

Second Skin: **Painting Architecture**

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.

ABSTRACT

This thesis is a creative and conceptual inquiry into the role of *surface* or *skin* in architectural theory and practice, and the nature of its relationship to architecture's form, structure, and depth.

The surface of architecture is presented as a site of conflict between two traditionally opposing imperatives of architecture: to represent social and cultural identity, and the art of its designed construction or *tectonics* – its structural order, material qualities, modular assembly, modes of production, and functionality. While the former is tied to stylistic traditions, the latter is inherently connected to technology.

Modern architectural discourse has traditionally remained partial to the tectonic, maintaining a hierarchical opposition between depth and surface, structure-skin, natural-artificial, authentic-synthetic, material-immaterial, bare-decorated, neutral-coloured, and the spatial versus two-dimensional, wherein the former is always privileged over the latter.

In contrast, the thesis concurrently observes how contemporary architectural practice is increasingly preoccupied with the production of surface effects. Conditions of globalization and the current digital age have contributed to an image-saturated environment in which architecture and media are increasingly harder to separate. Crossovers between architecture and art combined with the proliferation of decorative, communicative, and

responsive architectural surfaces continue to blur the line between what constitutes architecture versus decoration, ornament, or cosmetics – attributes intrinsically tied to the role of appearance and representation.

Through the act of painting architecture, the thesis proposes an alternative view of the surface that aligns more closely to contemporary practices. It posits that architecture's prerogative lies not only in the creation of form, spatial relationships and tectonics, but also in the production of *atmosphere* and perceptual experience. This expanded notion of architecture sees the surface as capable of generating spatial, immersive qualities. Here, the two-dimensional or 'superficial' is not opposed to depth but instead engenders it, juxtaposing both materiality and image, the concrete and imaginary, architectural and painterly.

By re-conceptualizing the skin as a *producer* of architecture rather than a by-product of it, this thesis argues that the architectural surface is as valid an investigation as questions of form, structure, or depth, and that it constitutes a legitimate practice within the field of architecture.

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“Architecture is the thinnest of the arts. To occupy your house is to move about inside a millimetre thick bag made of the paint on the walls and ceiling and the clear coat of varnish on the floor... it is not the spaces that are painted; rather, space is an effect of paint. Our architecture is made of paint yet there are no classes on paint in architecture school; professional magazines never refer to it and architects never discuss it. Our discipline pretends that architecture is thick, that it is the materials beneath the outer skin that are experienced and not the skin. There is a congenital fear of being superficial.”¹

- Mark Wigley, *Paint Space*





PREFACE

This thesis is rooted in an intersection of architecture and painting; two distinct creative practices that simultaneously resonate yet resist one another. Throughout my educational and professional endeavours, the aspiring architect and artist within me have always been in internal conflict. This thesis is my attempt at reconciling the two.

I began with painting architecture: as both an aspiring painter and a student of architecture, this was something I had wanted to do for some time. I was deeply interested several threads of research – urban art, the use of colour in architecture, and contemporary crossovers between art and architecture.

In the context of an architecture thesis, however, I was facing heavy doubts about the validity and appropriateness of this search. Focussing on something as superficial as the two-dimensional surface, particularly with regard to colour, paint, and visual effects, went against everything I had been taught to value in my architectural education. Form, functionality, program, structure, and materiality were prioritized. Colour was a topic I seldom gave a second thought. Something deemed ‘ornamental’ or ‘aesthetic’ in architecture school is equivalent to being shallow or superfluous. My artistic and architectural interests were, apparently, mutually exclusive.

Painting an existing building only reinforced the fickle and somewhat insubstantial nature of my endeavour. Paint eventually chips and peels. Art and colour are subjective matters that are difficult to define or critique from an architectural standpoint. Such subjects border on the realm of decor and interior design, fields distinctly viewed by architects as beneath their purview.

After painting my first mural, these concerns evolved into an inquiry about the fundamental ideologies of surface in architectural discourse, and the hierarchical assumptions that have shaped my architectural thinking thus far.

I question how, in pursuit of authenticity, architecture has traditionally privileged depth over surface, structure over skin, and function over appearances. In many instances, particularly in contemporary architectural practices, this dichotomy seems increasingly harder to justify. That inquiry is the core of my thesis.

INTRODUCTION

“This book is about the now, about the paradoxes of architectural thinking and architectural production. But [its] aim is not simply to reveal these paradoxes. It also wants to use them as figures of analysis and invention, particularly as they relate to the architectural surface. It suggests new ways of working through these issues that take into account many influences and inspirations.”²

- Mohsen Mostafavi, introduction to
ijp: The Book of Surfaces

This thesis is organized into three parts, according to the process of its inquiry: first, an autobiographical exploration that leads to emerging questions; second, a survey of ideas, assumptions, and tensions which formulate a framework for their re-examination; third, a contemplative analysis that deconstructs various elements of the inquiry.

PART ONE: PAINTING begins with an autobiographical essay that reflects upon my personal endeavour to paint architecture. It explains my initial sources of inspiration, how I began to tackle the subject from firsthand experience, how I arrived at an approach to designing my own murals, and the questions that arose from these encounters.

Integral to Part One is a detailed visual documentation of the process of designing and executing three murals, as well as their final outcomes. This documentation is annotated with brief descriptions of the constraints, general approach, and methodology employed for each mural. Sketches, digitally rendered images, and smaller scale paintings of varying size were integral to this process as smaller scale experimentations for the testing of ideas, techniques, and materials. It was these experiences, thought processes, and artistic explorations that led me to interrogate the role of surface in architecture.

PART TWO: THEORETICAL FRAMEWORK contextualizes my work in Part One within broader historical and contemporary architectural debates and ideas. It lays down basic theoretical concepts and precedents in architecture and painting in order to establish a groundwork for underlying oppositions and assumptions that are present in architectural discourse.

Part Two examines attitudes towards surface, image, colour, and ornament in modern and postmodern architecture and painting. The dual conditions of being covered/bare, decorated/plain, coloured/white, natural/artificial, real/imaginary and authentic/fake are brought into the foreground. These oppositions are intrinsic to the dichotomy of wall/canvas, and architecture/painting.

Arguably, the question of surface has been present since modernity's first division of structure and cladding, and the invention of the curtain wall. This separation has sustained a notion of the architectural surface as a form of clothing that hangs off of a body - a notion that has made the question of its role all the more problematic.

PART THREE: RE-THINKING reassesses the assumptions and attitudes outlined in Part Two in a contemporary context of digitally fabricated materials, virtual simulations, image reproduction, media saturation, and globalization. It observes how contemporary architectural practices are increasingly preoccupied with surface, often crossing over into the realm of visual art.

This is in clear contradiction to underlying values and foundations present in architectural discourse and education. Part three questions the claim that such modes of thought hold, calling attention to ambiguities within that discourse as well as within the contemporary condition.

Emblematic of this conflict is the quintessential contemporary two-dimensional surface - the interface - which possesses an infinite virtual depth. The manipulation of building colour is no longer limited to the use of paint with the advent of media-facades, mega-scale light projections, and new processes in the production

of building materials. The building industry has achieved unprecedented levels of visual effects, affective sensations and responsiveness.

These changes have revolutionized the status of the architectural surface, altering the framework from which to judge and define qualities such as material authenticity, tectonics, permanence, and depth. This in turn alters the nature of the question of surface.

“Walls and structures can be de-purposed, repurposed, de-faced, refaced, de-made, remade.”³

“The placement of works is often a call to place, marking locations with awareness, over against the proliferating urban ‘non-places’ of anonymous transit and commerce ... Street art is driven by the aesthetics of material reappearance.”⁴

- Martin Irvine, *The Work on the Street, Street Art and Visual Culture*

PART ONE: PAINTING

Urban Art in New York City.

These photographs show a few of the large scale urban artworks I encountered in New York City. Most of the pieces shown here are in Bushwick and Dumbo.

Beginnings: Graffiti and Urban Art

When I had an opportunity to visit New York City last fall, I jumped at the chance of seeking out its graffiti. Unfamiliar with the city, I immediately signed up for a private graffiti tour, and made a special request to see large scale mural pieces. The tour guide, himself a graffiti artist, had a particular attitude regarding the art form - to him, its importance was centered around its act of transgression. However, it was not the counterculture of graffiti that interested me so much as the visual and social effects it can have in the urban environment.

For many street artists, graffiti is not about vandalism but about bringing creative energy to neglected or visually banal environments.

While graffiti remains a legally grey area in many places, the majority of the artworks I visited were in publicly visible spaces. Their scale and level of detail made it clear to me that they were allowed to be there, whether or not they were specifically commissioned.

Most of the murals I saw were in fact sanctioned by cooperatives or organizations aiming to increase property values or beautify neglected urban neighbourhoods. “Dumbo Walls” is an example of a municipally funded initiative in New York City which supports ongoing murals by international artists as a strategy to attract visitors to the Dumbo area.⁵

I visited Bushwick, a post-industrial neighbourhood in Brooklyn. Graffiti is abundant there and held in high regard. It has been an attraction for many local artists who have been renting old industrial warehouses for art studios and workshops. Around every corner there are large scale murals, many of which are new and legal. The ‘Bushwick Collective’ is an initiative recently started by a property owner in the area who has been commissioning artists to paint art on the exterior walls of his buildings.

This phenomenon is, of course, not unique to New York City. Street art is ubiquitous in many major cities around the world. Developments in digital and communication technology have contributed significantly to the growth of street art, allowing an unprecedented ease of documentation and sharing of works with international audiences.⁶ Propelled further by social media platforms such as Instagram, it has gained even greater global popularity in recent years. Author Martin Irvine writes:

Street art began as an underground, anarchic, in-your-face appropriation of public visual surfaces, and has now become a major part of visual space in many cities and a recognized art movement crossing over into the museum and gallery system.⁷

However, while graffiti remains a key visual characteristic of the contemporary urban landscape, architects never talk about it.

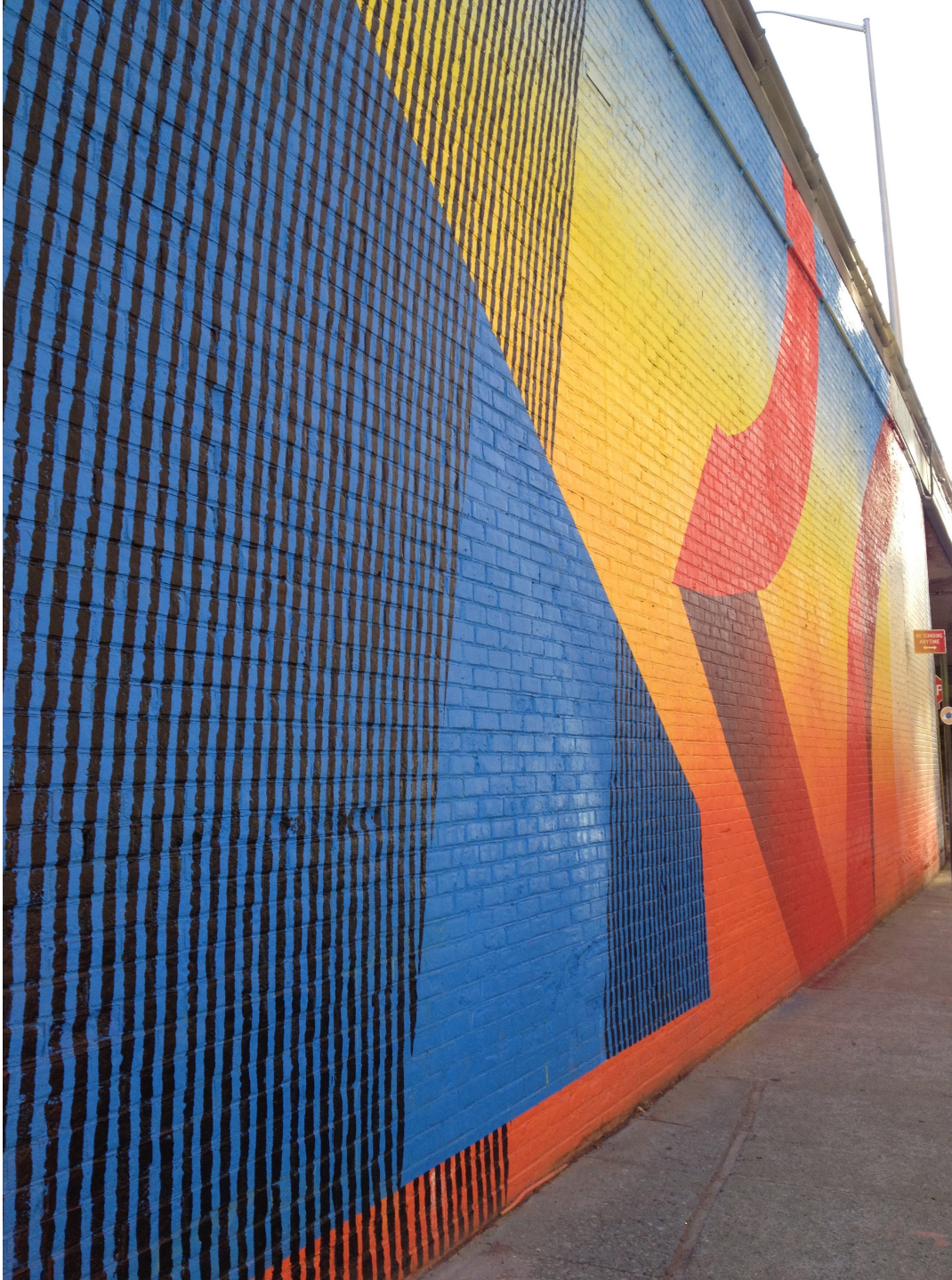


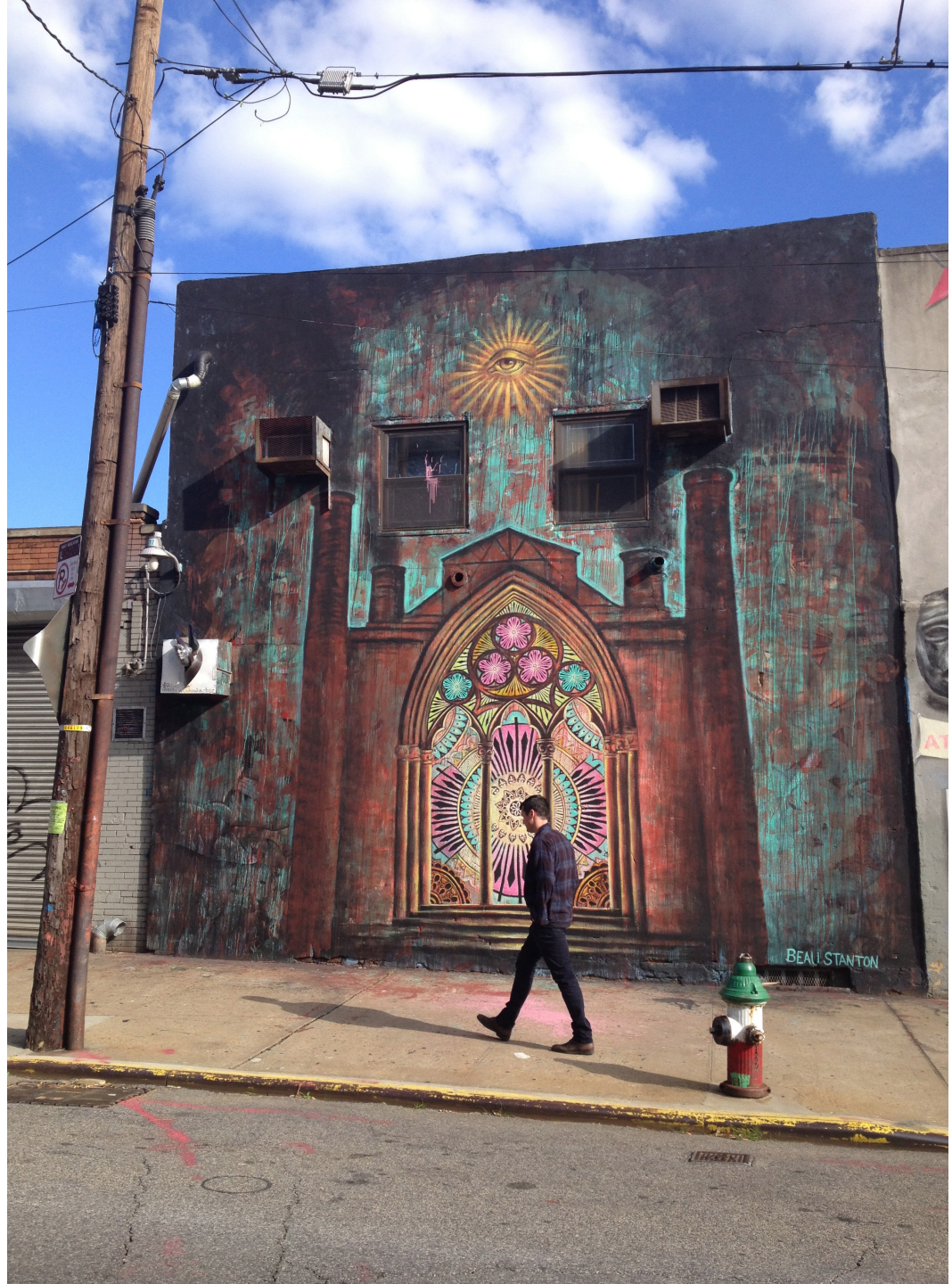
NO STANDING
ANYTIME
← →

12-10

STOP

City St
Caldman Plaza
West
Franklyn Dr







1.02

**Herzog and de Meuron, 40 Bond
Street, New York, 2007.**

Photographs of the cast aluminum
screen in front of the entrance.

Locally speaking, Toronto has a thriving street art culture that even boasts a designated “graffiti alley” (which, as a side note, is frequently featured on the Rick Mercer Report).

Herzog and de Meuron are architects who have directly acknowledged urban art in their design of an apartment building on 40 Bond Street in New York, completed in 2007. In front of the building is a large screen made of prefabricated aluminum, which was cast into a pattern based on a photographic collage of graffiti tags (1.02).⁸

While this may seem like a superficial gesture, it implicitly integrates the cultural context of New York city, fusing a stereotypically lowbrow art form with a high-end luxury condominium building in an expensive neighbourhood.

The appropriation of buildings with artwork is not a subject that usually concerns architectural practice, because it is a profession that fundamentally aims to avoid the need for such interventions (and in the case of vandalism, seeks its prevention). Despite this, it is an unavoidable reality of the built environment. As an urban phenomenon, it strengthens the notion that the surface plays a key social dimension in the built environment. Indeed, surfaces have the power to perceptually undermine all other aspects of built form.







1.03

Painted buildings in Tirana, Albania.

City as Canvas

“Now we have many problems to solve in the city, but we have a city. And this has been the beginning of it through just this very simple change of the mindset by putting some colour in the middle of nowhere.”⁹

-Edi Rama, Mayor of Tirana, Albania, 2009

In Tirana, Albania, urban art and painted colour are inseparable from the identity of the city. When Edi Rama was first elected as mayor in 2000, he began funding a city-wide project of repainting the city’s buildings in bright colours and assorted patterns. This was a strong contrast to its formerly grey and colourless Soviet architecture.¹⁰ This initiative evolved into a decade long project involving internationally renowned artists such as Olafur Eliasson and Liam Gillick (1.03-1.04).¹¹

While a new coat of paint might seem like a superficial or insignificant change, the social impact of its implementation at the city scale is undeniable. According to Rama, it was first and foremost a political operation before an aesthetic one. From the onset, it had a clear social and political message: a multiplicity of colours for a new democratic and pluralistic society. It was also motivated by Rama’s ambition to redefine the city’s collective identity and social life.

As the capital city of one of the poorest countries in Europe, Rama sought to change the prevalent negative perceptions of Tirana, a city he himself described as 'dead' and 'miserable' - to become instead a place where people would *choose* to live rather than *have* to, a place that could give them a greater sense of belonging.¹²

In some instances the use of colour in Tirana has been overstated and naturally would not suit everyone's tastes, nonetheless its popularity resulted in Edi Rama's re-election for twelve consecutive years. Tirana's repainting has had an effect that goes beyond surface appearances. Edi Rama aimed to reinvigorate citizen pride, and in so doing, the city's "lipstick" inspired further *internal* improvements such as the refurbishment of damaged buildings and pavements. Towards the end of Anri Sala's documentary *Dammi i Colori* (Give me the Colours), Edi Rama reflects:

I think that a city where things develop normally might wear colours as a dress, not have them as organs. In a way, colours here replace the organs - they are not part of the dress.¹³

At first, it was a change of colour, of skin. But eventually it became clear that it was more than that - the city itself had also changed.¹⁴



1.04
Painted buildings in
Tirana, Albania.

Across the globe, a multitude of organizations, artists, and individuals recognize the power that a painted surface can have on social morale - whether positive or negative. In some cities, murals are encouraged as a form of deterring visually offensive forms of graffiti and vandalism, or simply as a way to aesthetically enhance existing buildings and neighbourhoods.

The Megaro project is currently the largest mural in London, England. Painted over the Georgian facade of a five-storey hotel, the 450 square-metre mural completely reinvents the building, transforming how the architectural elements of its facade are read.¹⁵ The former tectonic order, visual hierarchy, and symmetry of the original facade are totally subverted by free-floating diagonal bands of colour that contradict the underlying logic of the architectural construction (1.05-1.06).

The owners of the Megaro Hotel commissioned the street art collective Agents of Change to design and paint the mural, which was executed by four of the collective's members in a two week period.¹⁶ Being located directly across from St. Pancras International Train Station (and visible from within the station), the mural contributes to the vibrancy of this significant travel hub and neighbourhood.¹⁷



1.05

Agents of Change,
The Megaro Project,
London, 2012.

The facade, before and
after the mural.

1.06

Agents of Change,
The Megaro Project,
London, 2012.

View from the street.



1.07

Haas and Hahn, Philadelphia mural painting, 2012.

1.08

Haas and Hahn, Favela Painting, Rio de Janeiro, 2010.

Painted favelas in Rio de Janeiro, Brazil, led by artists Haas and Hahn with the help of local residents.

In Toronto, initiatives such as StreetARToronto¹⁸ and STEPS (Sustainable Thinking and Expression on Public Space)¹⁹ provide ongoing funding and support for public murals. STEPS is a “non-profit organization that uses art to connect people to public spaces.” These projects are community-oriented and driven primarily by efforts to revitalize inner city neighbourhoods.

In 2013, STEPS unveiled a mural on a 32-storey apartment building in St. James Town, a low-income neighbourhood in Toronto dominated by high-rise modernist social housing built in the sixties. After a fire occurred in the aforementioned apartment building, regenerative efforts included a publicly funded mural as a way to improve community morale. The painting was executed by several members of the community and youth, under the direction of lead artist Sean Martindale. It is currently believed to be the tallest mural in the world.²⁰

The City of Philadelphia Mural Arts program is an organization whose mandate is using mural art to “transform places, individuals, communities and institutions”.²¹ The program hosted the Dutch artist duo, Jeroen Koolhaas and Dre Urhahn (“Haas and Hahn”) in 2012 (1.07).²² These artists gained international recognition for repainting favelas in Rio de Janeiro, a project that is currently ongoing (1.08).

The favela painting, like the repainting of Tirana, has significantly transformed the image of these slums, a persistently stigmatized part of the city. It has also contributed to its effective reappearance on the global map whilst fostering local community spirit. The active participation of locals coming together for this project, coupled with its worldwide positive reception, has likely reinvigorated the community’s pride and connection to place.²³

Arguably a coat of paint will not change underlying problems that run deep, such as poor structural foundations, political conflict, or impoverishment. That is not what this thesis seeks to demonstrate. Beyond its potential social impact, these projects reveal how the painted architectural surface has the capability of dramatically transforming how a building volume is read. Painted colours, shapes, or lines can either visually reinforce or camouflage individual architectural elements, fragment or unify the surface, emphasize horizontality, verticality, weight, fluidity, or movement. This simple observation formulated a point of departure for my own painting experiments.



1.09

HENSE, Washington DC, 2012.

Privately commissioned public work on the historic church in south-west Washington DC.

1.10 (*facing page*)

HENSE, Lima, Peru, 2013.

Commissioned public work created for ISIL Institute in Lima, Peru. Organized by Morbo Gallery, 2013.







1.11

MadC, 500 Wall, Leipzig, Germany, 2013.

550 square metre mural painted by the internationally renowned street artist.



1.12

MadC, 500 Wall, Leipzig, Germany, 2013.

Detail view of the mural prior to its completion.

First Encounters

In my experience, lower density cities tend to be more conservative regarding urban art and exterior building colour. In certain municipalities, if a building owner wants to have a mural painted on their property, the regulations and costs involved alone are a significant deterrent, or it is prohibited completely. In Waterloo, Ontario, city officials have only recently begun to consider removing public murals from the hindrance of signage bylaws. That being said, the city still holds the traditional view that a public mural must convey historical cultural content to be deemed appropriate.²⁴

The use of colour on building exteriors also seems to be more heavily regulated in suburban areas, particularly in North America. In some cases this regulation is not only legally imposed but comes in the form of conservative attitudes - numerous accounts exist of neighbourhood uproars due to individual homeowners painting their houses in radical colours or patterns.

The colour palette of many cities around the world is uniquely tied to their identities, such as the white and blue of Santorini, Greece, the red of Bologna, Italy, or the sandy beige of (my hometown) Bahrain. These colours are originally tied to geographical climate, local materials, and historical traditions, which ground these buildings to their unique cultural and physical contexts. Today, however, regulations on colour for new buildings are not necessarily correlated to these obligations beyond a connotational

reference. Building materials are not necessarily sourced locally, for example. An infinite variety of colours are at one's disposal for the same price, unlike the past when colour availability and cost depended entirely on geographic region.

The goal behind current exterior colour regulations is, understandably, to maintain neighbourhood identities and visually harmonious relationships between individual building developments. In some cases, however, the result can be monotonous and uninspiring. In others, the problem of blandness is only exemplified by the architecture itself.

I was exposed to colour regulation firsthand when the owner of a Mexican restaurant in Galt, Cambridge, contacted me about refurbishing the restaurant with new signage, brighter colours, and a mural or two. I had recently completed a trompe l'œil* style mural in a nearby floral shop (*Appendix A*). After seeing it featured in a local paper, the restaurant owner was inspired to have one as well (*Appendix B*).

