze awareness of the human spirit and its potentialities (46).

Ross wanted the York University educational experience to extend beyond pedagogy and foster a certain type of character in each student. Notes from early planning meetings discuss how a degree from York would be well rounded in many subjects feeding into the concept of a 'whole man' (Notes of Discussion 1962). This concept also influenced campus planning and design. It involved creating a campus that would function as its own small city, complete with classrooms, cultural opportunities, athletic centres and living spaces (UPACE Design Philosophy for York University 1962).

Robarts Library was built with the intention of being a world-class research institution to serve the educational needs of students within the city of Toronto and throughout the province. It was designed by New York based architects Warner, Burns, Toan and Lunde along with Toronto architectural firm Mathers and Halenby. The library faced a backlash from the moment construction began in 1968. Due to its high cost, massive appearance and the extensive use of concrete in its design, local residents and students immediately dubbed the library 'Fort Book' (Fulford F5). As a result of heavy criticism and controversy, the University of Toronto decided not to hold an official opening ceremony for the building (Friedland 336).

Robarts library also experienced enormous backlash from the architectural community and local press. Ron Thom, a Toronto-based architect who designed Trent University and Massey Hall at the University of Toronto, wrote in a 1974 issue of *Canadian Architect* that Robarts Library “represents everything in architecture that is arrogant and wrong.” (19) In an article for the *Toronto Star* titled 'Fort Book: It's Fourteen Stories of Literary Intimidation', Robert Fulford writes: “As you look at it and then enter it you may think of castles, fortresses, cathedrals, prisons and factories.”(F5)

***All That Is Solid* and the City Symphony film**

While *All That Is Solid* deals with architecture in an urban setting, it departs drastically from traditional city symphony films. Films such as *Berlin: Symphony of a Great City* (1927) and *Man with A Movie Camera* (1929) portray urban spaces and buildings as bustling sites of activity. These films depict positive, futurist visions of urban life, where industry and architecture represent progress. The buildings featured in *All That Is Solid*, while built in the 1960s, were inspired by similar forward-thinking ideas. Through the use of tracking shots, which slowly unveil the buildings, I was interested in conveying how the architects might have envisioned them. After the buildings are revealed, they slowly begin to decay. It is through this process that *All That Is Solid* differs from the positive view of the city symphony film. The solid concrete buildings that represent utopian visions slowly start to break apart and melt. The film also explores the material aspects of the buildings and their use of concrete, which was chosen for its strength and ease of use. Unfortunately, due their concrete construction and its imposing drab qualities, the buildings were poorly received by the students and faculty who used them.

Brutalism on Film

Due to its unique triangular design, Robarts Library has appeared in a number of science fiction and action films. In 2009, Robarts Library was featured in *Resident Evil 2 Afterlife* as a maximum-security prison that is eventually overtaken by zombies. With the exception of some computer-generated effects to age the surface of the concrete structure, little was done to alter the overall appearance of the library.

The University of Toronto Scarborough campus was built in 1965 and designed by the Australian architect John Andrews, who went on to contribute to the design of the CN Tower. The bold design of the campus was made up of long, angular concrete buildings set into the grassy hills at the edge of the Highland Creek. The unique campus initially won praise and attention from the architectural community. In his book *University of Toronto: The Campus Guide* former professor of Architecture at University of Toronto Larry Richards writes: “I think one can argue that maybe the two most famous Canadian buildings from the second half of the 20th Century were Habitat at Expo 67 in Montreal and Scarborough College.” (160)

By the early 1970s however, Brutalist architecture began to experience an enormous backlash, especially from those who worked in the buildings. Kenneth Frampton explains this growing contempt in a 1967 issue of *Architectural Design*:

Scarborough departs radically from the traditional Anglo- Saxon quadrangular university complexes of recent years. It is by far the most daring, comprehensive and radical, and as such merits serious critical attention. But then as now, those who use the building, or live in its immediate environs, are much less impressed by its futuristic structure than outsiders are; neighbours at the time referred to it as “the bunker on the hill”. (53)

The University of Toronto Scarborough campus has also been featured in a number of science fiction and horror films, though most extensively in David Cronenberg’s 1969 film *Stereo*. Shot four years after the campus officially opened, the angular concrete buildings became the setting for alienation and estrangement. In the film, the Social Science and Humanities building of the Scarborough campus is renamed ‘The Canadian Academy for Erotic Enquiry’ and is the site of drug-induced psychological experiments. The film’s main characters undergo long periods of isolation, resulting in two of them eventually committing suicide. Despite initial praise for the campus as a bold vision of new ideas and forms, films like Cronenberg’s *Stereo* reveal the public’s reaction to Brutalist architecture, seeing it as isolating and depressing. While architects like John Andrews designed the Scarborough buildings to reflect the progressive future of campus design, filmmakers like Cronenberg used the buildings to symbolize dystopia and despair.