She expressed to me that the exterior was of a higher priority for her than the interior. There were several problems with it, the most pressing of which were a confusing entrance, poor signage, damaged walls, and faded or peeling paint.

***trompe l'œil** (noun)

visual illusion in art, especially as used to trick the eye into perceiving a painted detail as a three-dimensional object.

- [count noun] a painting or design intended to create a visual illusion. French origin, literally meaning 'deceives the eye'.

Some of this was simply a matter of a repair, therefore I focussed my attention on designing a new colour scheme that would be both suitable for a Mexican restaurant and enliven its presence on the main street without clashing too harshly with its context.

The rear of the building was also of concern - as it currently stood, it was an unused entrance facing a parking lot, and fairly decrepit all around. The walls were yellow, while the doors and window were a reddish colour, somewhere in between maroon and purple. I relished the opportunity to beautify this area, which had so clearly been neglected for some time. The rear entrances of adjacent shops were also in similar condition, and I set my sights on repainting those as well.

After experimenting with various ideas and colour combinations, I settled on a design and eagerly showed it to the owner. She loved it, but she was a tenant of the building, and required the owner's approval as well. Since it was technically a designated heritage building, there were strict rules about colour usage I was not aware of, and the building owner requested that I get approval from the city first.

I called the city's planning department to ask about this issue. The planner I spoke to said it did not matter, and that paint was only temporary so no permit was required. I relayed this information to the tenant and owner, but they both seemed skeptical. Anxious

about potentially receiving a fine, the restaurant owner insisted that we arrange a meeting with the city planners in person.

The meeting revealed that asking for permission involves traversing multiple levels of bureaucracy. To get approved (which was apparently unlikely) I would need to put together an application package, addressed to the Municipal Heritage Advisory Committee (MHAC) in a few weeks time, to have it appear on the agenda of their next monthly meeting. By that time the project would be significantly delayed, and we were running out of good weather days for exterior painting.

I wrote a letter to the Mayor, hoping that he could expedite the process, but in the end I could not avoid the matter of MHAC. I forwarded my proposal to them, and eventually I was mailed a copy of the meeting agenda. It indicated that the committee voted to reject my proposal. The heritage planner encouraged me nonetheless to attend the meeting and present my ideas to the board, in case an alternative solution could be arrived at.

After giving my presentation, I received various questions and responses from the committee members. The overall review of my proposal was very positive. Ultimately, they were supportive of my goals but believed that a heritage building should only use 'heritage colours', and they encouraged me to modify the colour scheme to a more subdued palette.

I obtained their selection of heritage colours and accordingly modified my design. A few weeks later, I sent a revised proposal in both digital and paper formats with attached paint samples, to ensure that there would be no colour discrepancies (previously, their printed copies of my proposal indicated a facade painted entirely in tomato red.) After awaiting a response for several weeks, I was told secondhand that my proposal was yet again declined. The restaurant owner simply relayed to me the news that the city had contacted the building owner to inform him of the proposal's rejection.

At the end of the day, the city wanted the colours to remain the same, to preserve an image of authentic heritage. This is in spite of the fact that, literally speaking, repainting the building in the same colours is no less artificial than if it were painted neon pink.

Feeling discouraged, I left the matter aside, and wondered about potentially starting work on the restaurant's interior. I wanted to experiment with the spatial potential of painting, through manipulating form, colour, texture, and depth perception, while operating solely on the two-dimensional surface.

The restaurant owner had originally requested that I paint Mexican themes in a traditional trompe l'œil style, as I had previously done in the floral shop. By this point, however, I realized that a mural

depicting Mexican culture and scenic landscapes was a subject matter too specific to the restaurant and not to architectural design.

I also wondered if, in this instance, a representational painting may as well be done on a hanging canvas or material adhered to the wall. There was nothing essentially tying it back to *architecture* other than the potential impact of scale or false depth and perspective. This dilemma brought me back to the question of architectural trompe l'œil. On one hand, to create a spatially impactful painting it is necessary to engage with the idea of illusion or visual deception in some way. After all, painting and all other forms of pictorial art are essentially rooted in just that - the conveying of an altered or imagined reality, an invented space.

My goal was to directly engage the user or passerby's perceptual imagination through the creation of visual depth, rhythm, or movement through painting. Traditional trompe l'œil, however, seeks to literally *imitate* reality. It is based on convincingly recreating the recognizable forms of reality that exist in nature and the built environment. The success of this artwork is measured by its ability to create an ultra-realistic illusion that literally 'tricks the eye' into believing the painting is real. The viewer of such work is inclined to suspend their disbelief, much in the same way that one enjoys the performances and visual effects of film and theatre all the while knowing they are not real.

Literal imitation is not what I was after, and quite simply did not inspire me. I did, however, want to retain the concept of a theatrical kind of architecture through a kind of masking of the surface with paint. I strove for an 'architectural art', but one that still acknowledged itself as art and did not attempt to deny that fact. I also wanted to avoid forms of explicit symbolic representation or communication to better allow primary elements of design such as line, shape, and colour to take precedence. That way, the visual, corporeal, or emotional effects of the work may be judged without the interference of subjective narratives or metaphors.

“Wall-works bypass double supports. Marks drawn on the wall—here forward and in view; there only peripherally visible—spread along the wall. Simultaneously, in front of and behind you, fixed where they are by the wall’s mass, they become, perceptually, pure surface. The thickness of the wall has been rendered experientially negligible. These works cannot be “held”; they can only be seen.”²⁵

- Mel Bochner, *Why Would Anyone Want to Draw on the Wall?*

Between Art and Architecture

The artist Frank Stella has written at length on the subject of painting and its historical emancipation from the confines of architecture from which it began. In *Working Space*, Stella argues that all painting since the Renaissance irrespective of genre strives to create its *own* space, sometimes in direct competition with architecture, through pictorial illusionism,²⁶ stating:

The act of looking at a painting should automatically expand the sense of that painting's space, both literally and imaginatively. In other words, the spatial experience of a painting should not seem to end at the framing edges or be boxed in by the picture plane.²⁷

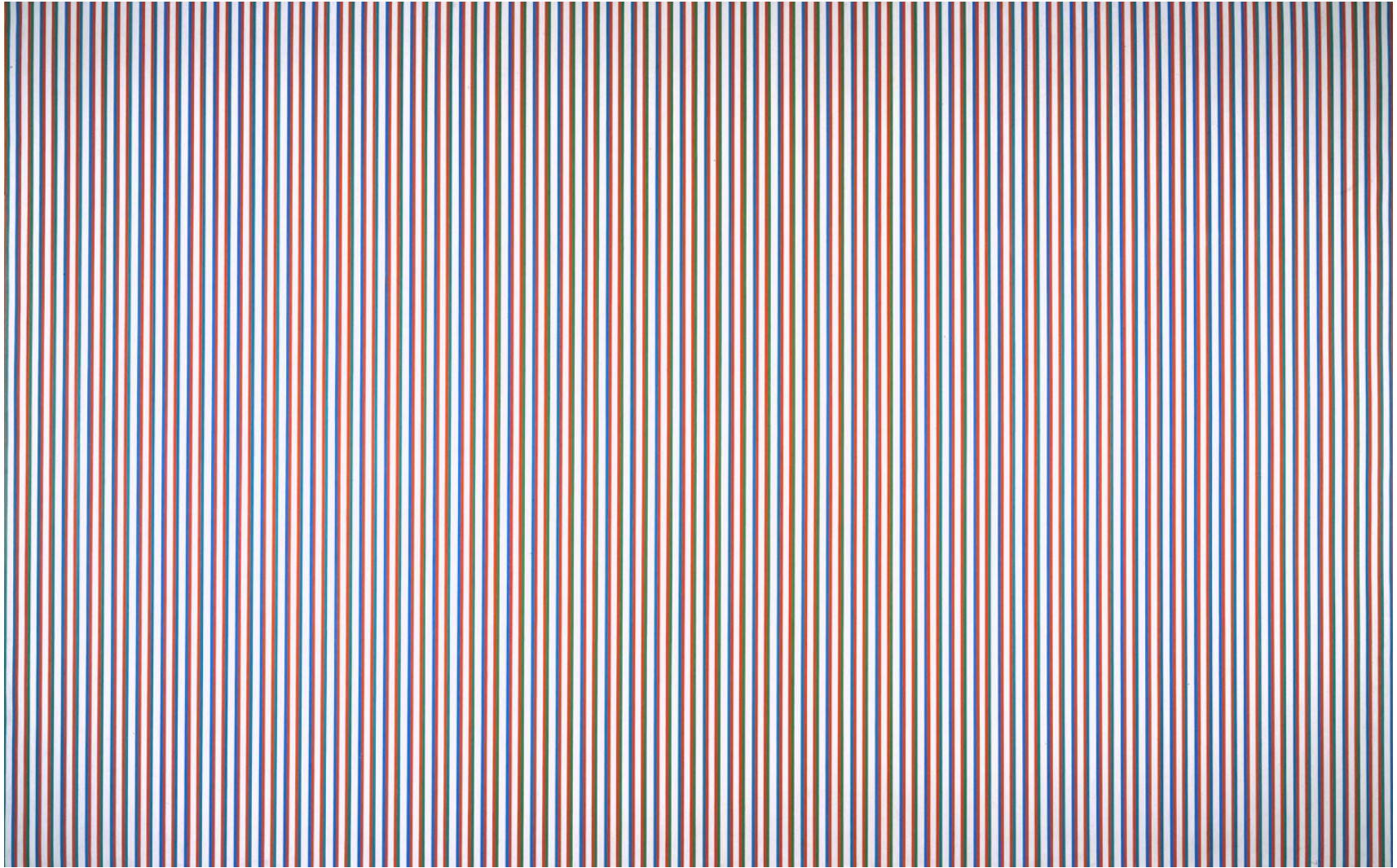
It is this relationship between painting and architecture that sparked my interest, and gave me the confidence to believe that painting murals did not necessarily signify a 'return' to traditional mural painting, but instead could constitute an exploration of the surface as a *creator* of spatial qualities.

There are numerous precedents of painting where the arrangement of lines or even flat areas of colour create visual depth and other optical effects without seeking to literally replicate reality. Rather, these paintings create a new reality (and space) of their own. Over fifty years ago the 'Op Art' movement explored such effects while operating solely on the smooth, flat plane of the canvas (1.13-1.14).

The artist Bridget Riley's paintings are characterized by geometric shapes and lines that engage visual perception through their careful and precise repetition and modulation.

This type of work partially exists in the eye and mind of the beholder: it begins to literally bridge the physical gap between subject and object. In this way it is quite similar to the optical fusion of colours explored in impressionist and pointillist paintings several decades earlier, in which perceptions of form and colour are entirely dependant on the distance between the viewer and painting. Op art, however, strips all subject matter down to the visual effect: perception is the art.

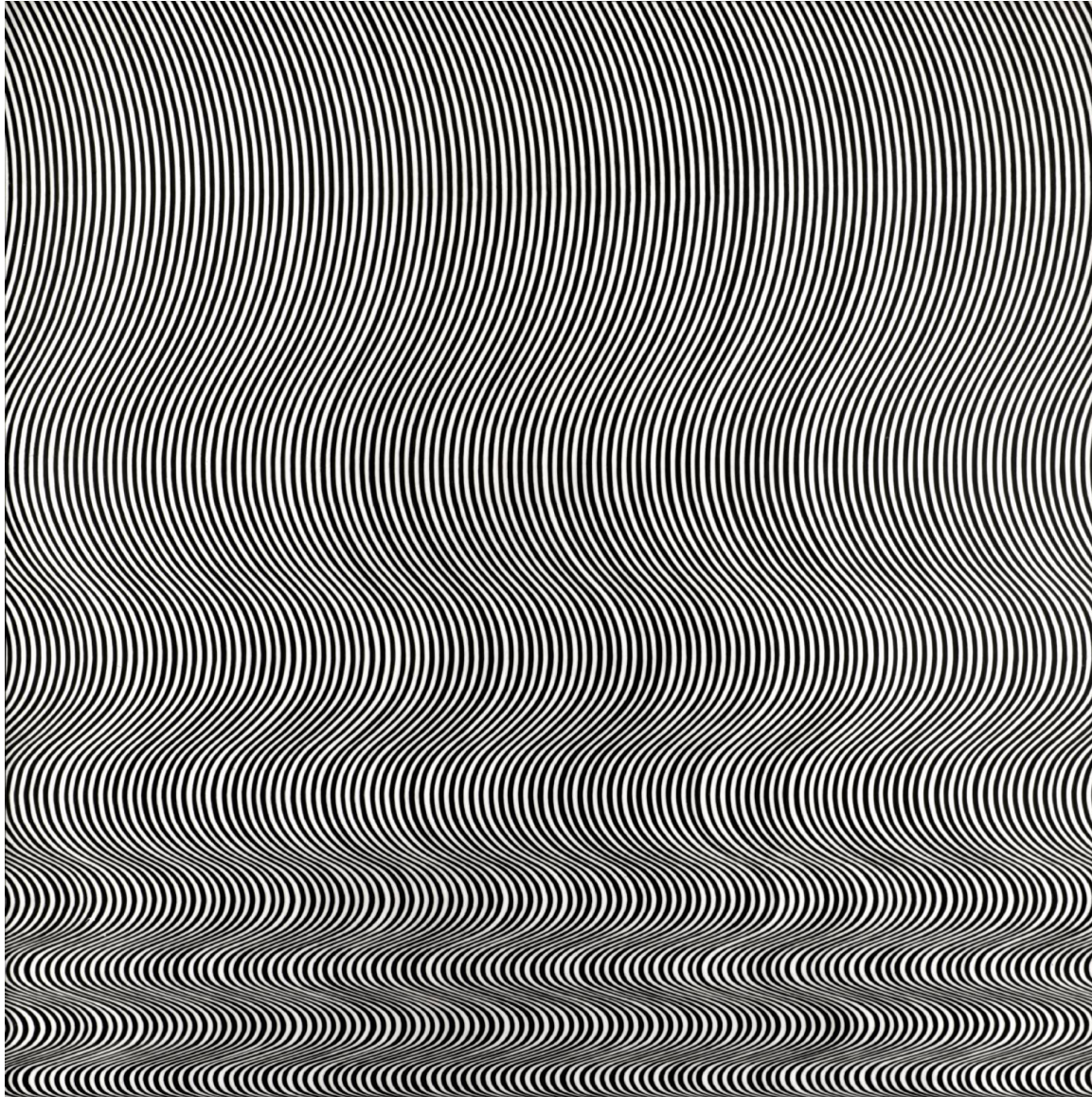
Riley's later work begins to introduce colour which also generates complex perceptual effects through colour contrast phenomena.²⁹ Simultaneous contrast is a phenomenon that occurs when two colours placed beside each other are perceived differently than when those same two colours are looked at separately. The eye will attempt to see the two colours as opposite as possible while they are adjacent. For example, red will look more orange when it is placed beside blue, and likewise the blue will look more green.²⁸ This effect occurs in Riley's *Late Morning (1.13)* where a yellow haze appears towards the centre (where it is white) by virtue of its interaction with the various red and blue stripes.²⁹



1.13

Bridget Riley, Late Morning, 1967–8.

Polyvinyl acetate paint on canvas, 2261 x 3594 mm.



1.14

Bridget Riley, Fall, 1963.
Polyvinyl acetate paint on
hardboard, 141x140 cm.

Works such as Riley's paintings are amongst many others that begin to enter the realm of architecture. Their use of a repetitive geometric language seems to extend beyond the peripheries of the canvas and into the physical space occupied by the viewer. Furthermore, they physically interact with the viewer's subjective perception through the manipulation of visual depth.

The work of artist Carlos Cruz-Diez overlaps the Op Art movement, and he continues to be a practising artist today. At the architectural scale, Cruz-Diez's intensely coloured kinetic paintings occupy entire walls and urban crosswalks. Like Op Art paintings, they physically engage the viewer only at an amplified scale, providing a contemporary example of painting extending into space. In describing his large scale urban artwork, Cruz-Diez has written:

They are not referential discourses, as in the Gothic, the Renaissance, or the work of Mexican muralists. They profess a different starting point by which real time and real space replace time that is inferred or transposed.³⁰

The kinetic aspect of Cruz-Diez's work is hard to capture in photographs, but video documentation reveals an amazing chromatic movement that occurs in his paintings when the viewer walks alongside, through, or directly upon them. In his smaller pieces entitled *Physichromies*, strips of colour seem to continually shift and transform into other colours as the viewer shifts their gaze, almost like a hologram. The very name *Physichromie* aptly captures Cruz-Diez's interest in the *physical* qualities of colour.³¹

The concept of illusion is redefined here. Unlike the illusionistic realism of traditional painting, reality is not simulated or represented, but rather recreated at a 1:1 scale. Cruz-Diez emphasizes:

The colour is in space, it is NOT an illusion. It is "virtual," indeed, but it is also real, because it results from our organism and our movement in front of the work.³²

Contemporary artists Jim Lambie and Yayoi Kusama also create vibrant, immersive spaces using simple two-dimensional graphics made out of coloured vinyl tape.

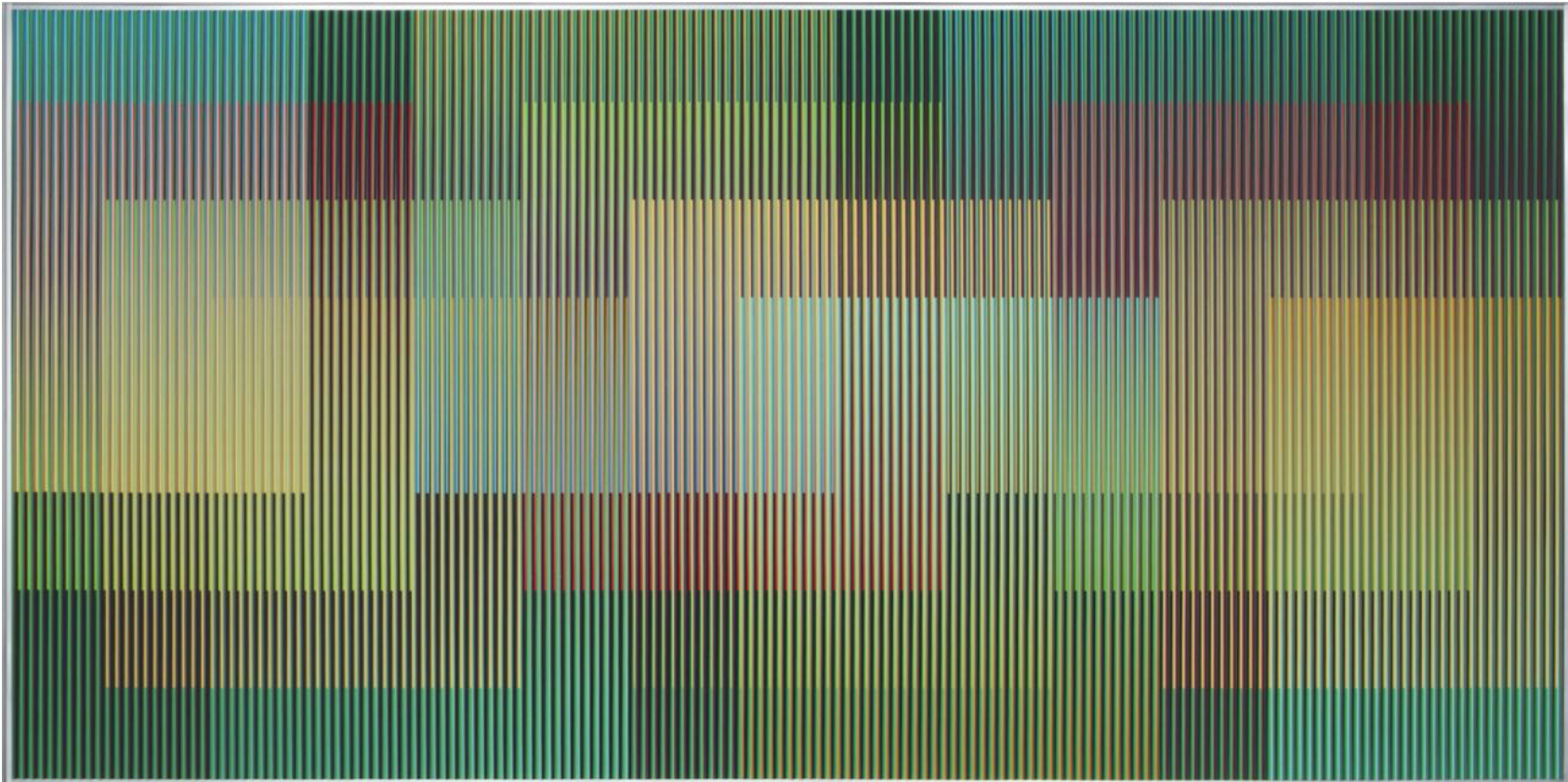
Lambie employs coloured strips of singular width to delineate the ground level of the spaces he occupies, redefining the architecture (1.18-1.19). Kusama is famous for her extreme use of brightly coloured polka dots that indiscriminately cover entire rooms: floors, walls, ceilings, and the various objects placed within them (1.20-1.21).

These artists demonstrate a provocative traversal of boundaries between art and architecture, through the surface. In the field of architecture, however, the idea of an 'architecture of skin' is too often relegated to interior design, decoration or commercial art.

1.15

Carlos Cruz-Diez, Physichromie 1740, 2011.

Silkscreen PVC modules and inserts mounted on plywood with aluminum strip frame, 35.5 x 70.9 in.



1.16

**Carlos Cruz-Diez, Casa Daros,
Rio de Janeiro, 2011.**

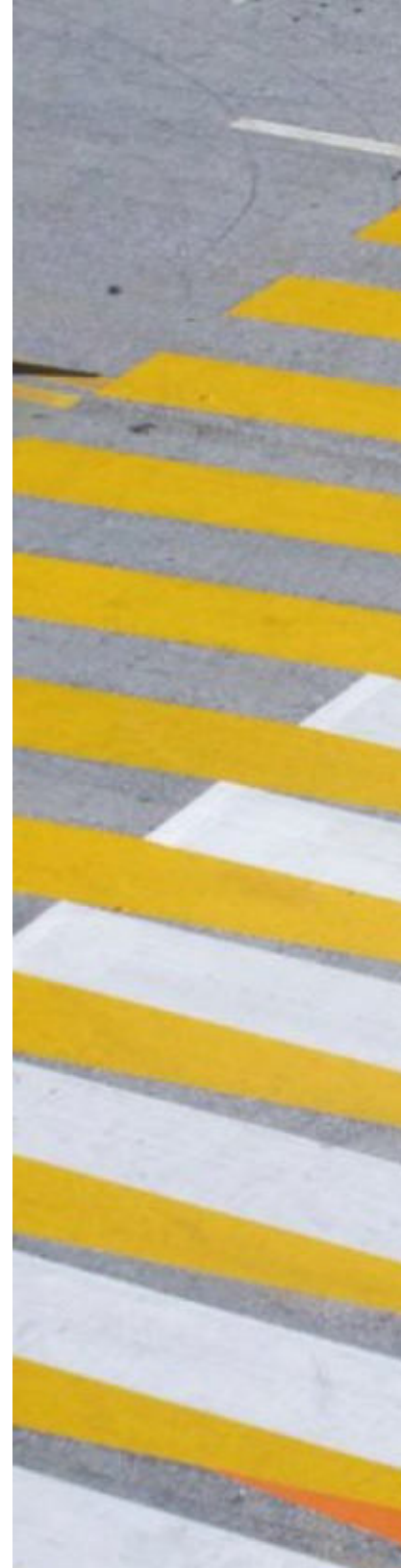
Painted wall intervention, 2.5
metres high, 87 metres long.



1.17

**Carlos Cruz-Diez, Crosswalks of Additive
Colour, Miami Beach, 2010.**

Painted intervention on crosswalks for the
Art Basel - Miami Beach annual art show.







1.18
Jim Lambie, *Zobop*. Installation view at the Hirshhorn Museum, Washington DC, 2006.



1.19
Jim Lambie, *Zobop*. Installation view at the Dallas Museum of Art, 2005.





1.20
Yayoi Kusama, Polka Dots Madness 6.



1.21
Yayoi Kusama, The Obliteration Room.
Installation view at the Queensland
Gallery of Modern Art, 2011.

Commercial Art, Fashionable Architecture

At what point does architecture, or more specifically the architectural surface, truly distinguish itself from matters of consumer culture? It occurred to me that my first mural at the floral shop was indeed driven by commercial needs. Surfaces are, after all, the obvious perpetrators of advertising, whether manifest on the giant billboards of expressways, building signs, or pop-up ads on an iPhone application.

My interest in architectural colour is also complicated by the fact that advertisements often constitute the main source of colour in many urban centres. This condition is lamented by many graffiti artists who view street art as a reclamation of public space that is so often sold for advertising.³³

To a certain degree, architecture must partake in the economy of consumption and digital or printed media to survive. The same thing can apply to art. In the sixties, Andy Warhol actually embraced this when he said, “Business art is the step that comes after Art.”³⁴ By the time I completed my third mural, I realized that only one of them was entirely removed from the economic necessity of consumption. It is also no coincidence that, aside from coverage of my material costs, I was not paid to do it.

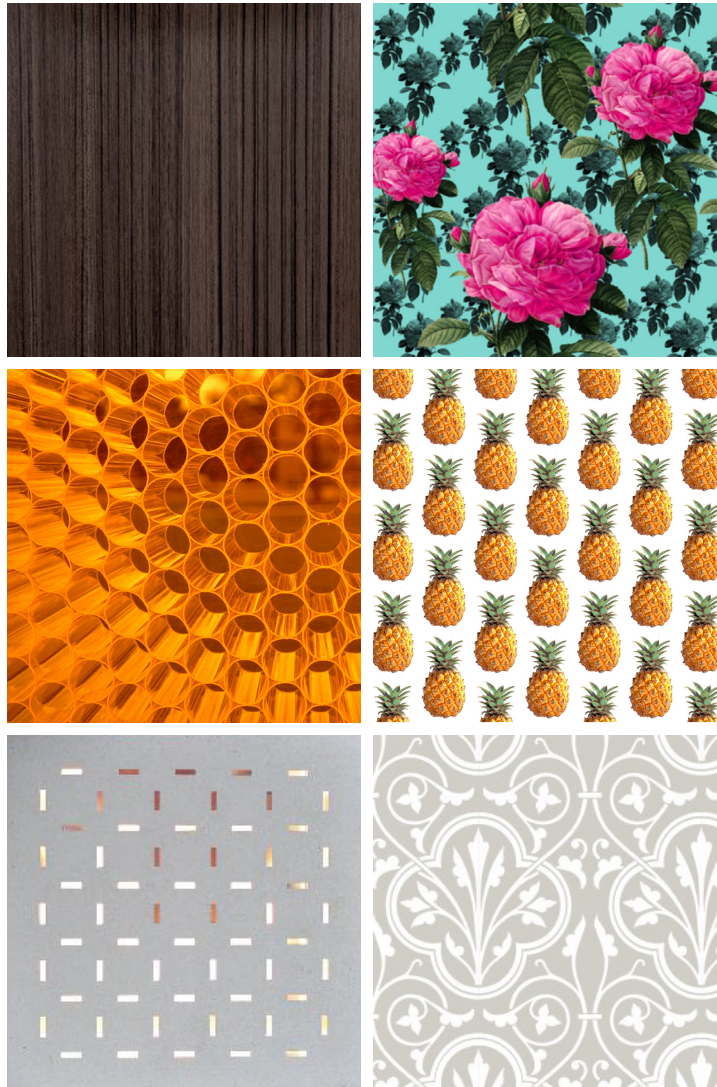
In his critique of contemporary culture’s obsession with images and spectacle, author Hal Foster has described the current capitalist economy as:

desperate to sustain consumer spending, [wherein] display remains all-important ... here architecture often serves as both stager and staged, both the setting for fine commodities and the fairest commodity of them all.³⁵

When architecture directly engages brand identity and exterior appearance, a parallel relation to fashion cannot be overlooked. Fashion too, with its seasonal cycles and inevitable focus on aesthetics, is historically viewed as the antithesis to architecture, which values permanent, robust structures and functionality. On the other hand, high-end fashion boutiques frequently have the budget to possess sophisticated and elaborate building skins that blur the distinction between architecturally functional, decorative, or commercial surfaces (1.24).

***kitsch** (noun)

[mass noun] art, objects, or design considered to be in poor taste because of excessive garishness or sentimentality, but sometimes appreciated in an ironic or knowing way.



1.22 (left column)

Architectural Material Samples.

top: 3M DI-NOC Architectural Finishes FW-7007-E.

middle: Panelite ClearShade IGU CS-U-TO4, used in OMA's McCormick Tribune Campus Center at Illinois Institute of Technology.

bottom: LiCrete, a transparent concrete panel.

1.23 (right column)

Architectural Material Samples.

top: "Redoute' roses, bright pink & robin's egg blue" wallpaper designed by Peacoquette Designs.

middle: "Pineapple" wallpaper designed by Emma Hartung.

bottom: graphic by Elkeslasi Surface Design, available in multiple materials including etched glass, cement board and aluminum composite panel

Underpinning Foster's argument is the notion that entire buildings can in essence become giant advertisements by virtue of their outward image. This relationship between architecture and commercialism is so often condemned by architects. It is not only a question of the deceit of advertising but also the idea that, when applied commercially or mass produced, art is often stigmatized as decor or 'kitsch'.* This definition however does not always extend to all of the synthetic architectural surfaces and finishes with which we are so familiar. If we define the decorative as anything nonessential and untrue to a material's natural, 'bare' surface, how is a vinyl floor tile which imitates wood any less decorative than a floral wallpaper? It is safe to assume that most architects would prefer the materials in column 1.22 over 1.23, but in principle they are not that different.

1.24

Louis Vuitton Stores.

A. Louis Vuitton in Tokyo. The facade designed by architect Jun Aoki employs thousands of glass tubes and perforated reflective panels.

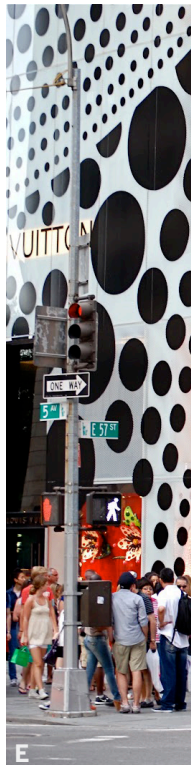
B. Louis Vuitton in Miami, with artwork by the street artist RETNA.

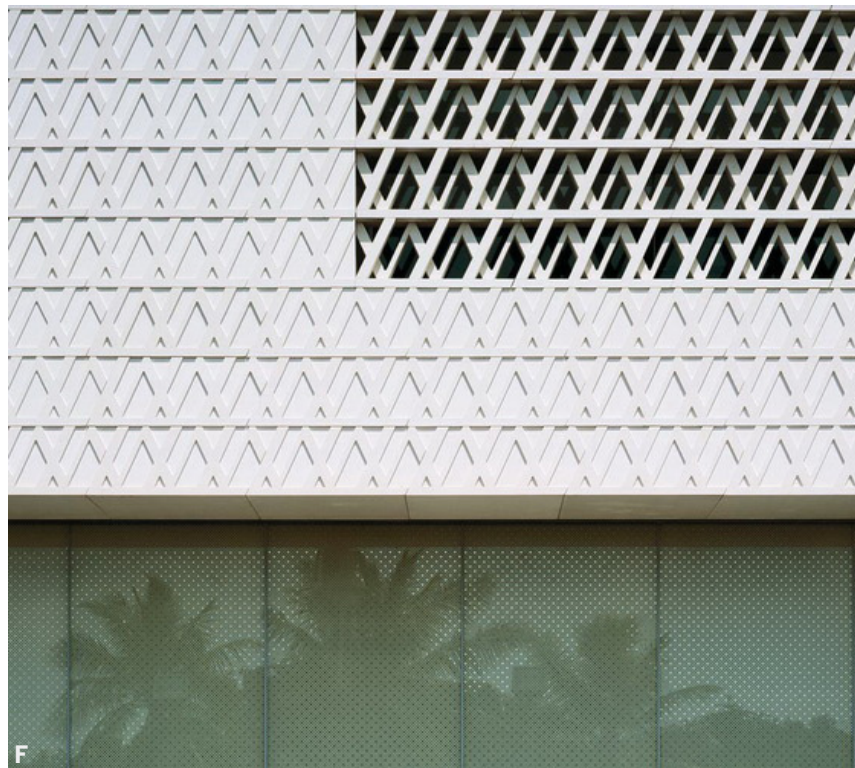
C. Louis Vuitton on Canton Road in Hong Kong. The 800 square-metre facade is a giant LED screen designed by the architect Kumiko Inui.

D. Louis Vuitton Kobe Maison in Kobe, Japan. The three-dimensional facade incorporates metal skins and printed glass panels.

E. Louis Vuitton in New York at the corner of 5th Avenue and 57th Street. The glass facade was designed by Jun Aoki, the more recent polka dot installation is by Yayoi Kusama.

F. Louis Vuitton Flagship Store in Guam. The facade is made of glass and artificial stone.





Objectives for Wall Painting

Architectural critic and scholar Sylvia Lavin has described a concept to which I would like to relate, of “us[ing] painting to give architecture to building”³⁶. Writing in reference to the Hammer Museum lobby at the University of California, Los Angeles, the multilevel walkway is regularly given over to artists who transform the space with murals, and it becomes an extension of the art gallery itself (1.25).

Lavin explains that these murals respond directly to the walls of the space, as opposed to being predetermined images that simply occupy the wall. In so doing, the walls are treated as both canvas and *surface*, without strictly falling into either category of painting, decor, or architecture. She describes this work as “almost architecture.”³⁷

Lavin asserts that while architects often dismiss such interventions as superfluous, the murals evidently create effects of an architectural nature, such as altering the viewer’s sense of spatial depth and scale. Previously, the space had no experiential effect on the user to speak of - it was simply a bleak, oversized lobby which encouraged no one to stay inside it.³⁸ She follows a similar line of thought in her recent book, *Kissing Architecture*, which celebrates the conjoining of architecture and art in many contemporary projects, highlighting a discrepancy between current architectural production and attitudes residing within architectural discourse and education.

Lavin looks at several examples of work where different artistic mediums meet the architectural surface, such as light projections, which she defines as acts of “kissing” architecture. She describes such works as “pushing architecture beyond its own envelope”,³⁹ a “thickening” of the architectural surface,⁴⁰ and having the capacity to render ‘invisible’ architecture more visible.⁴¹

Lavin asserts that this embracing of the architectural medium with other mediums need does not involve the collapsing of two mediums into one, nor the masking of one medium by another, but instead the *equal presence of both*. The unique thing about this condition is that it abolishes the hierarchy and opposition between art and architecture - here they coexist and work together to generate new experiences.⁴² The artwork is supported by the architecture, while simultaneously revealing its material support and drawing attention back to the architecture. This is particularly effective with much of the banal commercial architecture of today, which tends to operate simply as a backdrop for other activities or objects. Like street art, the addition of another artistic medium to the architectural surface can make the architecture reappear and better engage its audiences.

It is hard to accurately define how my work may influence the experience of a space. The delight it seems to have generated and its creation of more memorable or unique places is not dependant upon a specific artistic approach. However, if it truly is the case

that almost anything would be an improvement to a bleak wall, then I am faced with the problem of rationalizing my work.

While the practice of architectural design is unavoidably a combination of the objective and subjective, by embarking on painting architecture for an architecture thesis I am immediately confronting this dichotomy and its connection to the long-standing morally implicated issue of decoration as a superfluous and/or excessive element in architectural discourse.

My primary objective for wall painting in this thesis is to find a way for the medium of painting to interact with the medium of architecture in order to allow the latter to reappear with new meaning. In other words, to “*give architecture to building.*”⁴³

1.25

Transformations of the Hammer Museum Lobby.

A. Mark Flores, See This Through, 2011.

B. Linn Meyers, untitled, 2011.

C. Jan van der Ploeg, Wall Painting no. 183, 2007.



Methodology

I use painting as a tool to aesthetically explore concepts relating to the architectural surface on a direct and personal level. My approach consistently confronts dichotomies residing within painting/architecture and the tectonic/atectonic, striving to highlight the ambiguities of that discourse.

Surface manipulations can transform the perceived scale, weight, tectonic order and spatial understanding of a given wall, facade, or building volume. This challenges architecture's status as a discrete object with a defined set of boundaries and spatial limits. Here, the literally defined form of a building or the planar condition of a wall is perceptually undermined through the treatment of its outer surface or building skin.

The skin also has the potential to engage one's perceptual imagination through visual effects such as perspectival depth, colour contrast phenomena, moiré, rhythm, and movement. Such effects transform how architecture is perceived because the *skin* becomes a *space* that is visually occupied itself.

I strive to achieve this by viewing the mural as a *surface* rather than an easel painting that has simply been transferred to a wall. This surface is treated as a landscape as opposed to a framed image or a passive coating that reinforces the existing architectural form. The latter approach is how paint is conventionally used by architects today - not as a material but as uniformly applied protective or

decorative architectural coating. I conversely try to use paint as a constructive material, a creator of space rather than a mere coating subordinate to the architecture it covers. Architectonic qualities such as depth, materiality, weight and transparency are expressed through the painted two-dimensional surface.

Paint may not particularly suited to this purpose - its application upon the surface is more unpredictable, and it cannot be measured or quantified in the same way as a conventional architectural module such as brick. However, it is nuances and gradations of colour and opacity provide an opportunity to explore visual effects that transcend the literal boundary of a wall plane. It is important for me to combine these painterly qualities with architectonic ones, to find a way to, paradoxically, create an architecture using paint.

My methodology in the design of each mural consistently involved creating an underlying geometric system to 'ground' the art in an imaginary *tectonic*, and to give the paintings a sense of weight. This was a way for me to personally balance the tension inherent in this project, between the free-form nature of painting and the more rationally inclined motives of architecture. Manipulations of scale, shapes, forms, patterns and colours were constantly thought of in relation to their given context.

I frequently thought of Sol LeWitt and his abstract wall drawings, particularly his methodology. He had essentially reduced his art to a set of elaborate rules or parameters to apply to a given wall. The same set of instructions could result in quite different outcomes from one wall to the next, since certain parameters depended on the site, such as the wall's height or midpoint. In that sense, each artwork can be described as both interconnected to its site and independent of it.

The set of drawing or painting instructions practically constituted the artwork itself, and LeWitt actually hired draughtspeople to execute each work. This process intrigued me as being very similar to that of architectural design. It is almost as if, by virtue of being drawn on architecture, his work acquired the rationality associated with architectural production.

A key concept behind Sol LeWitt's work is the refusal to create a distinct art *object* for viewing by an independent *subject*. Being located in situ and directly on the walls, his artworks cannot be considered separate entities transported to the gallery site but are instead more like *spatial* elements. He employed simple repetitive geometries - such as orthogonal lines and squares - that are rendered experientially complex by virtue of their scale and application on walls. He describes them as "*creat[ing] a new kind of space and sometimes, even a new kind of light.*"⁴⁴

The use of repetitive elements, patterns and series in LeWitt's work also points to the inherent objectivity of basic shapes and patterns. Author Petra Schmidt describes patterns as less "dangerous" in the eyes of architects because, unlike some forms of decor, they have an underlying order or structure.⁴⁵ LeWitt also sought to avoid evidence of the human hand in his work. This ties back again to architecture, a profession in which the idea of the architect as an artist with 'signature' buildings is still contended.

Several of Sol LeWitt's wall works create mild optical illusions in the form of spatial depth or movement. The use of colour and strong black-white contrasts play a key role in this. He was interested in "the nature of space, perception, and the sensory effects of light, line and colour", and "played perspectival games with shapes that simultaneously advanced and receded".⁴⁶

The paintings executed for this thesis evolved from multiple ideas and influences, from my initial observations of graffiti to my investigation of conceptual artworks by more formal artists. Throughout this exploration I have consistently been conscious of my position in relation to architecture. In tandem with these explorations and productions of artwork, a series of questions have gradually come to the fore, the first of which is the very question of the status of surface in architecture.

1.26

Sol LeWitt.

A. Wall Drawing 1081, Acrylic paint, 2003.

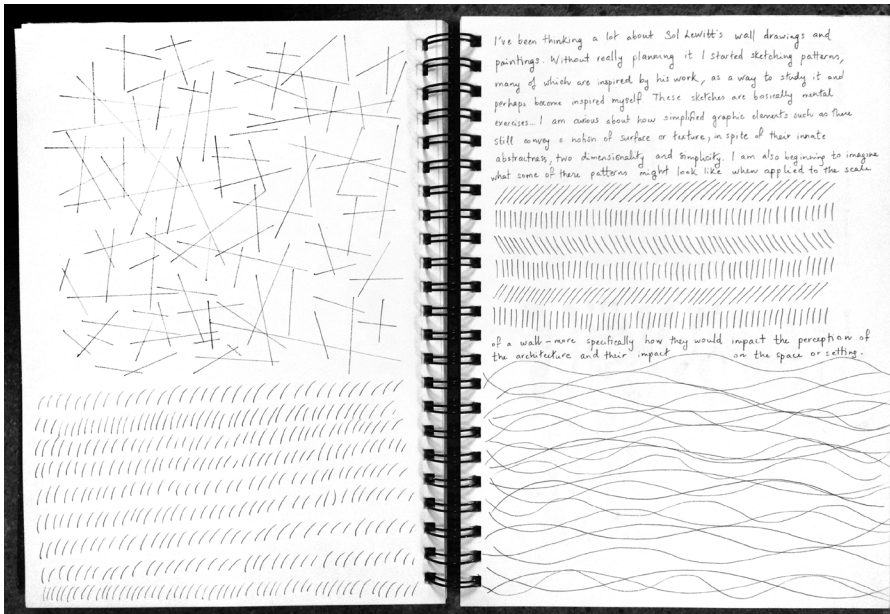
B. Wall Drawing 631, India ink, 1990.

C. Wall Drawing 381, India ink, 1982.

D. Wall Drawing 419, Colour ink wash, 1984.

E. Wall Drawing 692, Colour ink wash, 1991.

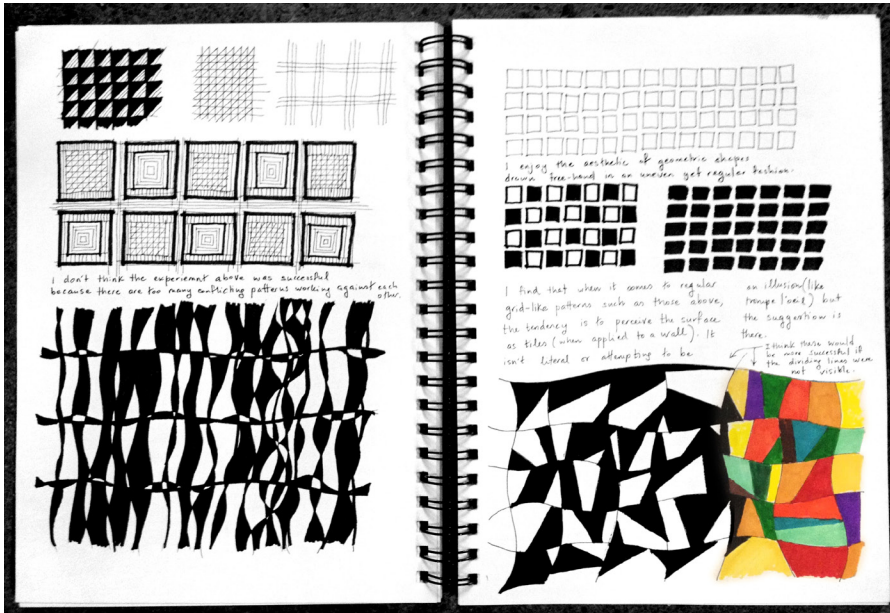




1.27

Experimental Studies of Sol LeWitt.

Samples from my Sketchbook.



The morally implicated decorated surface in architectural discourse offers a point of departure from which the historical connection of surfaces to *deception* (and a cherishing of 'truth') is observed. In the field of art, illusion is its prerogative, but when applied to architecture it becomes an issue of authenticity, an issue which seems to haunt architecture today.

As with decoration, architects traditionally regard questions of image, artificial colour, or illusionism (and their innate irrationality as compared to architecture's structure, tectonics or functions) from a critical or derogatory standpoint, yet, contemporary architecture increasingly engages them. The current preoccupations with surfaces and visual effects in many contemporary architectural projects appears to be in a startling contradiction to principles of the architectural discipline, and the very ways of thinking that have shaped my own throughout my architectural education.

In the pages that follow, I document my personal exploration of painting architecture, from experimental paintings, drawings, and sketchbook samples to the design and installation of three murals.

"While the painter and architect are destined to meet on the surface they share, the meeting necessarily takes the form of a confrontation because of their different attitudes towards that surface. It is not that the architect provides the space and the artist provides the coloured emphasis of that space. It is the colour that provides the space."⁴⁷

- Mark Wigley, *White Walls, Designer Dresses: The Fashioning of Modern Architecture*

WORKS

Painting 1: Tectonic Surface

Site:	South-facing exterior facade of a single storey commercial building, the Bread Factory lofts.
Wall Type:	Concrete block
Address:	7 Grand Avenue South, Cambridge, Ontario.
Mural Height:	13' on west end to 15' on east end.
Mural Width:	60'
Mural Area:	700 sf
Materials, Tools, Equipment:	140 cans of Molotow™ spray paint 12" wide Masking tape 6" wide Masking tape Painter's tape Duct tape Ladder Rolling Scaffolding (castor wheels) Rolling cart for transporting supplies Measuring tape Carpenter's pencil Craft knife

1.28

Bread Factory site photographs before the mural intervention.



I noticed this wall as an ideal site for a potential mural, so I contacted the building owner to ask permission to paint it. To my pleasant surprise, he was supportive of the idea and agreed to contribute financially to my material costs.



Tectonic Surface was a significant turning point in my endeavour to investigate the spatial possibilities of the two-dimensional surface. Not only did it provide me with public exposure, it was the largest painting I had ever done thus far, my first exterior mural, and my first time using spray paint.

I approached the mural design almost the same way as I would an elevation, exterior or interior. The painting was thought of as another layer of the building façade, and I sought to integrate the unique immaterial quality and formlessness of paint with the tactile, modular physicality of the architecture's concrete blocks. As noted previously, I also strove to create a painting with architectonic qualities which was rooted in an underlying 'system'. For me, painting the wall was as much about concealing its surface as it was about revealing the wall itself, or allowing it to reappear. I wanted to situate the mural in a manner distinct from that of simply hanging a painting, as one would do in an art gallery. As a result, the painting superimposes its own constructional logic upon that of the concrete, but it never fully assumes one system over the other – both are on simultaneous display, as I purposely exposed sections of the wall within the painting composition.

I embarked on developing a design by initially taking the concept of an inverted box or pyramid as a way to render depth on the wall surface. I intended to develop this concept into a modular system so that its repetition could generate visual rhythm on the facade.

After settling on a module design, I experimented with ways of repeating it and adding variation within that regularity so that its repetition would not become too monotonous or overbearing.

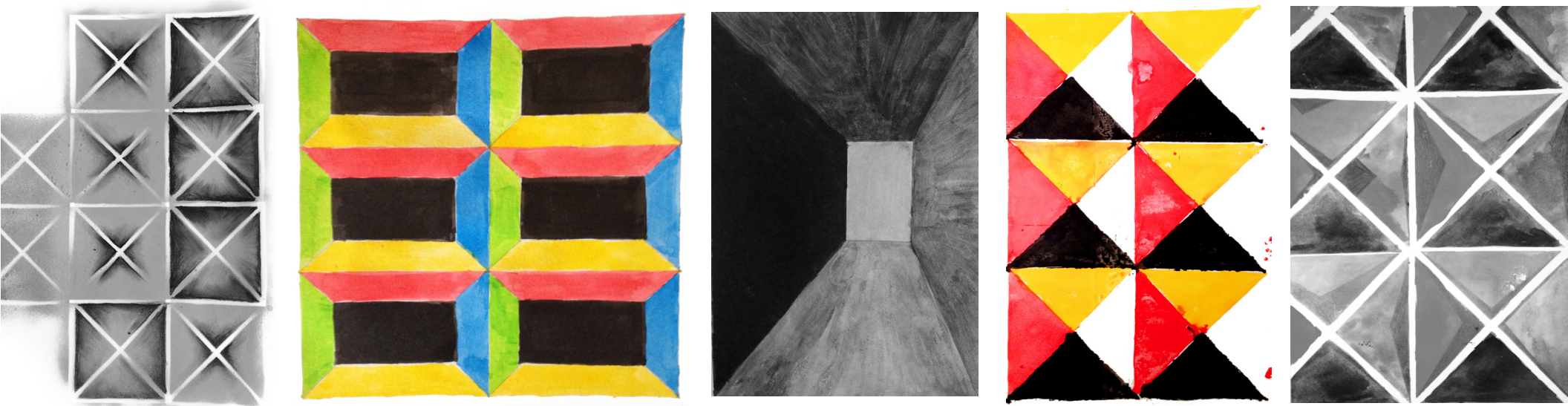
Using the existing doorways of the wall as a datum line, I divided the wall into two rows of abstract windows. Proportionally this seemed to work well with the site, particularly the rhythm of large windows of the adjacent school building. I then added elements of variation using irregular curvilinear shapes overlaid upon the grid, interacting with it directly. As I refined the design, I modified gradients and opacities to enhance the depth, movement and visual drama.

At a later stage I thought more critically about colour and composition. From my perspective, the site's predominant colours were essentially the red of the brick (of the Bread Factory building and architecture school) and the blue sky. I took those two colours as a point of response, expanding my palette from there, (hence the large use of not only red and blue but various shades of purple and pink in between). I avoided green so as not to clash with nature, and instinctively added a few hints of yellow and orange, albeit sparingly. In terms of composition, when studying the elevation I decided to have the painting fade in saturation and 'break apart' towards the west; a gesture intended to reduce the visual length of the wall.

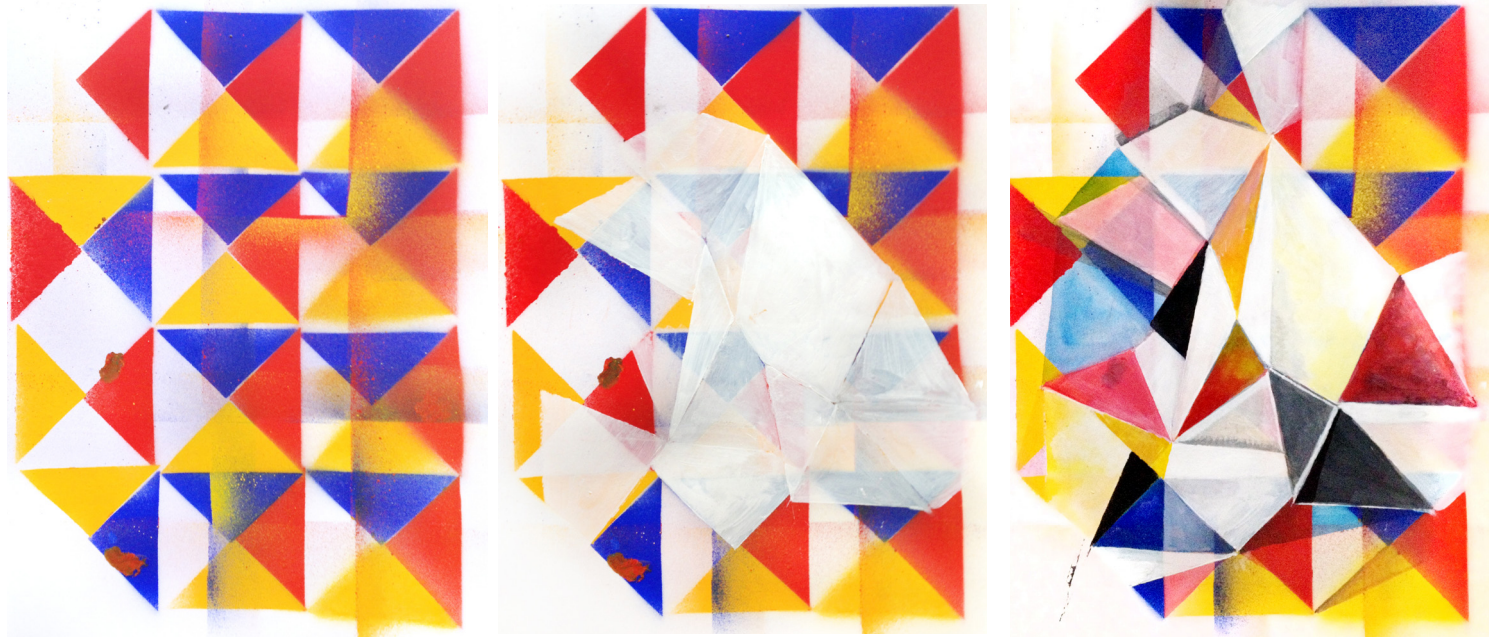
1.29 (pages 52-54)

Pyramidal Modular Studies.