Conclusion

After years of criticism and backlash, Brutalist architecture is being re-discovered. Fueled by a strong sense of nostalgia, architects and historians are taking a new interest in concrete buildings, revisiting their retro design features, protesting their demolition and helping them gain heritage status. Recent publications such as *Concrete Toronto*, *Clog: Brutalism* and the BBC television series *Bunkers, Brutalism and Bloodymindedness* have explored the history behind the movement and helped foster an aesthetic appreciation of these massive structures. After being abandoned by the mainstream film industry, celluloid film continues to be the material of choice amongst experimental filmmakers. The tactile qualities of celluloid and concrete are important characteristics that can't be found in other building or filmmaking materials. Their surface texture, grain and ability to convey a sense of the past will ensure that both concrete and celluloid will continue to be important, iconic materials for artists and architects to work with.

Works Cited

- Banham, Reyner. *The New Brutalism: Ethic or Aesthetic*. Reyner Banham. London: Architectural, 1966. Print.
- Berman, Marshall. *All That Is Solid Melts into Air: The Experience of Modernity*. New York: Simon and Schuster, 1982. Print.
- Bourque, Louise. "A Conversation with Louise Bourque." Interview by Micah J. Malone. *Big Red and Shiny*. N.p., 19 Mar. 2006. Web.
- Brakhage, Stan. *Metaphors on Vision*. New York: Film Culture, 1963. Print.
- Brenez, Nicole, and Miles McKane. "Chemistry and the Alchemy of Color." *Millenium Film Journal* 30.31 (1997): n. pag. *Millenium Film Journal*. 12 Aug. 1997. Web.
- Brown, Carl. "After: A Beginner's Guide to Alchemy." *Incite Journal of Experimental Media* 1 (2008): n. pag. Print.
- Frampton, Kenneth. "Scarborough College, Toronto, Ontario." *Architectural Digest* Apr. 1967: 53. Print.
- Friedland, Martin L. *The University of Toronto: A History*. Vol. 2. Toronto: U of Toronto, 2013. Print.
- Fulford, Robert. "Fort Book: It's 14 Storeys of Literary Intimidation." *The Toronto Star* [Toronto] Saturday Sept. 1974: G5. Print.
- Resident Evil: Afterlife*. Dir. Paul W. S. Anderson. Perf. Mila Jovovich. Screen Gems, 2010. DVD.
- Richards, Larry. *University of Toronto: The Campus Guide*. New York: Princeton Architectural, 2009. Print.
- Ross, Murray G. *The New University*. Toronto: The University of Toronto Press, 1961. Print.
- Scalbert, Irénée. *Architecture as a Way of Life: The New Brutalism 1953-1956*. Zotero. N.p., n.d. Web.<<http://www.team10online.org/research/papers/delft1/scalbert.pdf>>.
- Stereo*. Dir. David Cronenberg. Perf. Ronald Mlodzik. Film Canada Presentations, 1969. DVD.

Stewart, Graeme and McClelland, Michael, eds. *Concrete Toronto: A Guidebook to Concrete Architecture from the Fifties to the Seventies*. Toronto: Coach House, 2007. Print.

Thom, Ron J. "Protest 1: A Lesson For All." *Canadian Architect* Aug. 1974: 34. Print.

Whiffen, Marcus. *American Architecture since 1780: A Guide to the Styles*. Cambridge: MIT, 1969. Print.

University Planners, Architects, and Engineers. UPACE Design Philosophy for York University Design Procedure Sheet No, 2D. (Toronto: York University, 1962).

York University Humanities Seminar, Notes on Discussion. (Toronto: York University, 1962).