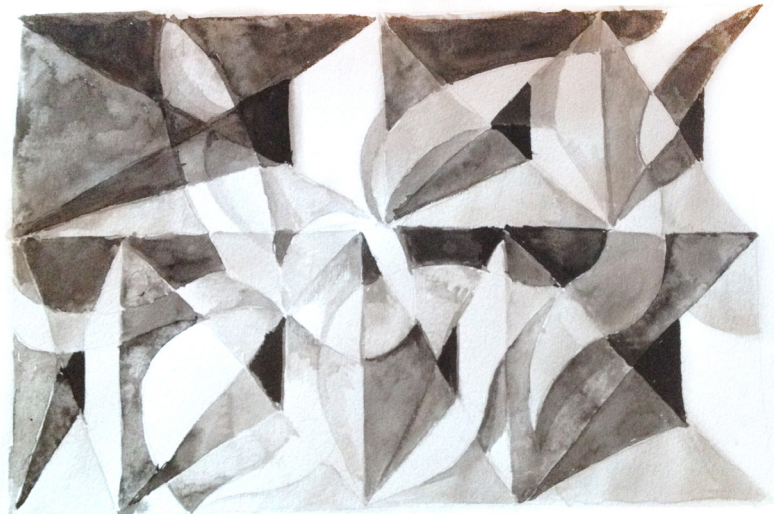
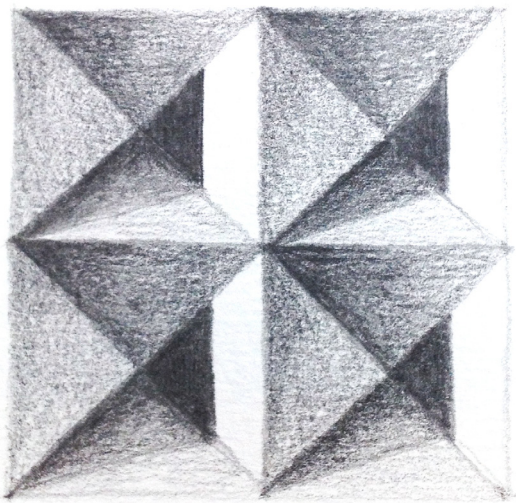
Experimental drawings and paintings using ink, charcoal, spray paint and acrylic paint on paper and card stock.

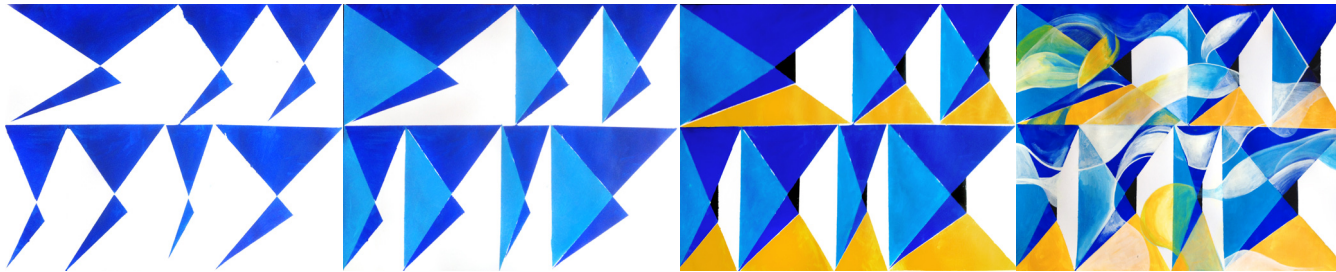


Taking my cue from abstracted windows and screens, I began using pyramidal forms as a way to suggest depth, either behind or in front of the picture plane. These are experiments drawing repeated modules with which to 'break down' the wall into in an alternate tectonic system using paint. At this stage I was working in greyscale and basic primary colours; focussing only on testing formal qualities and depth perception.



Here I began to explore ways of integrating a more varied and irregular 'system' over an initial set of repeated modules.





1.30

Progression of a modular design concept.

The yellow and blue hues were initially selected simply to indicate gradations from light to dark.



1.31

Photo-montage rendering of the mural design.

The mural design was generated digitally using photographs of the site and the painting above. I modified the colours in response to the site. The colour scheme is based on two key hues of red and blue within which a range of pinks and purples emerge. Splashes of yellow and orange were added afterwards for visual differentiation and highlights.



Colours derived from the site.

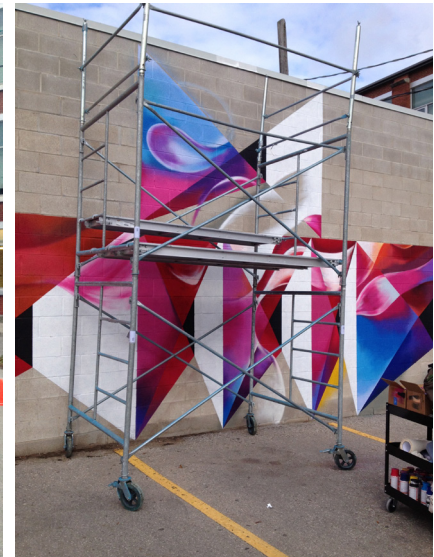
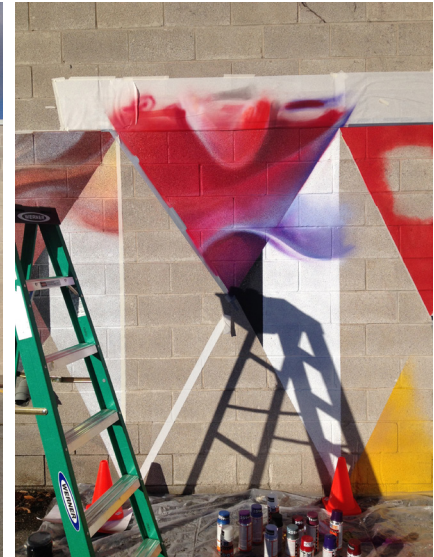


Expanded colour range selected for the mural.

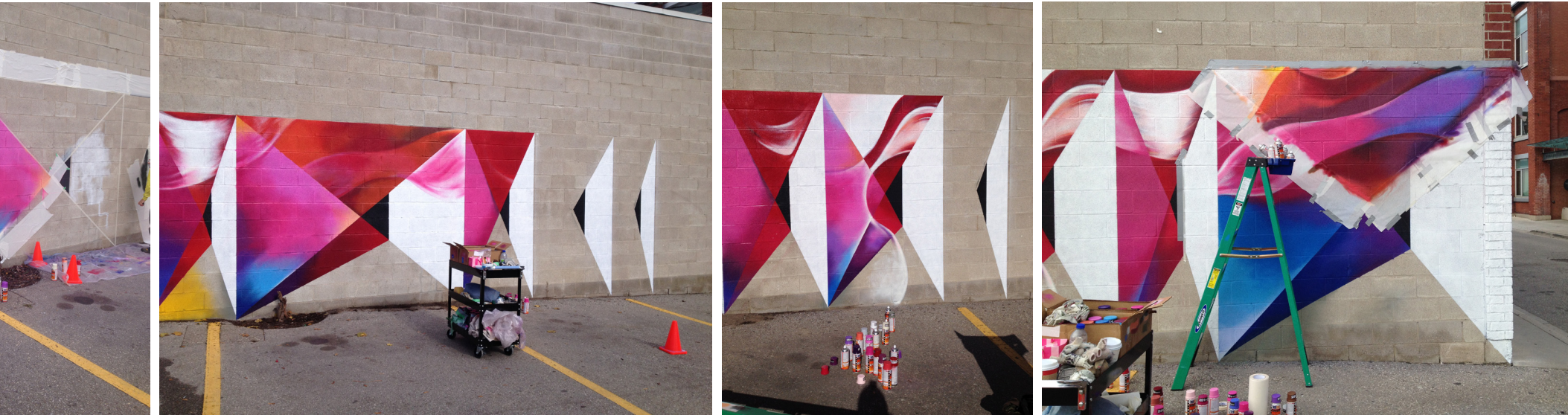
1.32 (facing page)
View of Tectonic Surface, the finished work, May 2014.



I began the mural in November, thinking it would not take much longer than a week. However, with the short hours of daylight, cold temperatures and extremely sporadic days of workable weather, progress was slow. A huge part of my difficulty was trying to control the placement of masking tape and spray direction under strong winds, let alone the reduced pressure of the spray cans under low temperatures. Consequently, I had only completed fifty percent of the mural by the time the snow had started. The painting had to halt for the entire winter and resumed five months later in May.



1.33 (pages 57-60)
Progress photographs of the installation of Tectonic Surface.







1.34 (continued on pages 63-64)

Views of Tectonic Surface after its completion.



Tectonic Surface is a play on our perception of surface, depth and materiality. It presents a series of contradictions: between the physical flatness of paint and its illusory depth; the thinness of its coating and solidity of the wall; its varying visual transparency and opacity; the tectonics of construction and the atectonic painted surface.

When looking at it from a distance, we perceive it as a series of boxes that appear to recede into the wall. I wanted to demonstrate that this perception is in part, a decision or choice made by the viewer as well: we visually and mentally 'erase' the pattern and our awareness of the concrete blocks from our view. The artwork's introduction of colours, geometries and spatial effects effectively dematerialize the concrete blocks. Leaving parts of the wall exposed acts as a sort of reminder of the reality of the wall, drawing attention back to its tectonic construction, which people probably did not pay much attention to before.

Finally, Tectonic Surface challenges our preconceptions of foreground and background, questioning what constitutes art versus architecture, and the traditional idea that a painting must fit within a defined rectangular frame. Here, where the painting ends and begins is ambiguous, because the concrete blocks and doors inevitably become a part of the composition.





The public response to the project was extremely positive. I received countless thank you's for brightening up a wall that was previously perceived by many as dreary, monotonous, and disengaging. Several people expressed how the mural has had a positive impact on their daily commute to the school, the view from their office, apartment, or student workshop. Nevertheless, I wondered if at the end of the day, beautification was all that mattered. Is it conceivable that, if banal buildings and spaces did not exist, there would be no need for murals? Possibly.

There is the social dimension of such work to consider, just as all matters of aesthetics, society, and culture are interconnected. A case study such as Tirana reveals that the cosmetic treatment of the architectural surface can have far-reaching sociocultural impacts. While my murals do not have a particular social or political agenda, I believe that they must inevitably affect the atmosphere and collective perception of a given place, exterior or interior.

The responses to *Tectonic Surface* were in part due to its whimsical nature in the context of an anonymous parking lot with an underwhelming cinder block wall, coupled with the general awareness that it is a work of *art* (not advertising) made by an artist. Conventional architectural design is not typically appreciated in that manner because it is not as 'unexpected' in the way art can be when it is found outside of a gallery setting.

I came to discover that numerous people also enjoy photographing the mural: the next door hairstylists with their clients, a band of guitarists, a bride and groom, kids on bicycles, yoga instructors, and a man photographing his Porsche, to name a few.

1.35

Yoga instructor in a
“dancing warrior” pose.

1.36

Porsche for sale.



Digital material experiments.

'Digital' paintings on brick, concrete block, and cast-in-place concrete with exposed tie-rod holes.

Painting Materiality

Throughout the thesis I continually produced smaller scale paintings and digital experiments to investigate the role that paint has as a 'new' or added surface that possesses its own unique materiality, and the relationship of this materiality to the more concrete, component based materials of architectural construction.

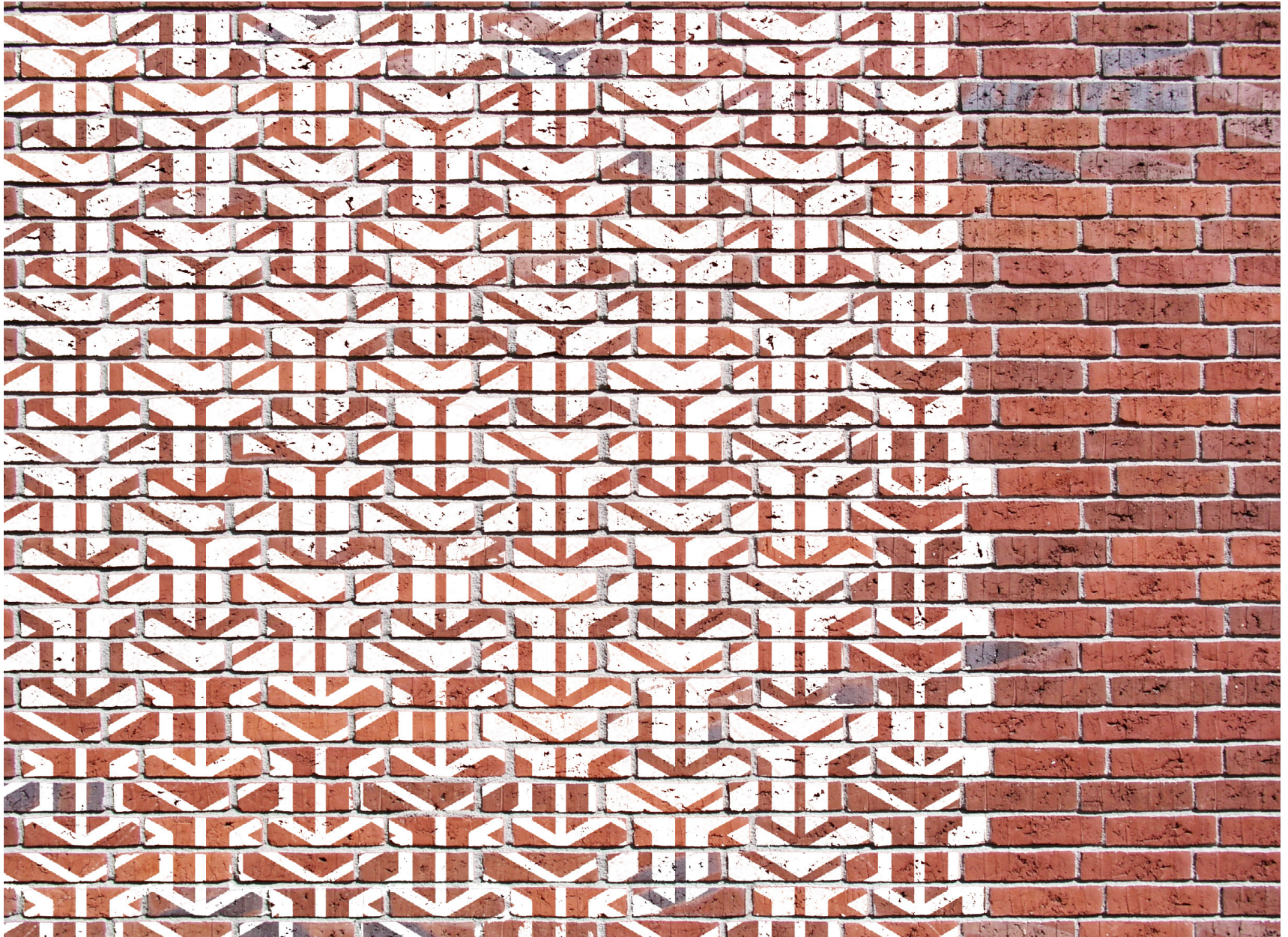
I experimented using conventional artist surfaces such as stretched canvas and gesso board but also found inspiration working on raw and/or architectural materials such as concrete block, faux-brick and plywood. With the latter mediums there was an evident tension to be explored between the material base and the paint. I painted directly on different material samples and digitally on photographs, testing the idea of simultaneously masking and exposing material qualities or modular components through the act of painting, as I had begun to do in *Tectonic Surface*. With the smoother blank canvases it was more of a tabula rasa condition so I focussed instead on generating entirely new material qualities, such as softness, fluidity, metallicity, transparency and folding.

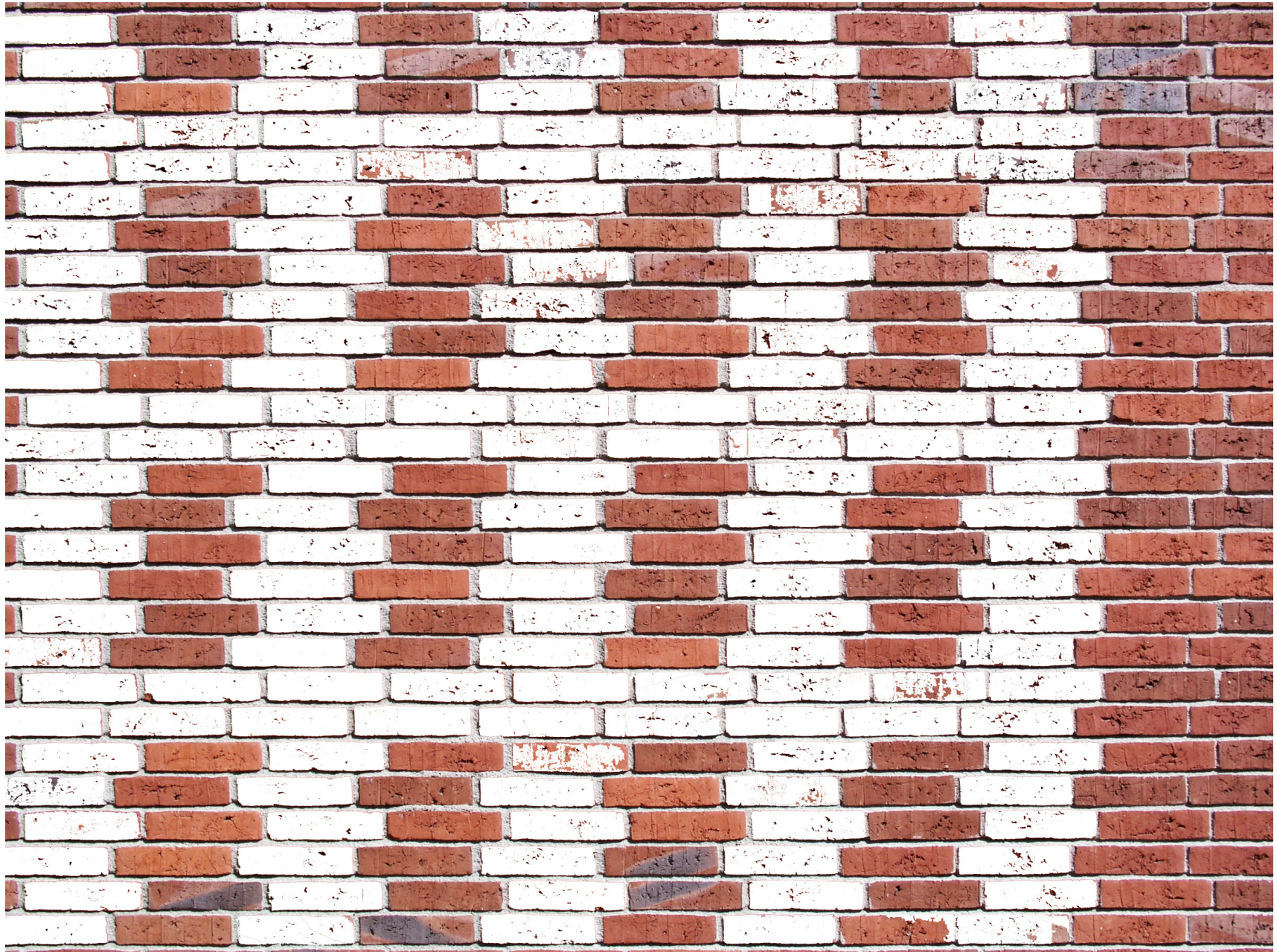
In the material-based experiments I sought to either blur the line or create a dialogue between the painted and bare, or the artificial and natural. I continually responded to the structure of the materials I painted on - such as the grain of plywood, or fragments of oriented strand board - while at the same time introducing another visual structure using paint, such as a grid or stripes. In some cases I used the given modular framework of the architecture

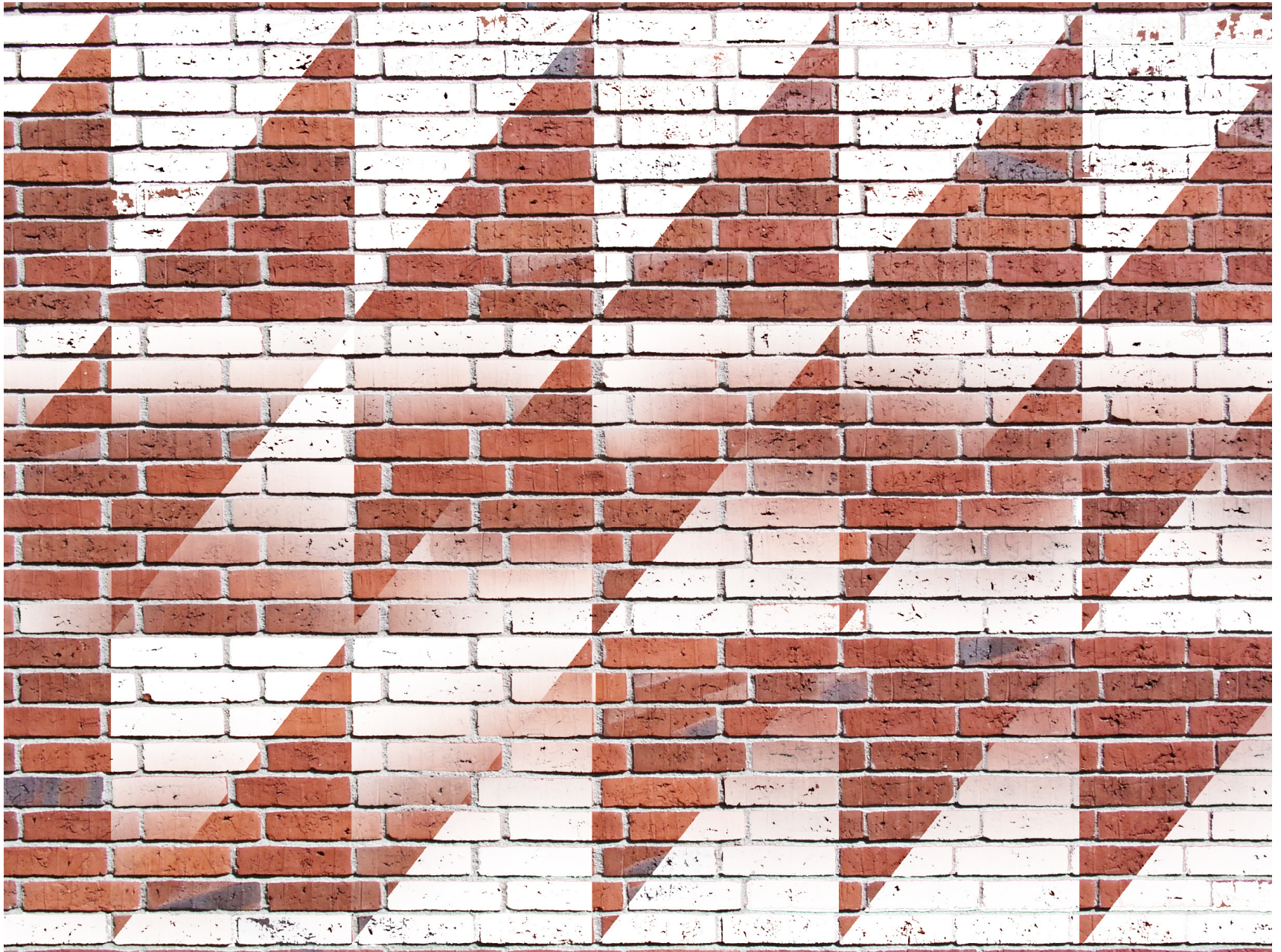
or material as a basis for a new painted tectonic, and in others I tried superimposing a completely unrelated one to compare the results. Through studying the relationship between painting and architecture thus far, I began to observe the emergence of several polarities. I strove to bridge the gaps, or collapse these opposing characteristics within my wall paintings:

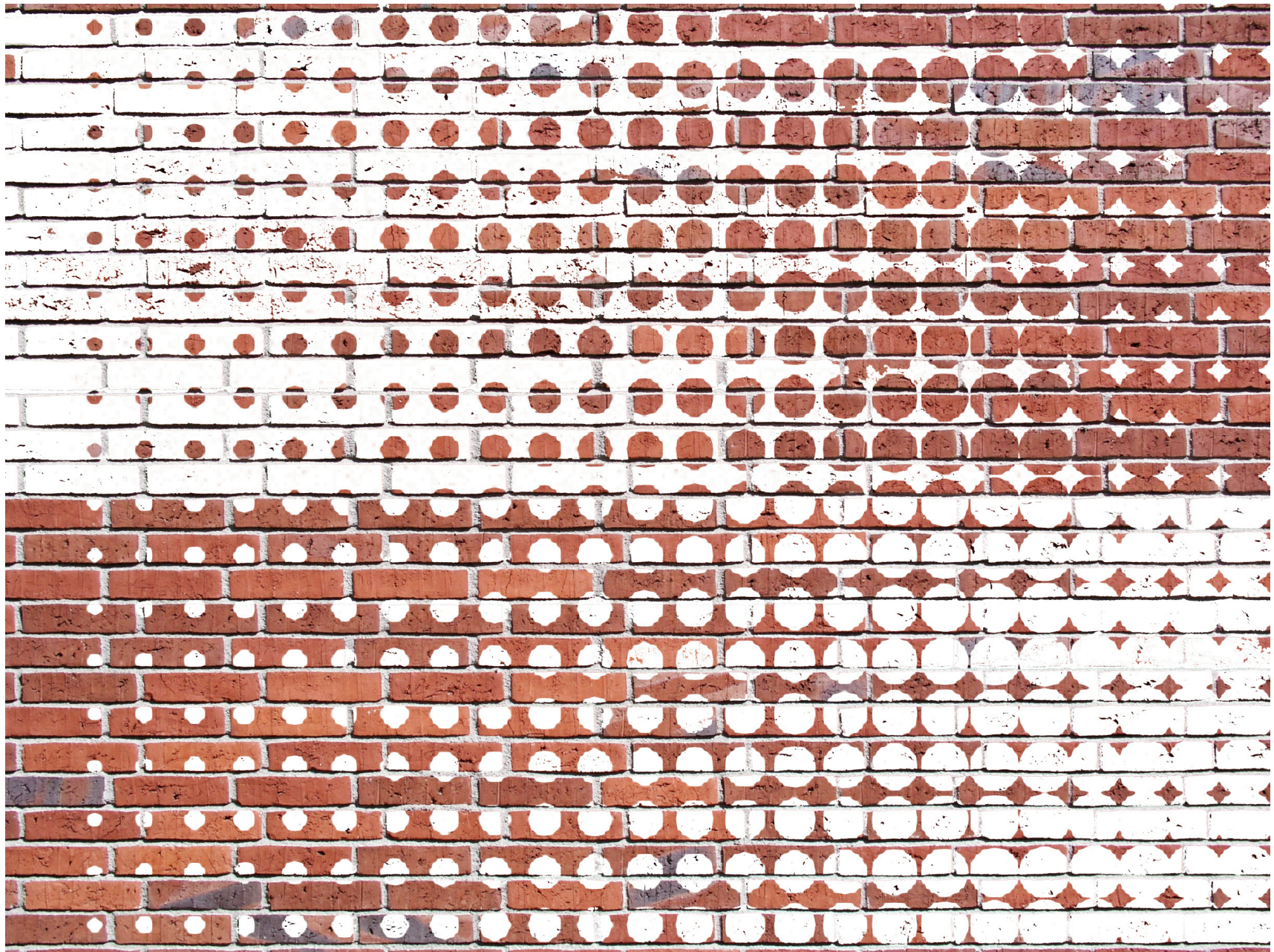
canvas | wall
surface | depth
shallow | deep
thin | thick
intuitive | rational
variation | regularity
nuanced | distinct
deception | truth
artificial | natural
immaterial | material
illusion | reality
concealing | revealing
covered | bare
decorated | pure

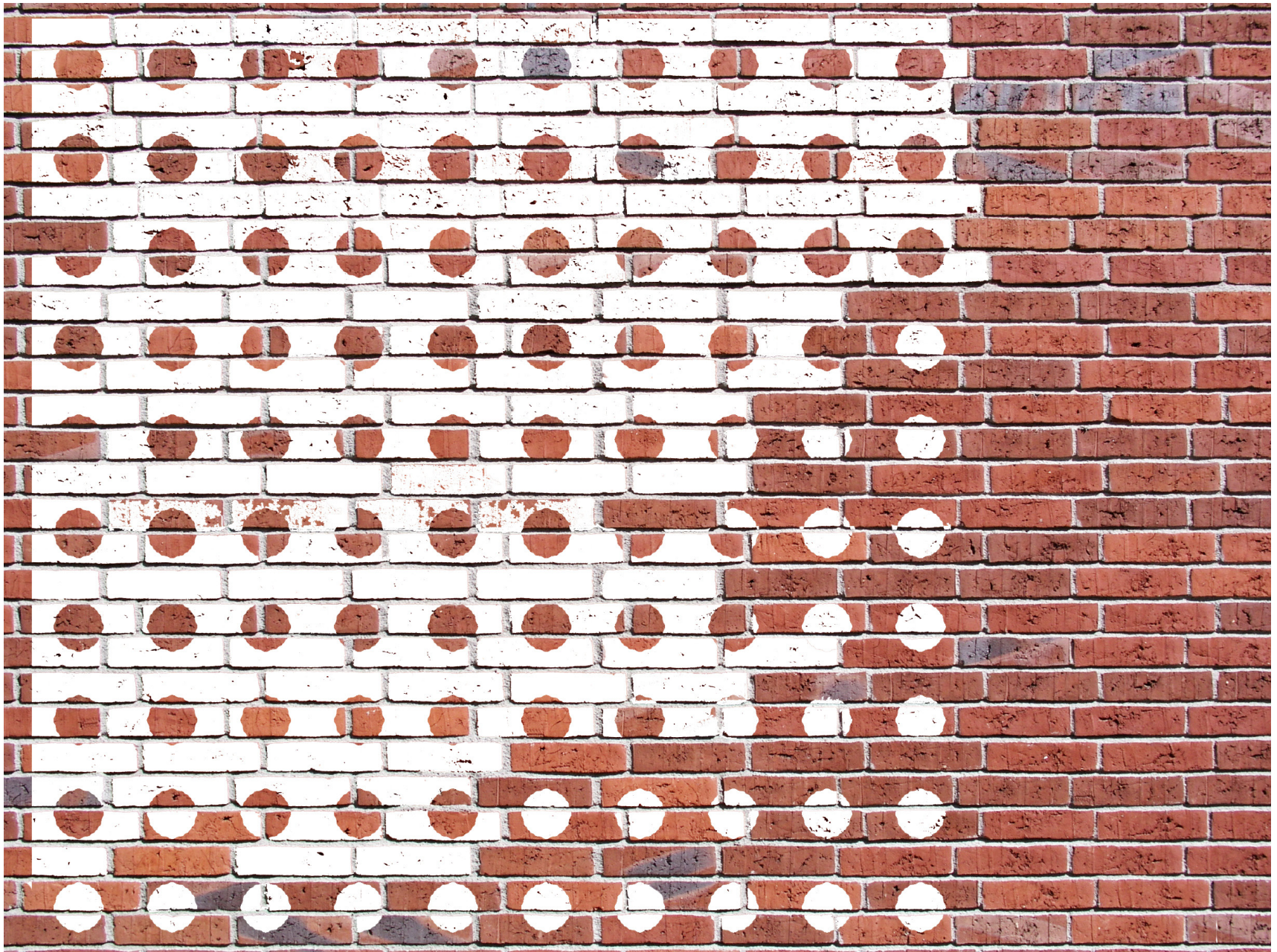
The questioning of these binary conditions in my artwork is mirrored throughout this thesis by my research and underlying argument that the rigid claims of one ideology over another is a debatable, grey area.

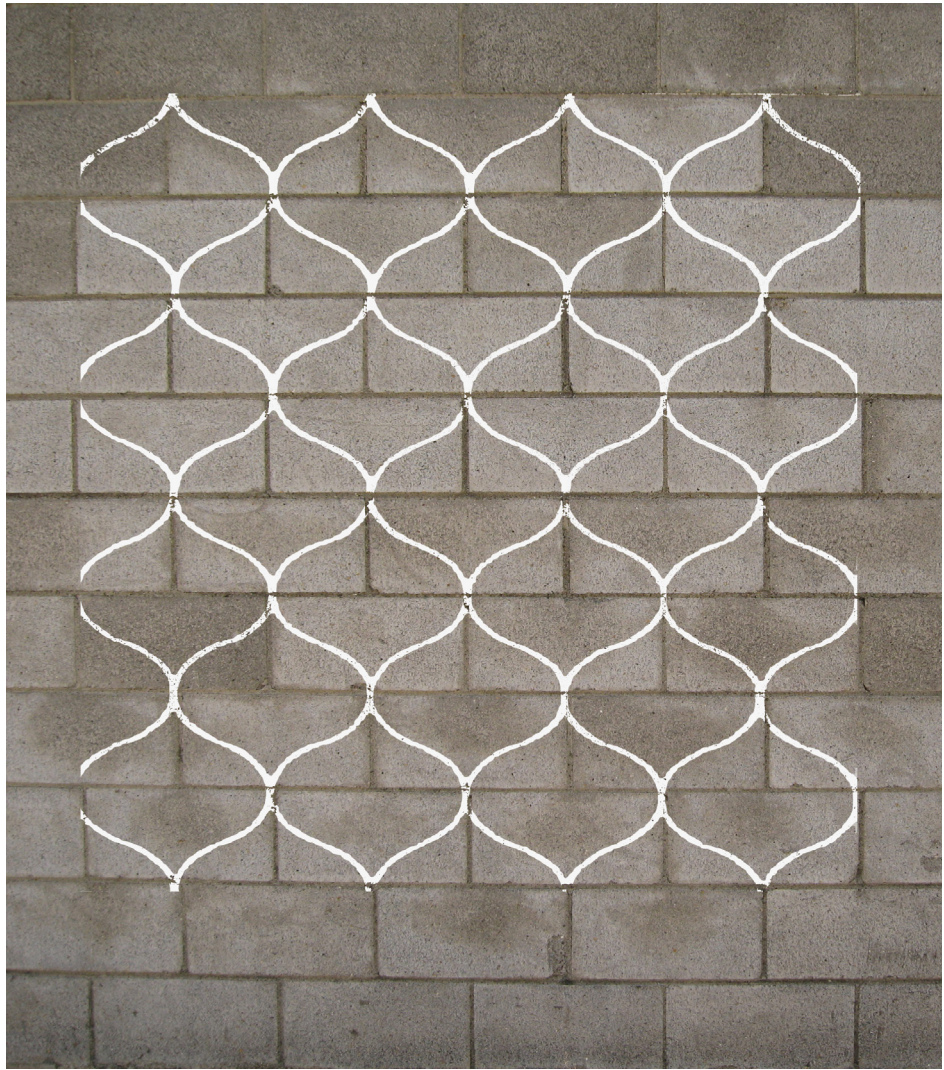
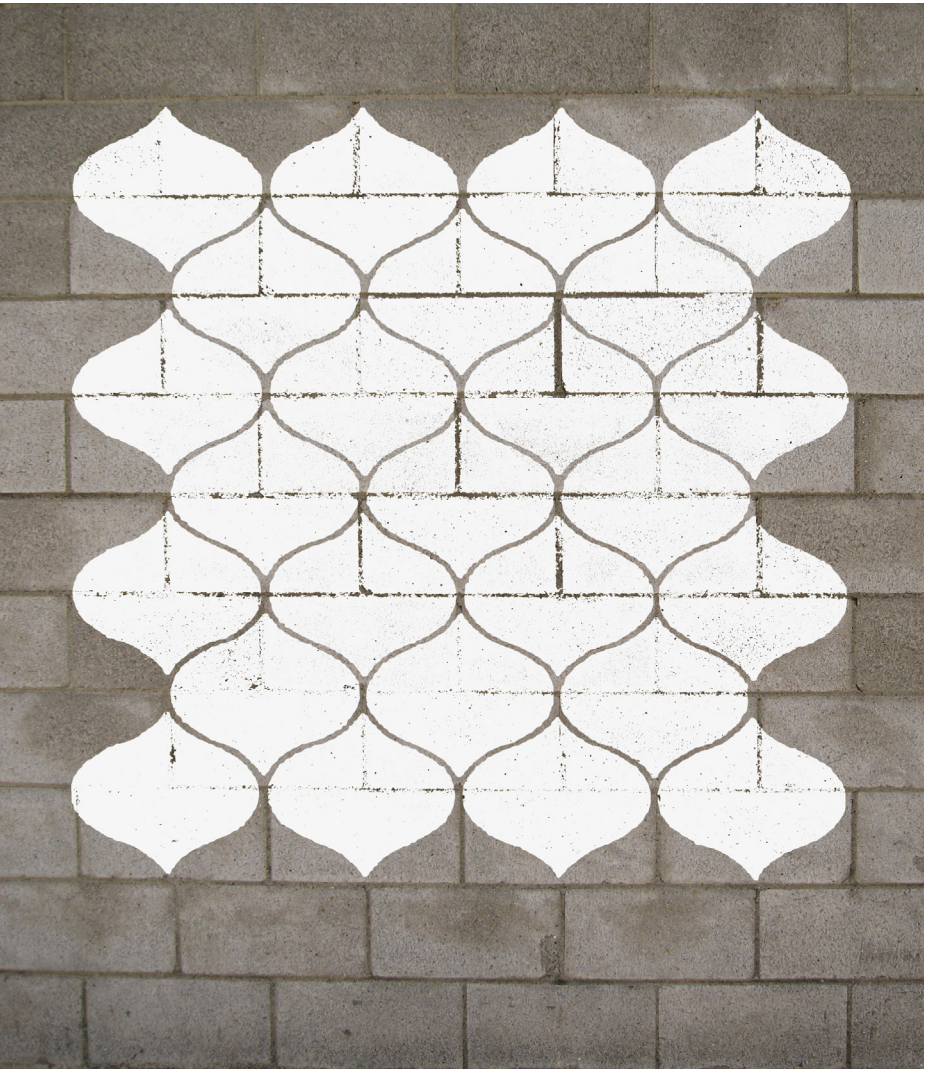


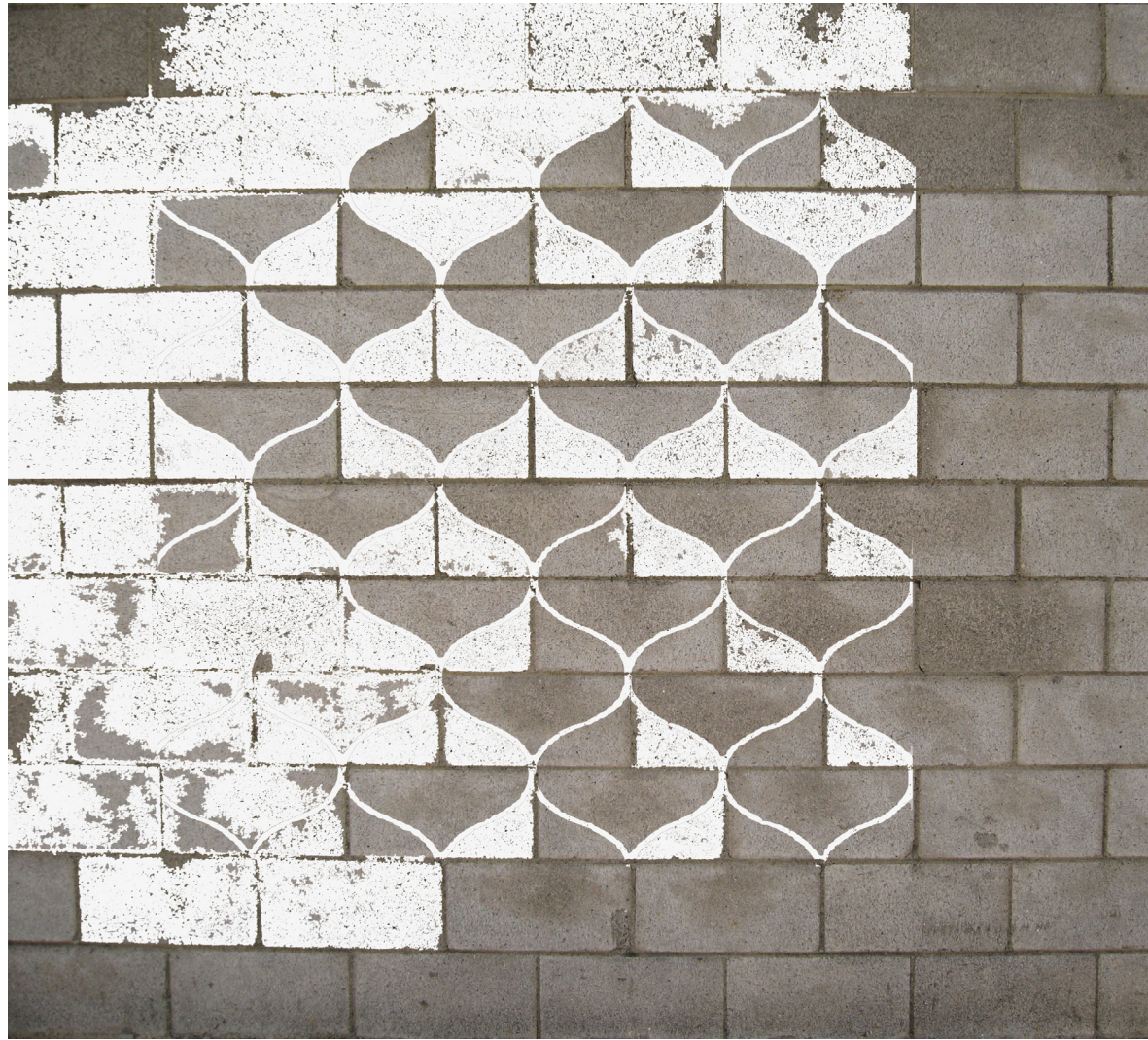


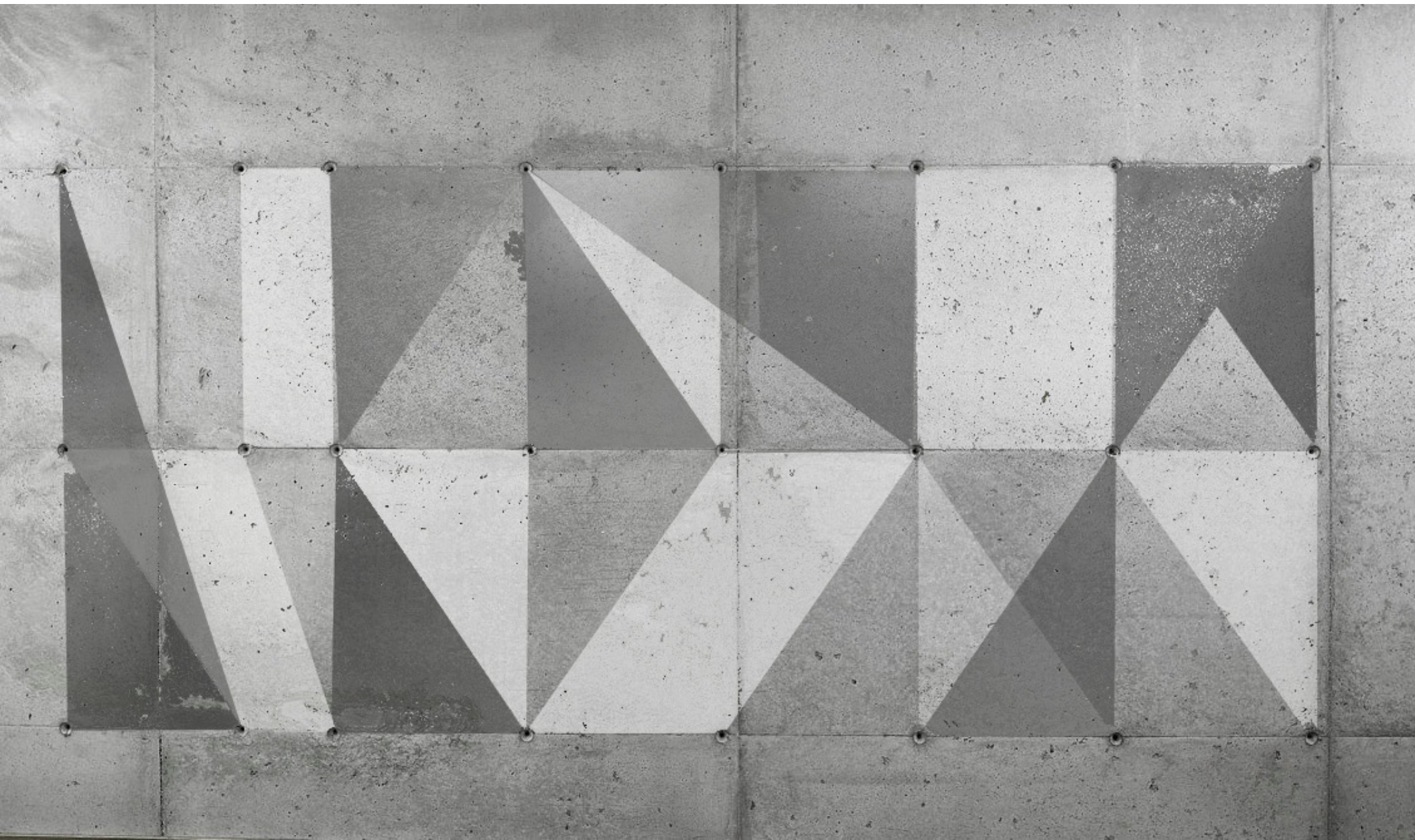






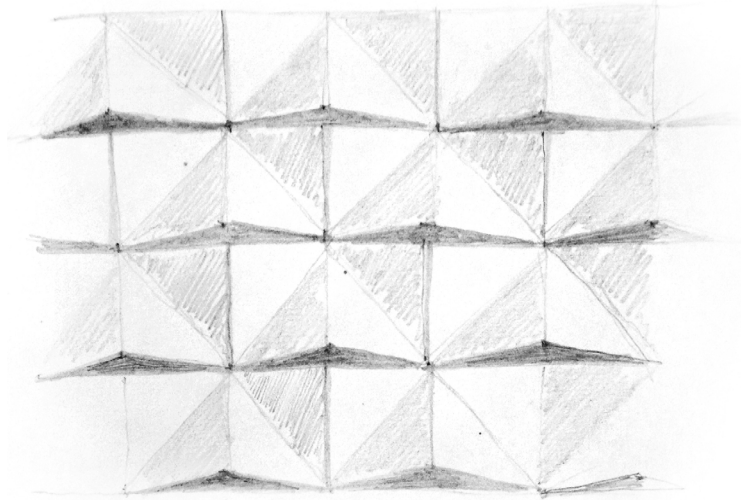




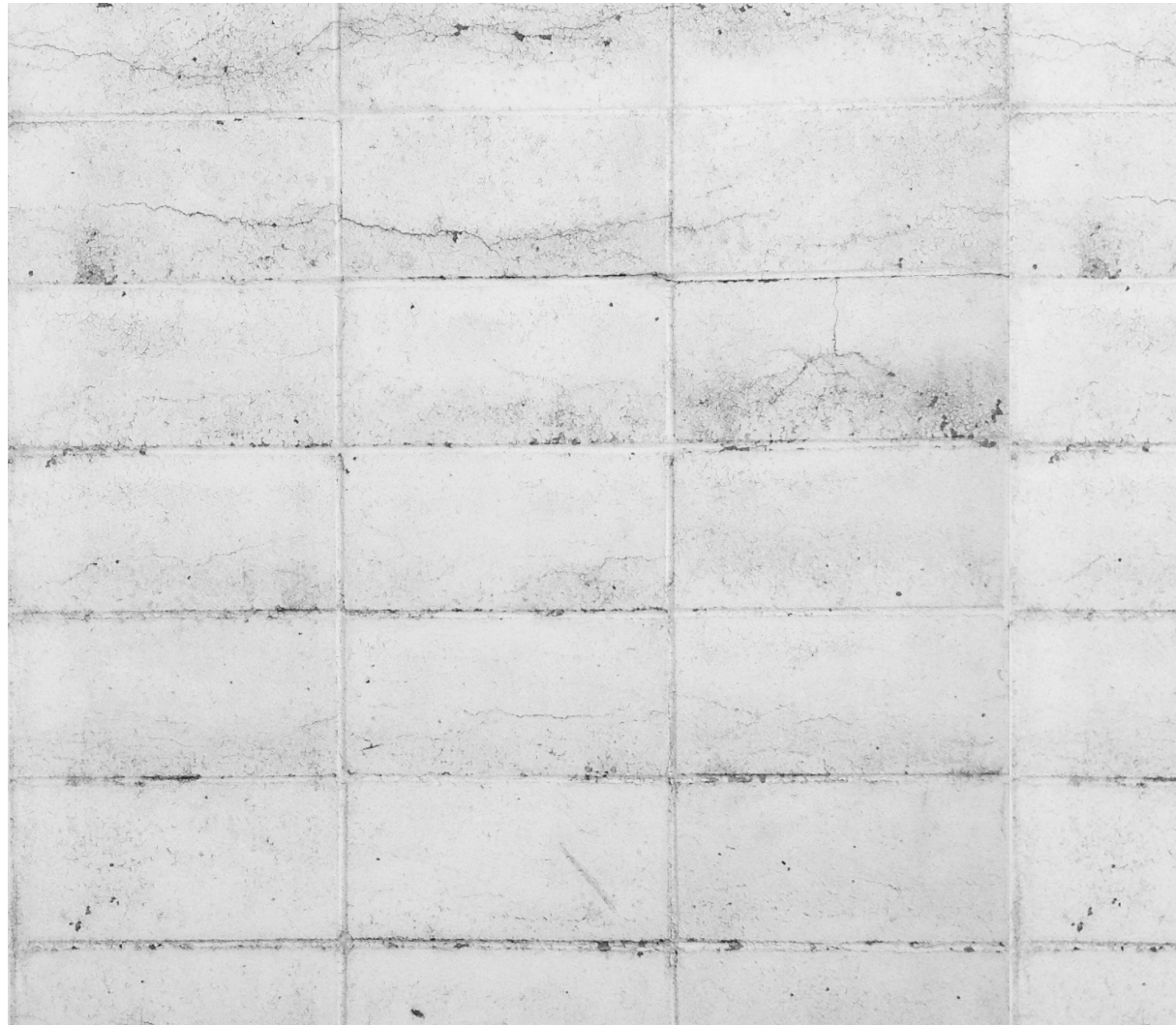




Here I painted directly on an existing concrete block wall that had previously been painted white. I began with a concept of modifying the reading of the modular rectangular grid using a secondary painted framework. I painted the dark grey triangles (using a stencil that I cut) to make the concrete blocks appear to fold inwards and outwards. After that the lighter grey sections were painted to enhance the depth but with greater subtlety.