Bibliography

- Banham, Reyner. *The New Brutalism: Ethic or Aesthetic*. Reyner Banham. London: Architectural, 1966. Print.
- Berman, Marshall. *All That Is Solid Melts into Air: The Experience of Modernity*. New York: Simon and Schuster, 1982. Print.
- Bourque, Louise. "A Conversation with Louise Bourque." Interview by Micah J. Malone. *Big Red and Shiny*. N.p., 19 Mar. 2006. Web.
- Brakhage, Stan. *Metaphors on Vision*. New York: Film Culture, 1963. Print.
- Brenez, Nicole, and Miles McKane. "Chemistry and the Alchemy of Color." *Millenium Film Journal* 30.31 (1997): n. pag. *Millenium Film Journal*. 12 Aug. 1997. Web.
- Brown, Carl. "After: A Beginner's Guide to Alchemy." *Incite Journal of Experimental Media* 1 (2008): n. pag. Print.
- Elder, R. Bruce. "Air Cries, "Empty Water" Trilogy." (1993): n. pag. Print.
- Forty, Adrian. *Concrete and Culture: A Material History*. London: Reaktion, 2012. Print.
- Frampton, Kenneth. "Scarborough College, Toronto, Ontario." *Architectural Digest* Apr. 1967: 53. Print.
- Fulford, Robert. "Fort Book: It's 14 Storeys of Literary Intimidation." *The Toronto Star* [Toronto] Saturday Sept. 1974: G5. Print.
- Hollein, Max, and Esther Schlicht, eds. *Zelluloid Cameraless Film*. Frankfurt: Kerber, 2011. Print.
- Liscombe, Rhodri W., ed. *Architecture and the Canadian Fabric*. Vancouver: UBC, 2011. Print.
- Resident Evil: Afterlife*. Dir. Paul W. S. Anderson. Perf. Mila Jovovich. Screen Gems, 2010. DVD.
- Richards, Larry. *University of Toronto: The Campus Guide*. New York: Princeton Architectural, 2009. Print.

Ross, Murray G. *The New University*. Toronto: The University of Toronto Press, 1961. Print.

Scalbert, Irénée. *Architecture as a Way of Life: The New Brutalism 1953-1956*. Zotero. N.p., n.d.
Web.<<http://www.team10online.org/research/papers/delft1/scalbert.pdf>>.

Stereo. Dir. David Cronenberg. Perf. Ronald Mlodzik. Film Canada Presentations, 1969. DVD.

Stewart, Graeme and McClelland, Michael, eds. *Concrete Toronto: A Guidebook to Concrete Architecture from the Fifties to the Seventies*. Toronto: Coach House, 2007. Print.

Takahashi, Tess. "After The Death of Film: Writing The Natural World In The Digital Age." *Visible Language* 41.1 (2008): 44-69. Web.

Thom, Ron J. "Protest 1: A Lesson For All." *Canadian Architect* Aug. 1974: 34. Print.

Whiffen, Marcus. *American Architecture since 1780: A Guide to the Styles*. Cambridge: MIT, 1969. Print.

Woloshen, Steven. *Recipes for Reconstruction: The Cookbook for the Frugal Filmmaker*. Montreal: Scratchtopia, 2010. Print.

University Planners, Architects, and Engineers. *UPACE Design Philosophy for York University Design Procedure Sheet No, 2D*. (Toronto: York University, 1962).

York University Humanities Seminar, *Notes on Discussion*. (Toronto: York University, 1962).

Filmography

Buffalo Lifts. Dir. Christina Battle. 2004. 16mm.

July's Wet Dreams. Dir. Kara Blake. 2003. DVD.

Imprint. Dir. Louise Bourque. 1997. 16mm.

Jours En Fleurs, Dir. Louise Bourque. 2003. DVD.

Air Cries "Empty Water" Trilogy. Dir. Carl Brown. 1993. DVD.

Urban Fire. Dir. Carl Brown. 1982. DVD.

Trissakia. Dir. Nick Collins. 2013. Online video.

Mr. Edison's Ear. Dir. Francisca Duran. 2008. DVD.

Hardwood Process. Dir. David Gatten. 1996. 16mm.

Ville Marie. Dir. Alexandre Larose. 2010. DVD.

Instabile Materie. Dir. Jürgen Reble. 1995. DVD.

Chicago. Dir. Jürgen Reble. 1996. DVD.

The Girl's Nery. Dir. Jennifer Reeves. 1995. 16mm.

When It Was Blue. Dir. Jennifer Reeves. 2008. DVD.

Quadro. Dir. Lotte Schrieber. 2002. Online video.

Zero Visibility. Dir. Steven Woloshen. 2008. DVD.