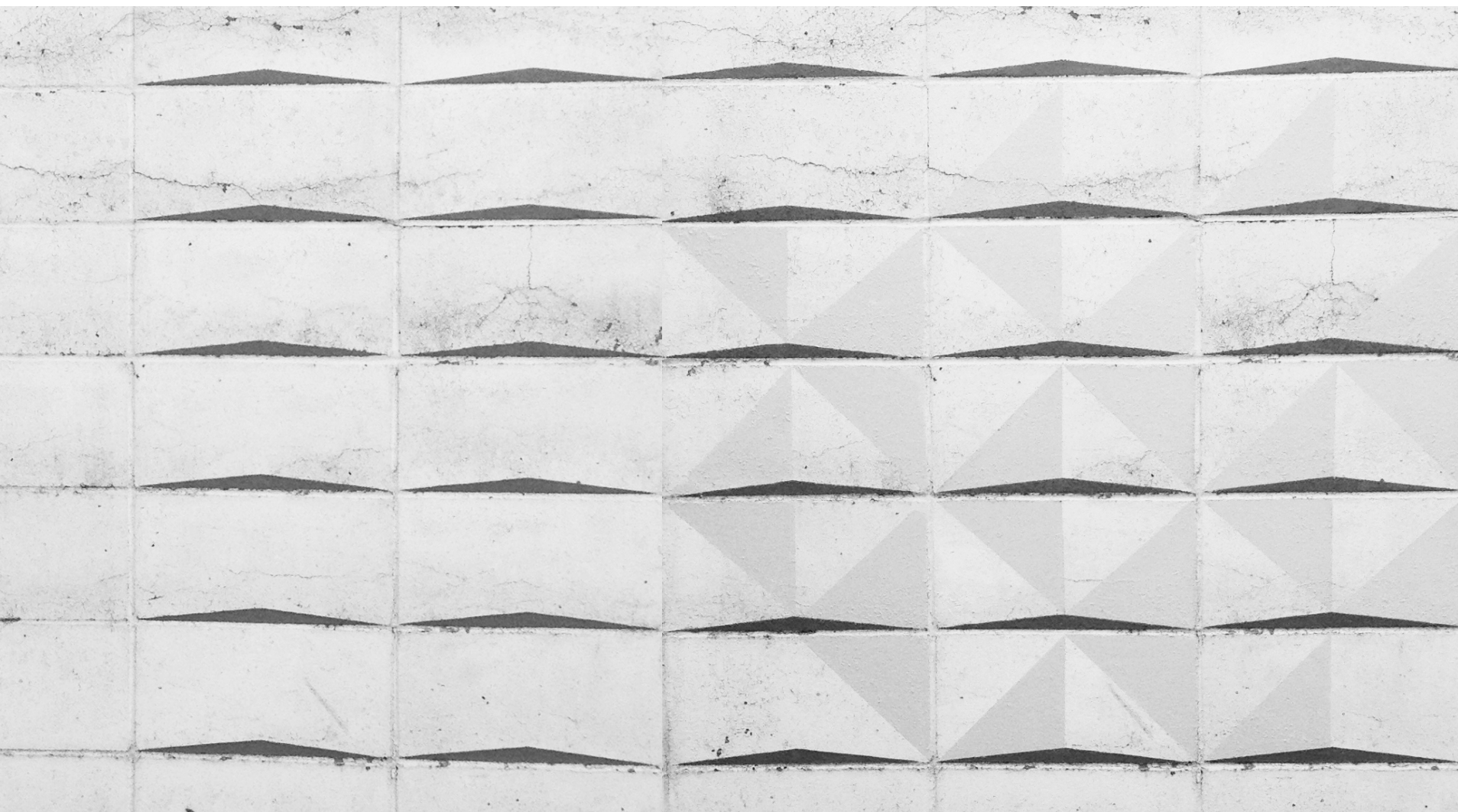


1.38
Modular concept sketch
for painting over an
existing block-work.



1.39

Experimental painting
on top of an existing
concrete block wall.



1.40 (pages 79-94)

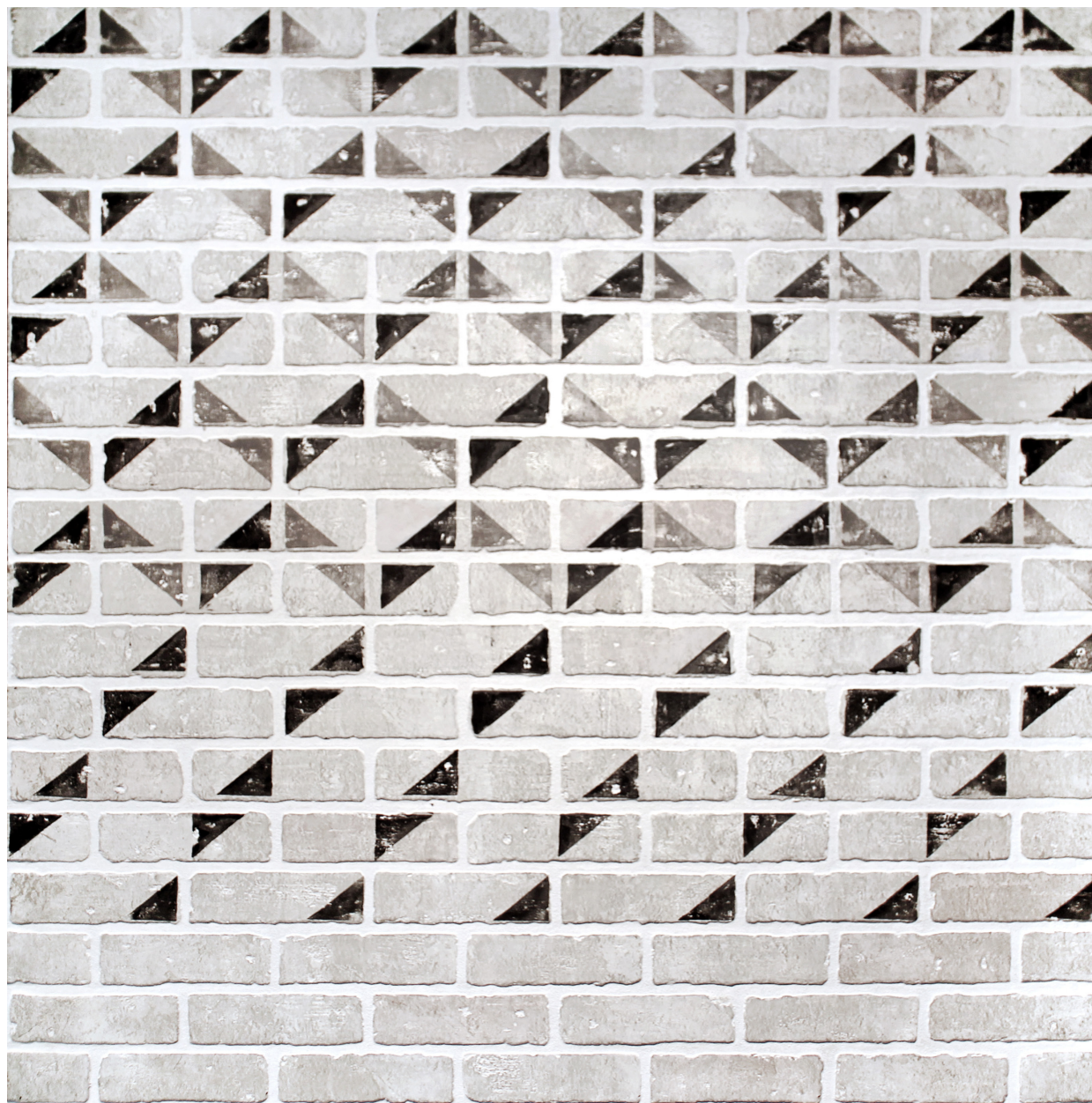
Panel paintings.

Exploring materiality using paint on a variety of media: faux-brick, plywood, oriented strand board, gesso board, stretched canvas, and peg board.

For these pieces I created stamps by cutting foam into three different shapes derived from the modular dimensions of the brick, which I then glued onto blocks of wood. In each painting I strove to create a secondary 'tectonic' layer - a new perceptual depth on the surface of the brick - in order to both modify and enhance its reading, drawing attention both away from and back to the original framework. I think that using a stamp here made this particularly successful because of its dimensional regularity combined with the irregular consistency of the paint, which in a way allowed the brick's texture to reappear with greater intensity. In the last piece my process is intentionally deconstructed to make the viewer more aware of how their perception shifts.

48 x 48"

Acrylic on faux-brick hardboard.





12 x 26.5"
Acrylic on faux-
brick hardboard.

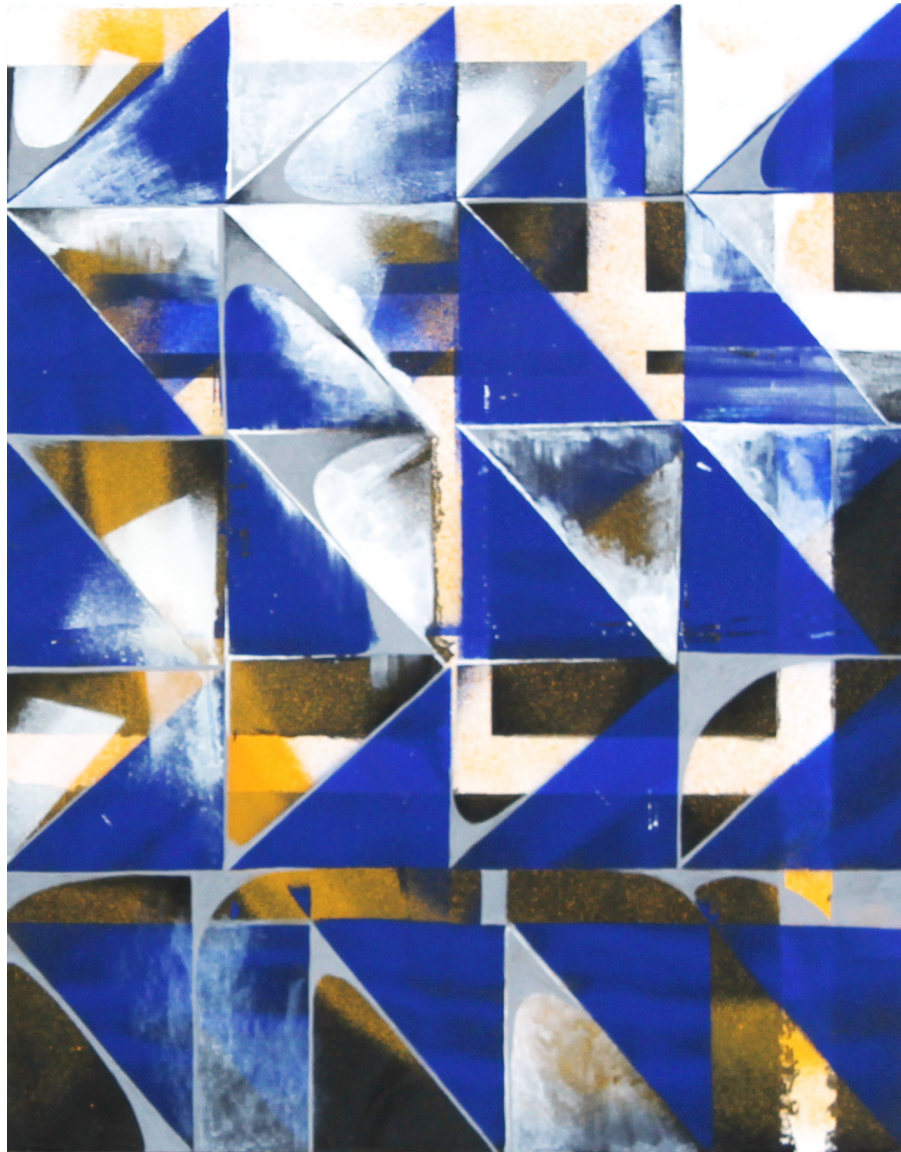
36 x 48"
Acrylic on faux-
brick hardboard.



16 x 18"
Acrylic on plywood.



18 x 19.5"
Acrylic on plywood.



16 x 20"
*Spray-paint, acrylic, and
pencil on gesso board.*



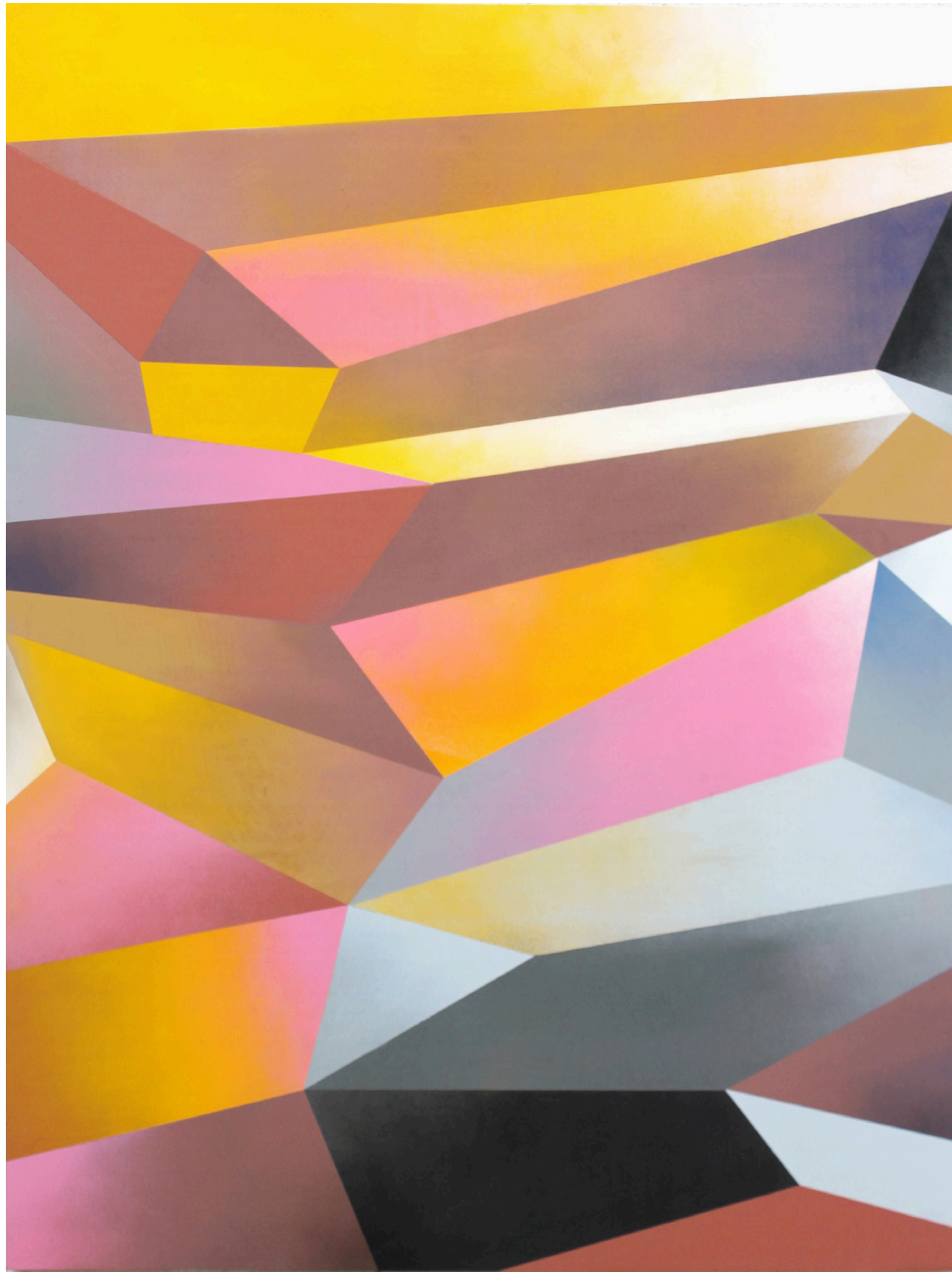
13 x 20"
Acrylic on OSB.



21 x 23"
Acrylic on OSB.



21 x 21"
Ink and charcoal on plywood.



36 x 48"
Spray-paint on wood.



18 x 24"
Acrylic on gesso board.

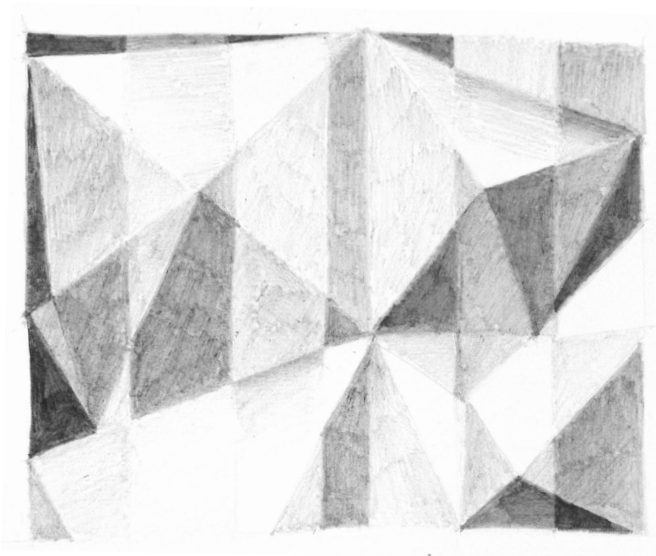


36 x 48"
Spray-paint on wood.



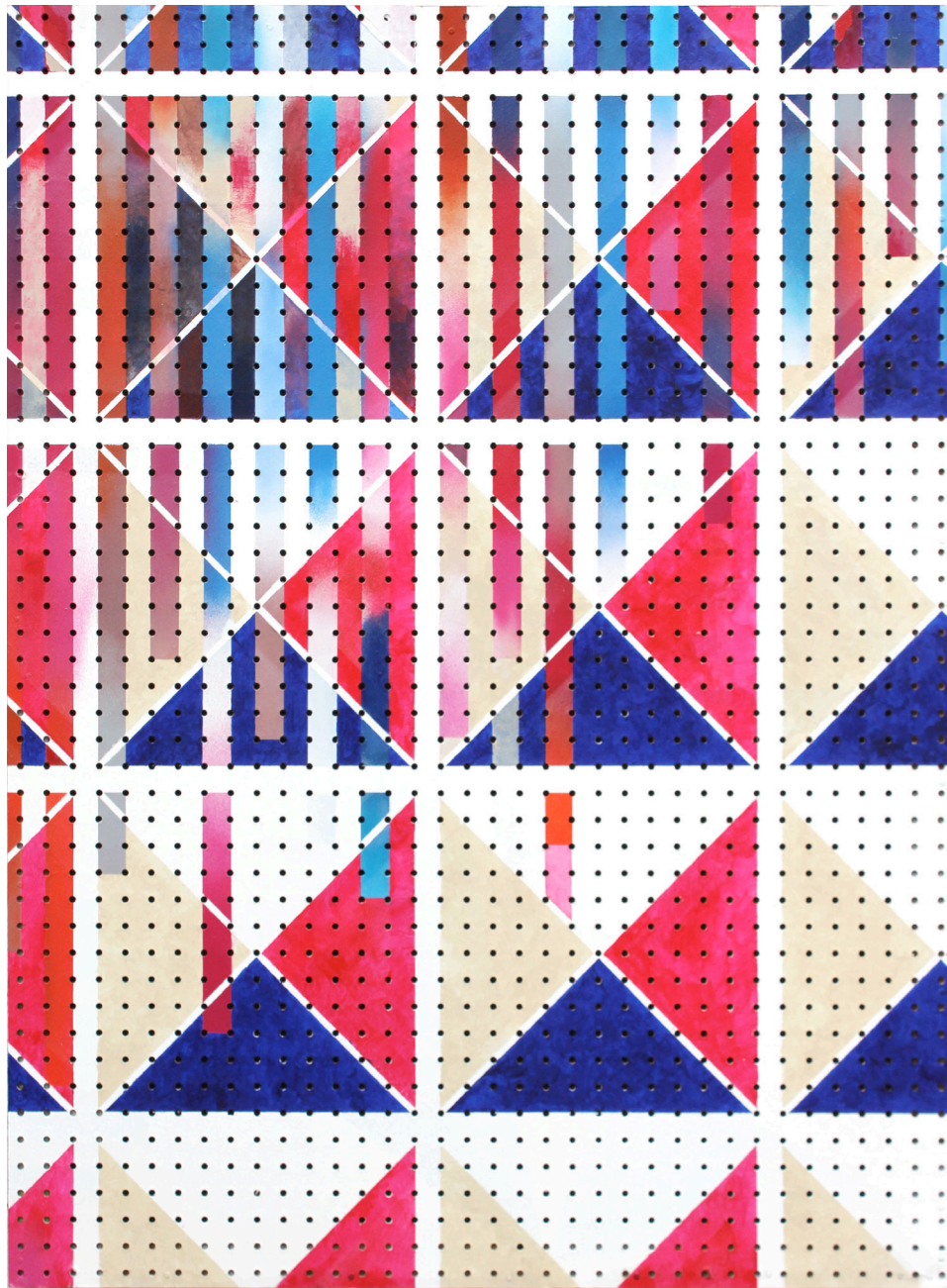
36 x 48"
Spray-paint on OSB.

Here I was exploring ways of creating multiple 'systems' or frameworks which overlap and intersect in order to generate a more complex reading of visual depth on the surface in which sections appear to simultaneously advance and recede.



*24 x 24"
Acrylic and spray-
paint on canvas.*

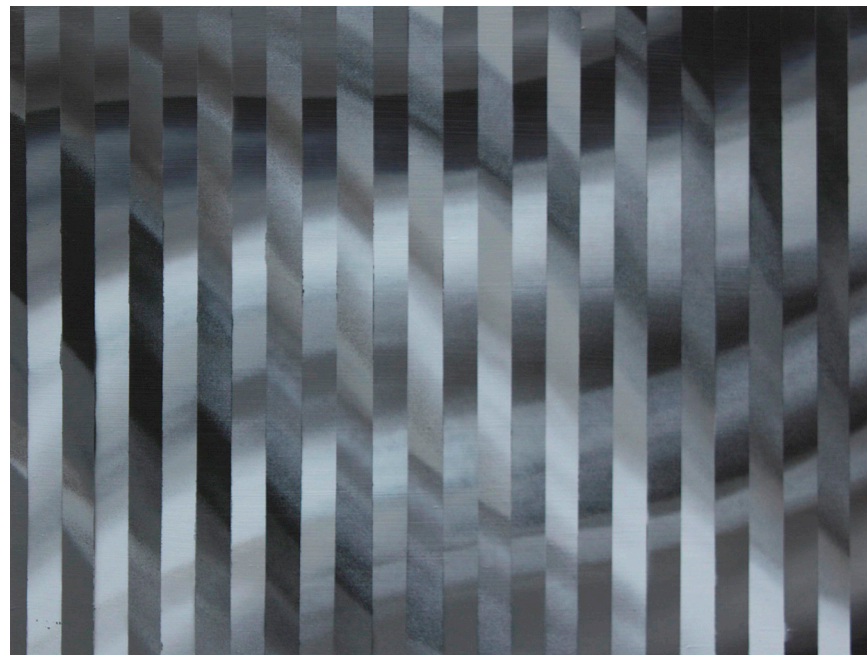




36 x 48"
Acrylic and spray-
paint on peg board.



23 x 30"
Spray-paint on wood.



18 x 24"
Spray-paint on wood.



12 x 36"
Spray-paint on wood.

A Coat of White

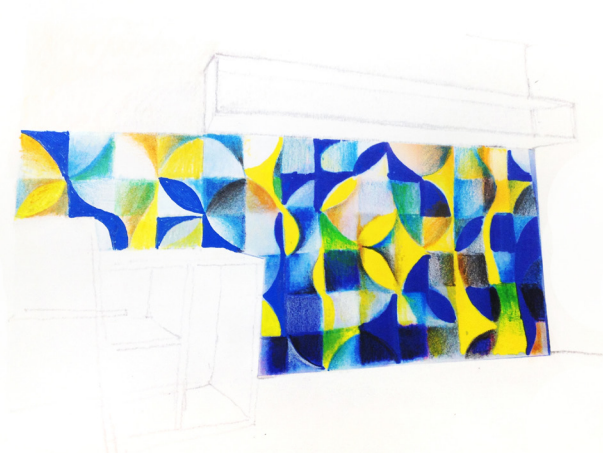
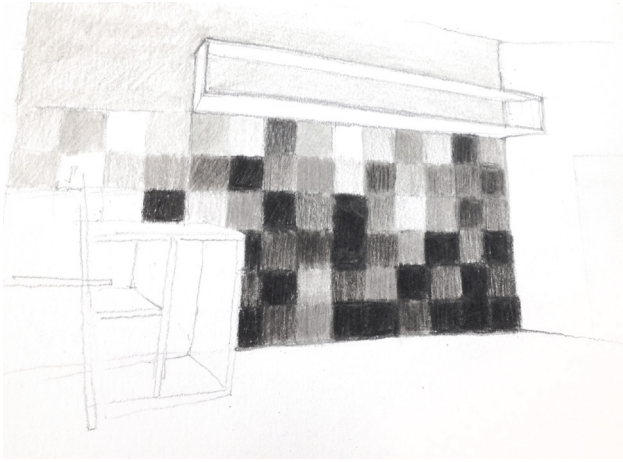
Despite my engaging the topic of murals and directly confronting the architectural taboo of ornament, I do not believe that a mural would necessarily be suitable everywhere - the unique context of each building and space dictates my approach. If artwork surrounded us at every corner it would have the opposite effect of delight and instead become visual overload. At the same time, there is a fine line between minimalism and banality. This is neither an argument “for” nor “against” the decorative surface but rather an inquiry about its legitimacy in the architectural discipline.

I developed a concept for a studio in New Hamburg rented by my husband, who runs a collaborative design workshop there. The space is linear in format and has overhead industrial shelves running a significant length of the wall, beneath which he asked me to paint a mural.

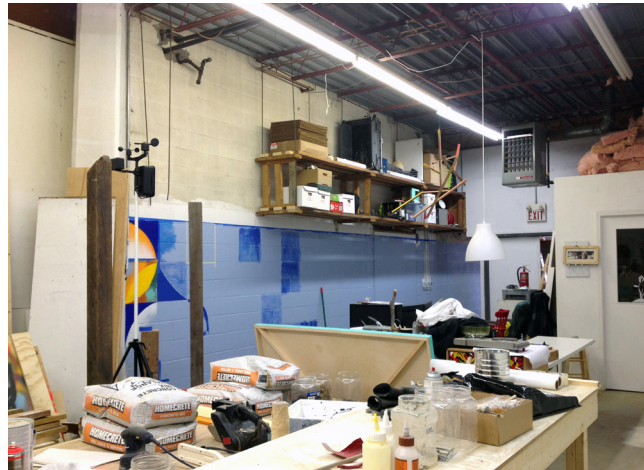
I had some reservations about the idea of painting a mural there, simply because there was already so much activity, equipment, furniture, artwork, and various other objects in the space. Moreover, the workshop was undergoing a massive reorganization, so there was a degree of uncertainty as to where desks and other furnishings would be placed. I feared that adding a mural would only clutter and confine the space.

Nonetheless, I took a stab at an idea of dividing the lower half of the wall into a uniform square grid based on dimensions of the existing concrete block wall, which at this stage was uneven and partially painted in white. The concept behind the grid was to maintain the existing uniform backdrop, only with added visual depth and colour. Within the designed grid I added leaf-like forms which I created stencils for, scaled to the dimension of each square.

When I began installing the project however, after a few hours I realized that it was not going to work well in the space at all. Even the base coat alone - a light shade of blue - visually narrowed the already confined space. We both agreed to paint the entire space white instead, which not only brightened it up but made it feel larger and allowed the various pieces within the shop to visually stand out.



1.41
Unrealized mural;
preliminary concept
sketches.



1.42
Unrealized mural; initial
stages of painting before
repainting the wall white.

Painting 2: Transparencies

Project Facts

Site:	Interior 'feature wall' of a model suite in a commercial loft development.
Wall Type:	Drywall, primed.
Address:	Waterloo Corporate Campus, at the intersection of Northfield Drive and Weber Street North.
Mural Height:	18'
Mural Width:	30'
Mural Area:	540 sf
Materials, Tools, Equipment:	4 gallons Latex Paint (eggshell) 1 quart Latex Primer 3" trim rollers and roller covers 4" paint rollers and roller covers 9" paint rollers and roller covers Paint trays Paint-mixing containers Sponges Painter's tape Ladder Scissor Lift Measuring tape Laser level Pencil Eraser

1.43
Detail photograph of
Painting 2: Transparencies,
completed in June 2014.



My second opportunity to paint a mural was under very different circumstances than the first. Unlike Tectonic Surface, it was to be a fully paid job in an interior, corporate context. The site was also still under construction, which necessitated cooperating and coordinating with other workers - painters, carpenters, electricians, carpet installers, etc. The scheduled timeline of construction imposed a huge pressure to execute the painting in a timely fashion, one week to be exact. This was partially the result of previous work getting delayed and hence delaying the other work that followed in a domino-like effect, leaving the last few stages in a very tight spot.

The opportunity first arose when a friend of mine working for a building developer suggested to him that they have a mural painted on the 'feature wall' of a model suite, instead of a former plan to use decorative tiles. The model suite is a loft building that was recently refurbished for future commercial tenants. It is currently being used to attract tenants for other loft spaces being renovated and new ones being built as part of the same development. Eventually the model suite will be rented out as an office space.

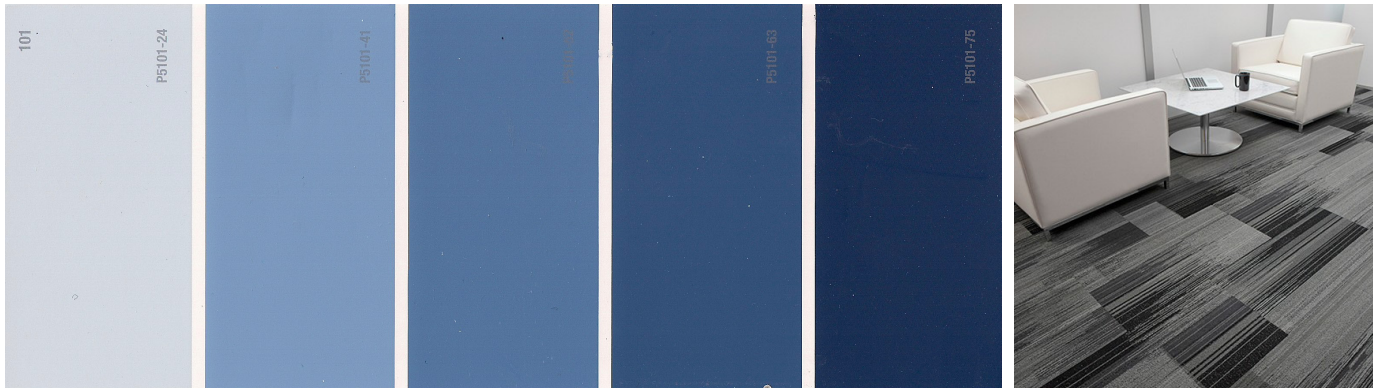
The feature wall runs from floor to ceiling in a double height space, projecting out a few feet from the main perimeter wall. Being a

typical primed drywall it was plain, smooth and white. Left as it was it seemed overwhelmingly blank. My greatest challenge was figuring out where to begin with such a clean slate.

The only constraint was that the mural had to employ a blue-grey colour scheme and match a particular shade of blue specified by the interior designer. I was also given a sample image of the grey striped carpet that was to be installed. Another feature of note was the overhead trusses that intersect the wall.

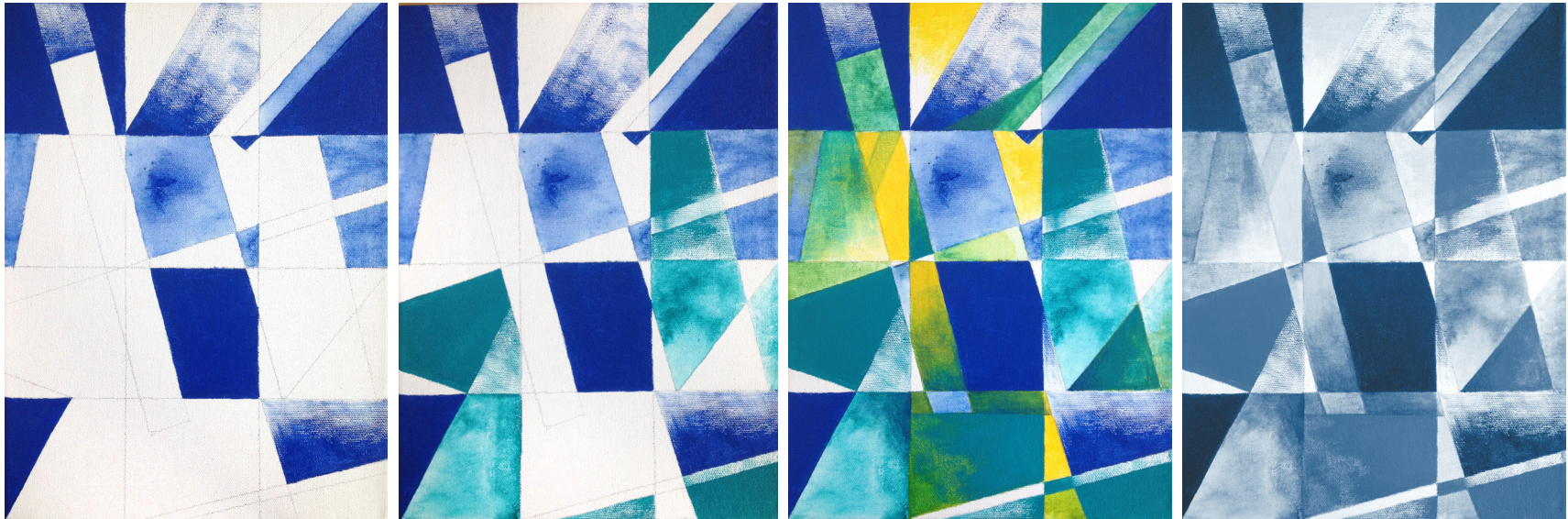
My first impression of the wall was its massiveness, and I imagined that future office workers might be dwarfed in comparison. My design approach therefore began by breaking up the wall into smaller units, to give it a more human scale.

Before officially getting hired to do the job, I was required to submit a design proposal within a short time frame. I formulated three options based on my previous ideas about creating a modular grid and adding variation within its framework. In this particular context, my goal was to lighten the visual weight and contradict its solidity, through both its fragmentation and by creating a kind of visual transparency on its surface. I imagined that I could treat the wall's surface as a picture plane or semi-transparent layer that partially hides and reveals indefinite inner depths behind it.



1.44
Para Paints colour swatch.
 P5101-63 Tornado; specified by the interior designer.

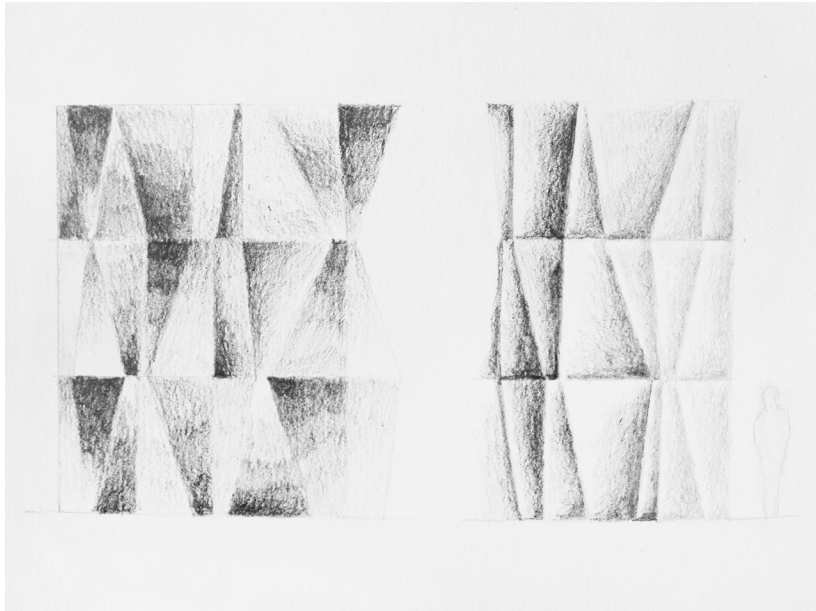
1.45
Tandus carpet tile.
 Stack 9 04332 Black Aluminum 75003; specified by the interior designer.



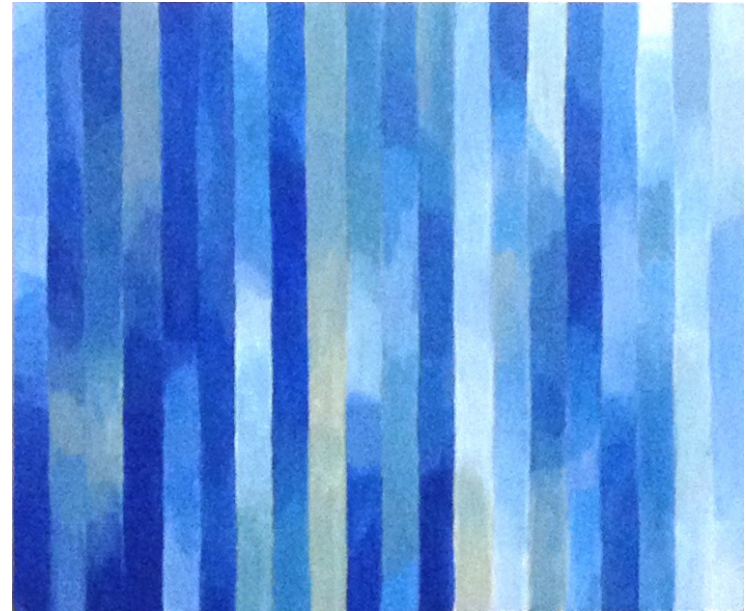
Acrylic on canvas, 8 x 10"

Here is a progression of one of my preliminary design concepts for the mural. This was a development of an earlier painting I produced on a wooden panel (page 84). The fragmentations of the grid in the former piece are derived from the original fragments of the OSB. Here, I tried to abstract this on a blank canvas, while maintaining a notion of intersecting planes of varying transparencies. I then modified the colours digitally to suit the specifications of the client.

1.46
Development of a mural design.
 This was one of three concepts developed, and the final one chosen by the developer (option 3).



1.47
Development of a mural
design (option 2).



Acrylic on gesso board, 6 x 8".

1.48
Painting of a mural design (option 1).

1.49
Renderings of three mural
design options submitted
to the developer.

Option 1

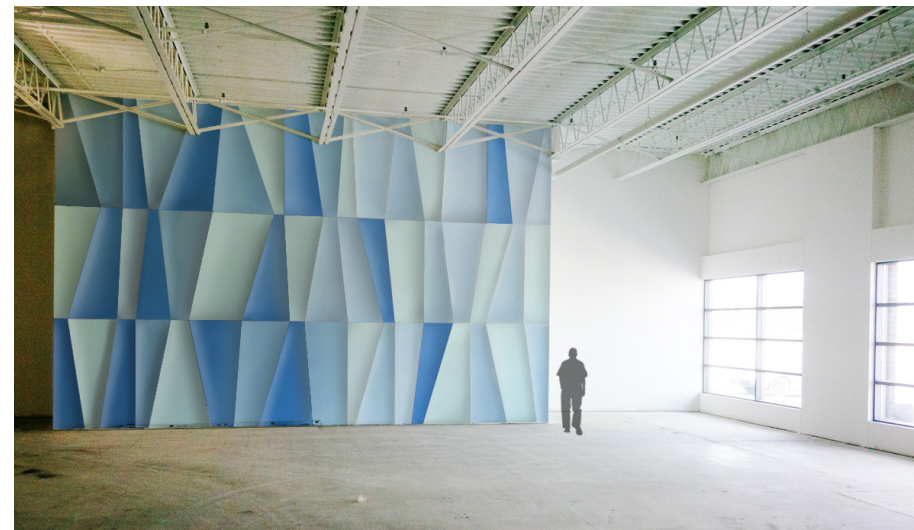
This design was focussed on a response to the direction of natural light in the space. Dividing the wall into stripes of equal width, I added tonal variation within the stripes to add visual movement and lightness to the solid white wall. Towards the right of the wall, I gradually lighten the shades of colour to exaggerate the effect of light hitting the wall from the windows on the right.

Option 2

This concept was based on the same notion of light direction, but with a different geometric framework. Unlike the previous design's subtle gradations, the individual facets are shaded with sharper visual contrasts along their edges to make them appear as though they are pressed into the wall.

Option 3 (Selected option)

Seeing as the wall was primed drywall, the mural would essentially be adding paint to paint - there was no inherent materiality to respond to, so I endeavoured here to create an artificial materiality through paint. With this particular concept, the painted diagonals visually interact with the overhead cross bracing.



By physically engaging in the act of transforming architecture through the surface, I learnt the importance of scale through the direct experience of translating my ideas on paper to the final architectural product. Paramount to this experience was engaging with the rules and regulations of the construction site. One of my personal milestones was learning to operate a scissor lift and acquiring a license through completing a fall protection and aerial work platform training program. This made clearer to me a new aspect of the relationship between my work and architecture - it was no longer “just” painting, but painting construction. Interestingly, the Ontario Occupational Health and Safety Act includes painting in its very definition of construction:

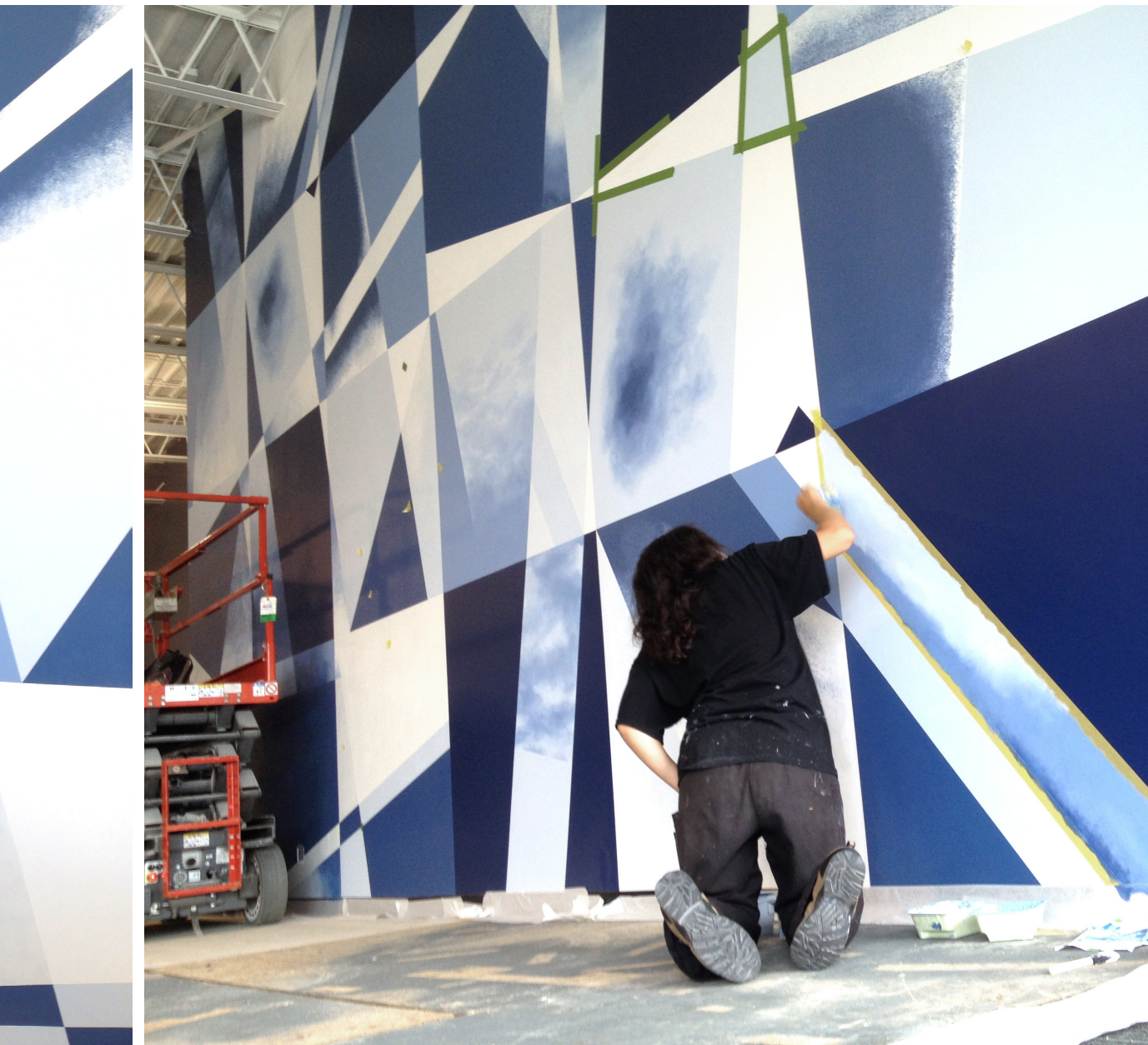
“construction” includes erection, alteration, repair; dismantling, demolition, structural maintenance, **painting** land clearing, earth moving, grading, excavating, trenching, digging, boring, drilling, blasting, or concreting, the installation of any machinery or plant, and any work or undertaking in connection with a project but does not include any work or undertaking underground in a mine.





1.50 (pages 103-106)
Process photographs
of the installation of
Transparencies.



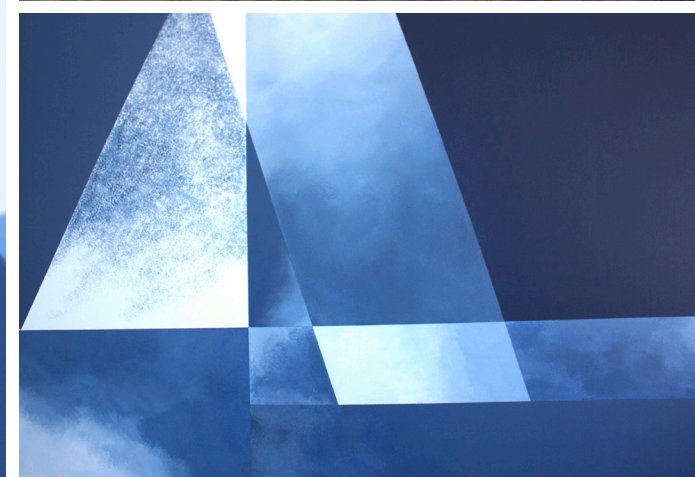
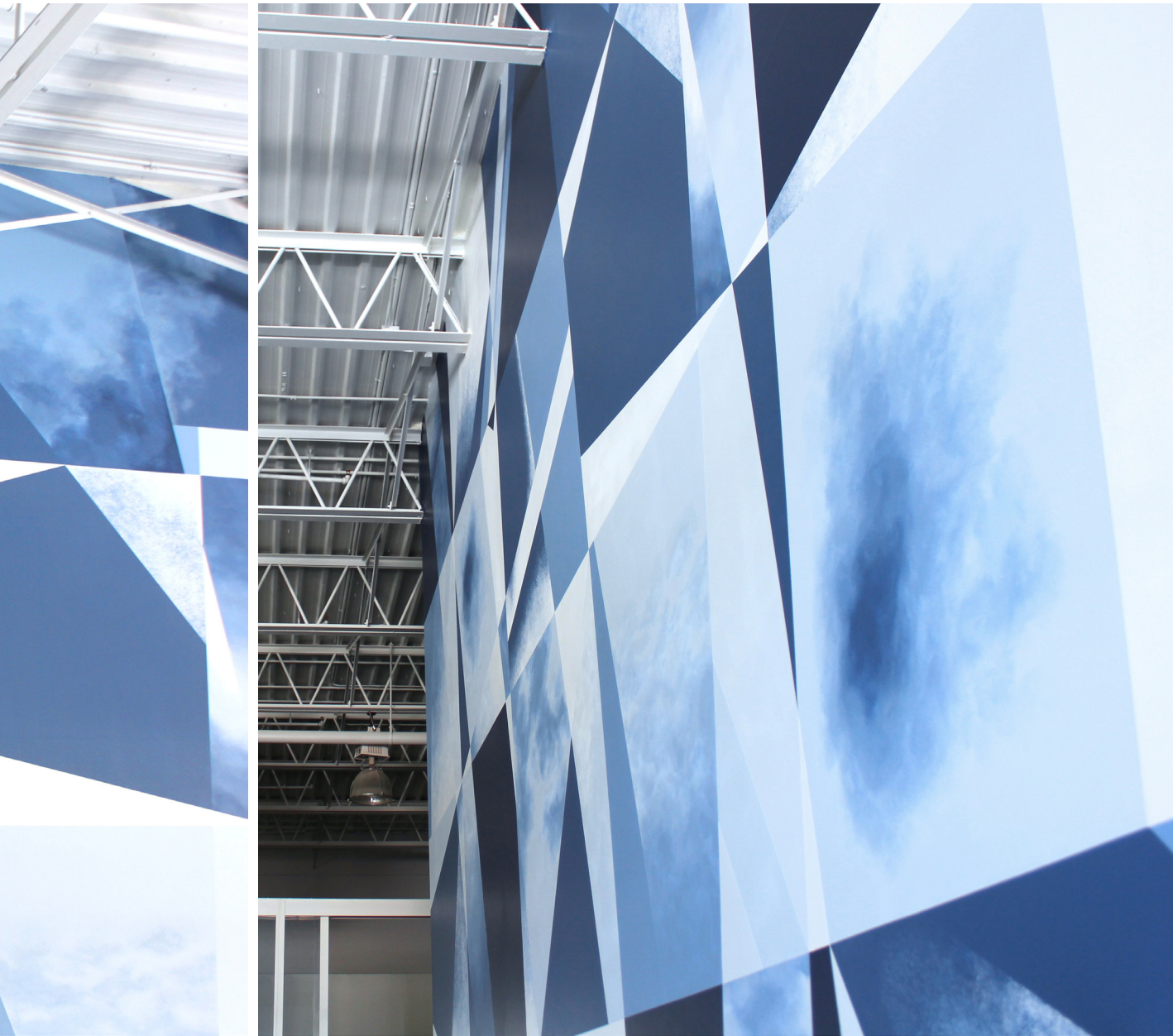


As I knelt down to paint a lower section of the wall, someone entered the suite and walked over to me to chat about the project. He was a real-estate agent. After learning that I was an architecture graduate he said to me somewhat patronizingly, “and now, you’re on your hands and knees?”

The likeness to clouds was not intentional, but I think that these more 'softly' painted areas create an ambiguity of depth, which generates an interesting visual effect when juxtaposed against the solid planes and sharp edges. The overall effect is an architecture of paint that is more striking than the actual architecture supporting it.



1.51 (pages 107-110)
Views of the completed
mural, *Transparencies*,
June 2014.



I cannot yet know what is to become of the space as it has not yet been leased, and the furniture on display is only temporary. However, after the mural was completed I received positive feedback from the developer, architect, interior designer and several visitors to the suite. I was told that “the mural definitely makes the space”, and it was also the key feature of a photograph for an article published in the Waterloo Record about the Waterloo Corporate Campus development. The title of the article was “Make Way for a Cooler, Funkier Waterloo”. While no mention was made of me or the mural, I could not help but think that it was the only ‘funky’ and ‘cool’ thing about the story.





Painting 3: Art Gallery Exhibition

Site: Art Gallery
Wall Type: Painted Drywall
Address: Design at Riverside Gallery, 7 Melville Street
South, Cambridge, Ontario.
Mural Area (including floor): 864 sf
Materials, Tools, Equipment: 5 gallons Latex Primer
4 gallons and 2 quarts Latex Paint (eggshell)
3" trim rollers and roller covers
4" paint rollers and roller covers
9" paint rollers and roller covers
Paint trays
Removable adhesive wallpaper
6" x 19' plywood
6" wide Masking tape
Construction chalk line
Painter's tape
Ladder
Measuring tape
Level

1.52

Design at Riverside Gallery mural,
September - October, 2014.



Exhibiting my thesis work-in-progress in an art gallery provided me with a unique opportunity to both consolidate my thesis intentions and to produce a third mural that would be viewed by a more perceptive audience on a platform open to feedback and discussion.

Being in a setting where visitors attend with a specific intention to engage with creative work allowed me to further observe responses to the work in terms of physical interaction and uses of the space. This audience included both my architecture peers, professors, affiliates of the Cambridge Libraries and Galleries, and various members of the local community with a diverse age range.

The limited one-month duration of the exhibit also meant that it would not operate in the same manner as a public urban artwork or more permanent manipulations of the architectural surface, interior or exterior. This was comparatively a much more transient intervention, therefore my goal was to demonstrate the spatial potential of paint in a direct and visceral way that would make my thesis concept clearly comprehensible and immediately impactful.

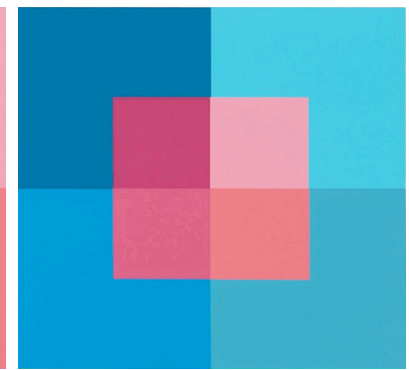
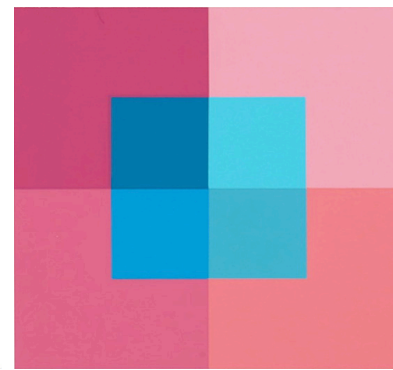
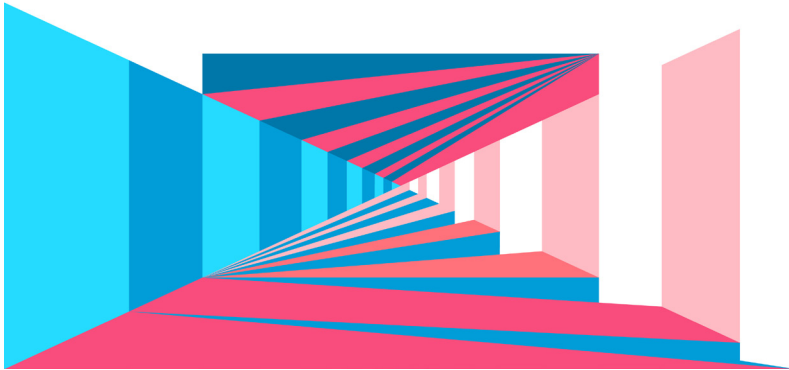
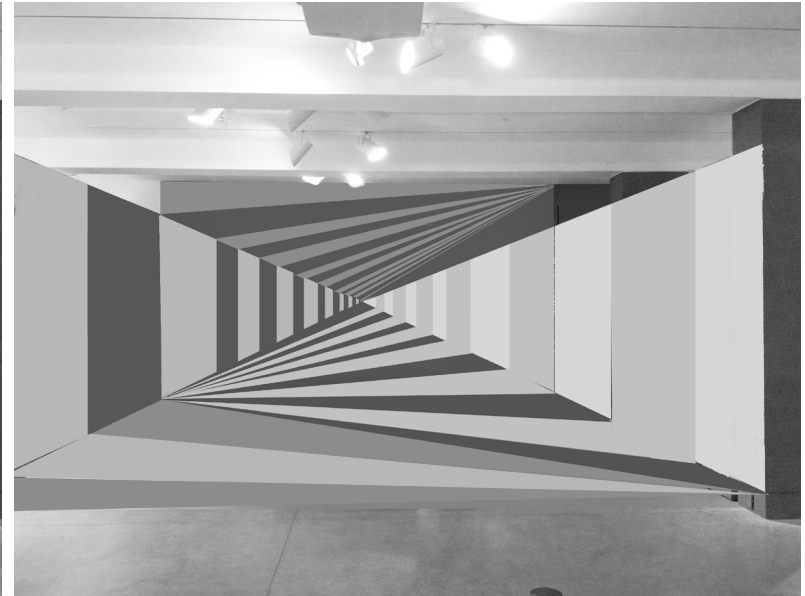
To create an architecture of *paint*, I aspired to draw the viewer's attention back to the notion of paint as a literally habitable "millimetre thick bag" of space. A key strategy here was to formally emphasize the physical transformation and contrast between the existing condition and painted intervention.

1.53 (*opposite, top left*)
Gallery space: site of the painted 'immersive' mural.

1.54 (*opposite, top right*)
Digital rendering of mural design concept.

From the onset of the project I sought to take advantage of the fact that it was a *space* to be occupied and not a single wall for viewing. I decided to paint three walls and the floor to create a partially enclosed room in order to allow the audience to be more physically immersed in the work, enabling them to experience the spatial effects of paint and colour both visually and corporeally. The atmospheres of Yayoi Kusama's intensely patterned installations and Cruz-Diez's *Chromosaturations* works were a significant source of inspiration.

The artwork deliberately negates the corners and edges where walls and floor meet. My intention here was to create an alternate spatial condition derived from the paint as opposed to the existing structural support. Structure and frame are pushed to the background and skin to the foreground in a reversal of the traditional architectural hierarchy.



Using both a scaled model and photographs of the gallery space I arrived at a design concept through testing variations of a basic one-point perspective, initially in greyscale. My goal for colour was to generate a visual ‘vibration’ and shifts in perception between contrasting hues. With a blue-pink concept in mind, I looked to Josef Albers’ classical book for reference and inspiration. The most difficult part of the design was figuring out how to translate the view into the three-dimensional space - this required numerous attempts at cutting and pasting printed and scaled images onto the physical model, as well as testing the concept at 1:1 using chalk in a mock-up room in my studio. The concept echoes the anamorphic art of Felice Varini, however, achieving an absolutely precise perspectival illusion was not my primary objective.

1.55 (bottom left)
Digital rendering of mural design concept with an integrated colour scheme.

1.56 (bottom right)
Sample from Josef Albers’
Interaction of Colour, 1971



1.57
Time lapse photographs of the
gallery mural installation.



As part of the exhibition we installed a camera during the installation process that automatically took a photograph every minute. We created a time-lapse video and displayed it on a projection screen on the opposite end of the space to effectively mirror the completed work.



1.58
Visitors interacting with the mural.



1.59

View of the mural within the gallery space.

The public response to the installation was one of delight and playfulness by adults and children alike. I noticed that unlike my previous murals, the painted space elicited direct physical and emotive responses. Visitors did not only *look* at the painting but instinctively moved within it, engaging with it in a variety of ways such as dancing, sitting, and lying down inside it, laughing, hopping around and striking comical poses.

The mural also inspired the Cambridge Library to hold one of their children's story-time sessions in the gallery space. The "Seussical Story-time" included a range of activities including reading Dr. Seuss, crafts, singing, stretching exercises, movement songs and a parachute circle. The children were extremely excited by the space. I noticed a few of them trying to climb up the main wall's painted perspectival steps, and others concentratedly walking along the painted lines. Seeing how children responded to the mural made me realize how a painted surface can generate responses at quite a primary, intuitive level, regardless of prior knowledge or explanations.

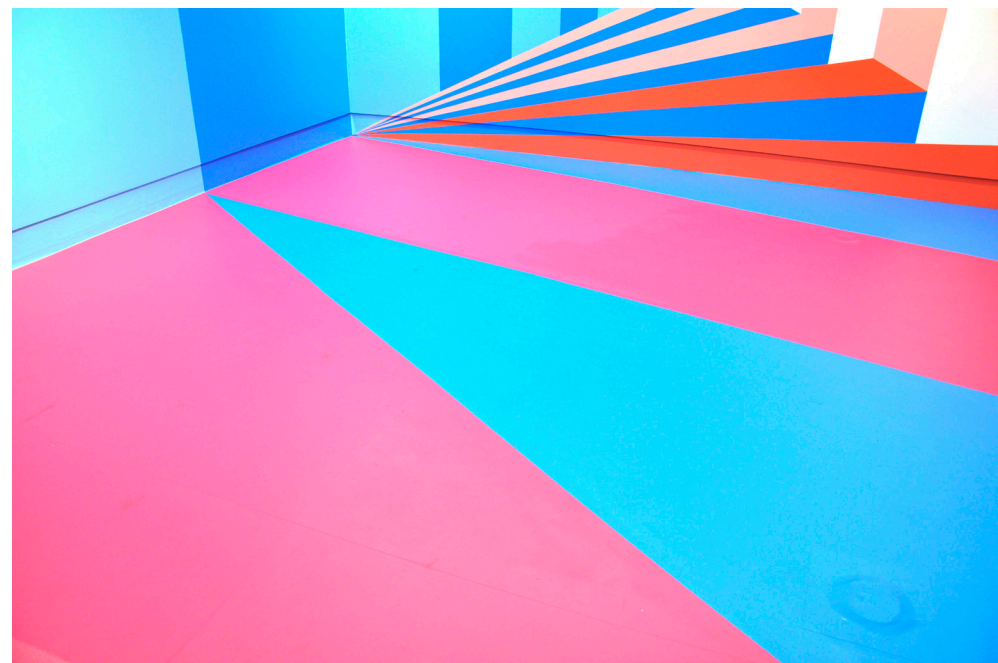
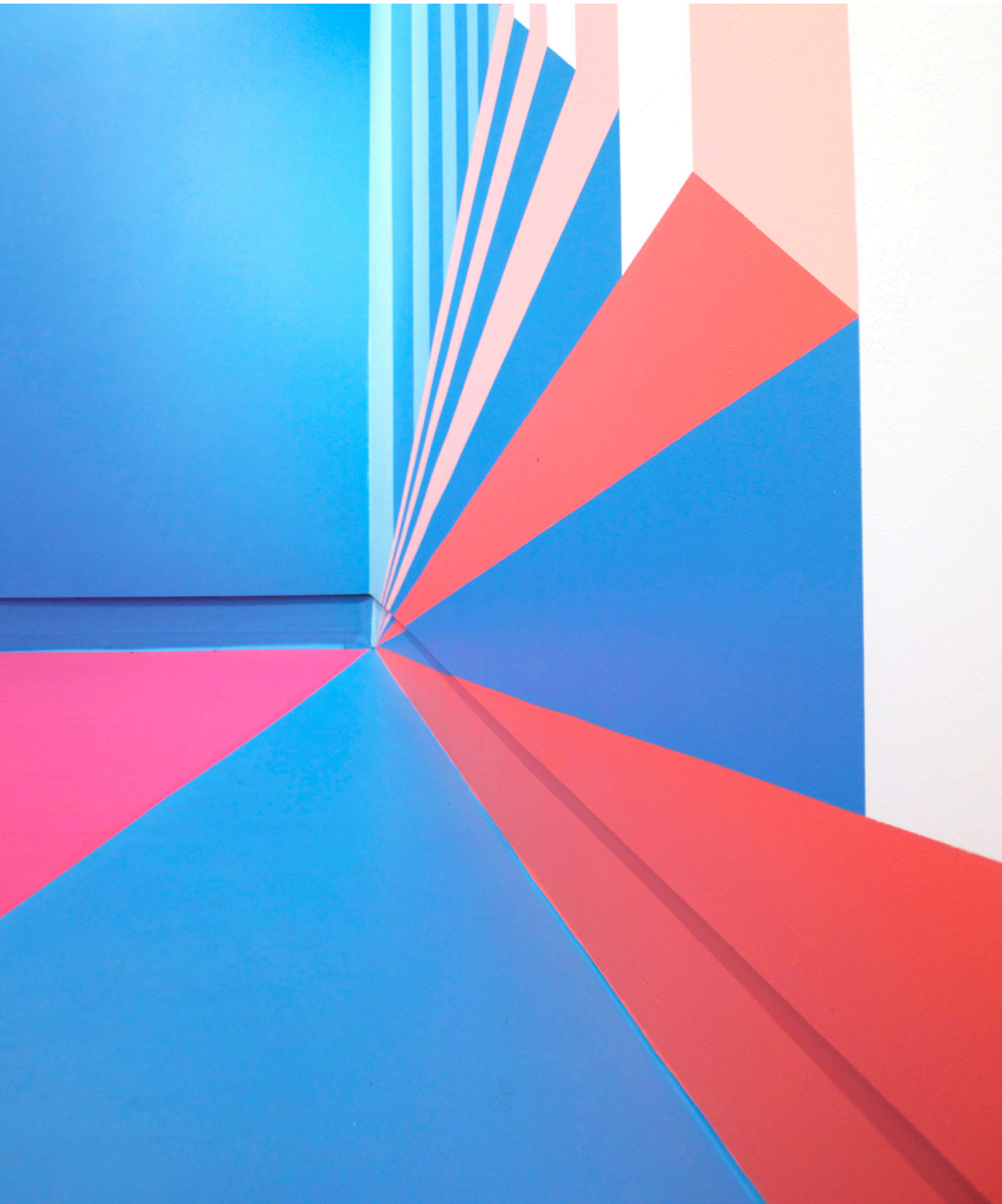
1.60 (pages 120-121 and 197)
Children in the mural space during
a story-time session held by the
Cambridge Library, October 2014.

1.61 (page 122)
Views of the gallery mural.









“The standard way of understanding surface has been as an abstract and undifferentiated plane that functions above all to veil or delimit a depth. From the face that mirrors the soul, to the magic writing tablet that reveals subconscious drives ... surfaces have been considered worthy of attention insofar as they are the top layer, the outermost skin, the merely visible envelope of more particularized and specific under or inner depths.”¹

- Sylvia Lavin, *Kissing Architecture*

“Why should the area of skin, which guarantees a human being's existence in space, be most despised and left to the tender mercies of the senses? ... If the law of thought is that it should search out profundity ... then it seemed excessively illogical to me that men should not discover depths of a kind in the 'surface' ... Why should they not be attracted to the profundity of the surface itself?”²

- Yukio Mishima, *Sun and Steel*

PART TWO: THEORETICAL FRAMEWORK

SUPERFICIAL, DECEPTIVE, SEDUCTIVE

superficial (adjective)

1 existing or occurring at or on the surface

- situated or occurring on the skin or immediately beneath it

2 appearing to be true or real only until examined more closely

3 not thorough, deep, or complete; cursory

- lacking depth of character or understanding

The surface is connected to questions of morality and is inevitably associated with notions of dishonesty and triviality. As the outermost layer of a given object, building, or body, the skin or surface is traditionally viewed as subordinate to the structures and depths it covers, both physically and philosophically speaking.

The ideology that the surface of something is less substantial, permanent or even truthful than its inner counterpart is prevalent in society and culture at large, hence the ease with which the word ‘superficial’ switches between meaning located on the surface to meaning lacking depth of character. Unsurprisingly, the words surface and superficial share the same Latin word origin, *superficies*, based on the combination of the words ‘super’ (above) and *facies* (face).

In figures of speech, the surface is frequently denigrated; the physical shallowness of surfaces is equated with an assumed psychological one, in the same way that the word ‘deep’ is used to imply meaningfulness. It is commonplace to use phrases such

as “you’re just scratching the surface”, “beauty is only skin-deep”, and “don’t judge a book by its cover”, or terms such as “surface value” and “surface appearances”. Such ways of thinking indicate a long-standing hierarchical and binary opposition between surface and depth, echoing a similar dichotomy between superficiality and profundity, the supplemental and essential, and representation and reality, wherein the former is always viewed as inferior to the latter.

This dichotomy of surface and depth is contingent upon the idea that the surface is bound up with issues of appearance, image, and representation, the very definitions of which are tied to a deception of some kind. A representation is subordinate to the thing being represented, and an image is never as true as reality.

That surfaces are held under such contempt is only a testament to their power, a power intrinsic to visibility. Surfaces are immediate and therefore illicit instant emotional responses. The potential seduction of images or outward appearances has been criticized and philosophized since time immemorial, in social, cultural, and religious circles alike, time and time again.

The moral problem of seduction goes hand in hand with the idea of falsehood and misrepresentation – that beneath the seductive surface or mask is the reality, which may or may not be as desirable as appearances seem.

Plato's allegorical cave of illusions provides a classic philosophical example of the mistrust of two-dimensional images. In the Greek myth, prisoners of a cave view and understand the world only through shadows projected on the cave's walls. The shadows are a metaphor for images as incomplete representations of the true reality and knowledge that exists beyond the cave. This idea that surfaces are connected to a kind of moral responsibility has persisted throughout history across different disciplines in varying ways.

MARKED SURFACES

As a site of social and cultural identity, surfaces are where we procure our first (and often long lasting) judgements about people, places, and things. Integral to this connection is a judgement regarding the specific *marking* of surfaces with anything other than what is deemed natural or functional, such as added colours, patterns, or imagery.

Although we might not always be conscious of it, we continually partake in both the creation and judgement of identity on a regular basis, a basic example being through the clothes we wear. This role of surface extends to architecture, and one could even argue that the use of lipstick and tattoos on the body is similarly applicable to building.

tattoo (verb)

mark (a part of the body) with an indelible design by inserting pigment into punctures in the skin.

- make (an indelible design) on a part of the body by inserting pigment into punctures in the skin.

cosmetic (adjective)

1 relating to treatment intended to restore or improve a person's appearance.

- serving to improve the appearance of the body, especially the face.
- 2 affecting only the appearance of something rather than its substance.

Underpinning the moral uncertainty associated with marked surfaces is a desire for authenticity, reality, and truth, but where people choose to draw the line has always varied. Cosmetics and tattoos provide a common example of this tension. How much makeup is 'too much'?

The use of cosmetics is ancient, and historically tied to various social, cultural, and religious customs. But its use today is largely inconsequential and actually viewed rather negatively – it is a ubiquitous commercial product whose prime purpose is to sell beauty, and whose prime selling point is its ability to deceive. It is often said that makeup is well done if it is invisible. The purpose behind such makeup is, oddly enough, to look more natural than nature – to make eyes seem bigger, eyelashes longer, lips fuller, cheeks rosier and skin flawless.

The term cosmetic is often used pejoratively to emphasize the prioritization of aesthetics at the expense of inner substance or value. This is certainly the meaning it acquires when used in conventional architectural critique.

Tattoos originated in the cultures of indigenous peoples as an important demarcation of individual and collective social identity. Over time, their use has evolved and been re-appropriated in a multitude of different contexts into a more heterogeneous, commonplace activity. Tattoos are widespread and arguably more

popular now than ever before, although they too present a divisive line between tasteful or tacky culture and what is considered beautiful versus visually offensive.

The frequent disapproval of tattoos is related to their permanence and an underlying question: are they a *disfigurement* to the body, or a *figuration* of identity?³ Those who wear or endorse the practice of tattoos inevitably fall within a spectrum of opinion regarding what amount or kind of tattoo is appropriate or meaningful enough.

Therein lies a parallel between tattoos and architectural ornament: historically this analogy was articulated in Owen Jones' book *The Grammar of Ornament* published in 1856, and later in Adolf Loos' 1908 polemical essay, *Ornament and Crime*. As the latter influential title suggests, the use of architectural ornament became heavily scrutinized in the early 20th century. The ornamentation of architecture and utilitarian objects was synonymous with the practice of tattooing the skin, a custom that the emerging modern society of the machine age viewed as primitive and uncivilized.



2.01

**Tattooed female head
from New Zealand.**

From the architect Owen
Jones' book, *The Grammar
of Ornament*, 1856.

Ornament and Decoration

ornament (noun)

a thing used or serving to make something look more attractive but usually having no practical purpose, especially a small object such as a figurine.

- [mass noun] decoration added to embellish something.

(verb) make (something) look more attractive by adding decorative items.

decorate (verb)

make (something) look more attractive by adding extra items or images to it.

- apply paint or wallpaper in (a room or building).

Ornament, decoration and cosmetics share a common conceptual thread based on the fundamental idea that they are solely concerned with appearance. As such they are considered neither functional nor essential. This represents a significant departure from their original meanings, as well as a limited view of their potential application.

Ornament and decoration are rooted in concepts related to the organization, fitting-out and composition of space, and the creation of settings for activities or events to occur. Architectural scholar Brian Hatton uncovers the etymology of ornament and decoration, articulating their specific differences in order to better understand historical debates surrounding ornament, decoration, and colour in architecture. Ornament, he explains, first emerged around the 14th century as *orneth*, a term used to describe the act of *equipping*

something in order to improve its function or understanding, to *orn*. This was centuries before the idea of ornament as unimportant or excessive began to emerge in literature. Over time it increasingly became associated with the concept of 'mere' appearance, seduction and deception.⁴

The use of the term decoration first emerged out of theatre, therefore it was naturally connected to temporality. The negative connotations one may associate with being transient, fleeting, or image-oriented are irrelevant to decoration in this context. On the contrary, to decorate was to maintain *decorum*, defined as propriety, or appropriate behaviour and conduct. Here, decoration's role in 'setting the scene' extends beyond simply making a space appear more attractive, which is how decoration tends to be understood today. Rather, decoration is about the creation of a *context* or *setting* for activities to take place. It informs the character, atmosphere and programmatic functions of a space, which in turn influence the actions of its users.⁵

The key difference between architectural ornament and decoration is that traditional ornament originates from the material of the object it is applied to, whereas decoration is an external addition, unrelated to an object's existing material structure or tectonic organization. It is for this reason that paint or other forms of added colour are considered decorative.⁶

*skeuomorph (noun) an object or feature which imitates the design of a similar artefact in another material.

Gottfried Semper's Theory of Dressing

The nineteenth century German architect and historian Gottfried Semper wrote extensively on the tectonic and stylistic origins of architecture and the arts. His writings and illustrations substantiate an intrinsic connection between architecture and textiles through detailed historical and theoretical accounts.

A key theme running through Semper's work is his concept of *Bekleidung* (dressing), a layer of clothing or coating that masks a face, body or structural frame. For Semper this dressing (decoration), in the same way as theatre, was not about deception or imitation but instilling matter with social and cultural meaning. Without some form of interplay between concealing and revealing, the body is socially insignificant and void of any cultural function.⁸ As a form of dressing or mask, decoration is thus a critical ingredient of architecture and all forms of art:

I think that dressing and the mask are as old as human civilization and the joy in both is identical with the joy in those things that drove men to be sculptors, painters, architects, poets, musician, dramatists, in short, artists. Every artistic creation, every artistic pleasure presupposes a certain carnival spirit ... the haze of carnival candles is the true atmosphere of art. The denial of reality, of material, is necessary if form is to emerge as a meaningful symbol.⁹

Semper essentially viewed decoration as a constitutive element of human society and culture. For Semper, decoration was not simply a form of adornment or dressing equivalent to fashion –

the latter being a cyclic commodity driven by the economics of continually remaining new.¹⁰ Nor was decoration rooted purely in beautification, as we tend to think of it today. Rather, he conceived decoration as a dressing that is tectonically linked to the fundamental creation of enclosure. Semper asserted that before the first permanent buildings were constructed, the earliest enclosures were made of woven materials. The primordial weaving of branches evolved into weaving plant fibers for textiles, and that these ancient techniques preceded those of masonry wall. The “wall fitter” was the “weaver of mats and carpets” who played an essential role in the evolution of the enclosure.¹¹ In his essay *The Four Elements of Architecture* Semper describes wickerwork as “the original space divider” and “the essence of the wall”.¹² Semper also argued that the practices of using stucco, plaster, and painted wooden panels were skeuomorphic* and visually derived from the original carpet walls.¹³

In this conceptualization, the surface is given much greater significance than space and structure. Space does not preexist as a divisible entity, but rather, it is *created* by the act of enclosure. The enclosure itself functions as a spatial boundary only by virtue of its surfaces. Space is thus “an effect of the surface”.¹⁴ The functional role of structural support is also treated as secondary:

Hanging carpets remained the true walls, the visible boundaries of space. The often solid walls behind them were necessary for reasons that had

nothing to do with the creation of space; they were needed for security, for supporting a load, for their permanence, and so on. Wherever the need for these secondary functions did not arise, the carpets remained the original means of separating space. Even where building solid walls became necessary, the latter were only the inner, invisible structure hidden behind the true and legitimate representatives of the wall, the colourful woven carpets.¹⁵

This presented a significant departure from the common beliefs of Semper's contemporaries regarding the fundamental principles and origins of architecture. Of primary importance is Semper's concept of decoration as rooted in an ancient principle of dressing. The dressing, instead of a superfluous element, becomes a kind of *structural ornament*. The decorative woven patterns of textile walls are to the occupant the only visible structural boundaries.¹⁶

In his critical analysis of modern architecture's surfaces, present-day author Mark Wigley examines Gottfried Semper's writing as it pertains to surface. Wigley emphasizes Semper's stance on decoration as collapsing the binary of structure/ornament:

It is not just that the architecture of a building is to be found in the decoration of its structure. Strictly speaking, it is only the decoration that is structural. There is no building without decoration. It is decoration that builds.¹⁷

This line of thought extends towards Semper's argument that the historical use of festive banners and temporary decorations during public events and parades establishes the basis for all civic architecture.¹⁸ Wigley reiterates the connection that Semper draws between decoration and social life:

Public buildings, in the form of monumental architecture, are seen to derive from the fixing of in one place of the once mobile "improvised scaffolding" on which hung the patterned fabrics and decorations of the festivals that defined social life. The space of the public is that of those signs. Architecture literally clothes the body politic. Buildings are worn rather than simply occupied.¹⁹

Part of the controversy that surrounded Semper's work revolved around his writings on polychrome architecture. The popular Neoclassical architecture of the eighteenth century exemplified the common belief that the classical Greek ruins it sought to emulate were made of naked stone and were naturally white or beige. Around the mid-nineteenth century it was then discovered that classical architecture and sculptures were in fact originally decorated and very colourful indeed.

Gottfried Semper was a significant proponent of this argument, particularly in his essay *Preliminary Remarks on Polychrome Architecture and Sculpture in Antiquity* (1834). Semper refuted the notion that the ancient architecture and sculptures were pure and

unornamented, claiming on the contrary that they were almost always painted or gilded with various colours, patterns, and symbols. These decorations were, according to Semper, inseparable from the forms they covered and crucial to their conception and function:²⁰

... in Greek architecture, both the art-form and decoration are so intimately bound together by this influence of the principle of surface dressing that an isolated look at either is impossible.”²¹

John Ruskin, Semper’s contemporary, defined architecture as the “decoration of construction”²². For Ruskin it is structure that is functional and adornment is a separate element added on afterwards. Semper, on the other hand, conceived of adornment and structure as a unified whole. For Semper, the coloured surface “undoes the opposition between form and the ornamental or decorative”²³.

John Ruskin was also an advocate of “permanent polychrome”,²⁴ the preference of natural colours inherent to an architectural material as opposed to applied artificial colours. A material’s natural colour was evidently perceived as more permanent than applied pigments, and the artifacts and ruins of classicism were a testament to this. They maintained the long-standing nostalgic romanticization of pure structure and form as enduring through time, in contrast to the coloured surfaces which had altogether disappeared.



2.02
Detail of the Parthenon, Akropolis, Athens.
Painted by Gottfried Semper, 1836.



“Depth in architecture is idolized as pure, abstract, white, difficult to grasp, serious and linguistic, while whatever is sensual, eloquent, colourful and essentially non-linguistic is ridiculed as superficial, cosmetic, vulgar, indecent, and even pornographic.”²⁵

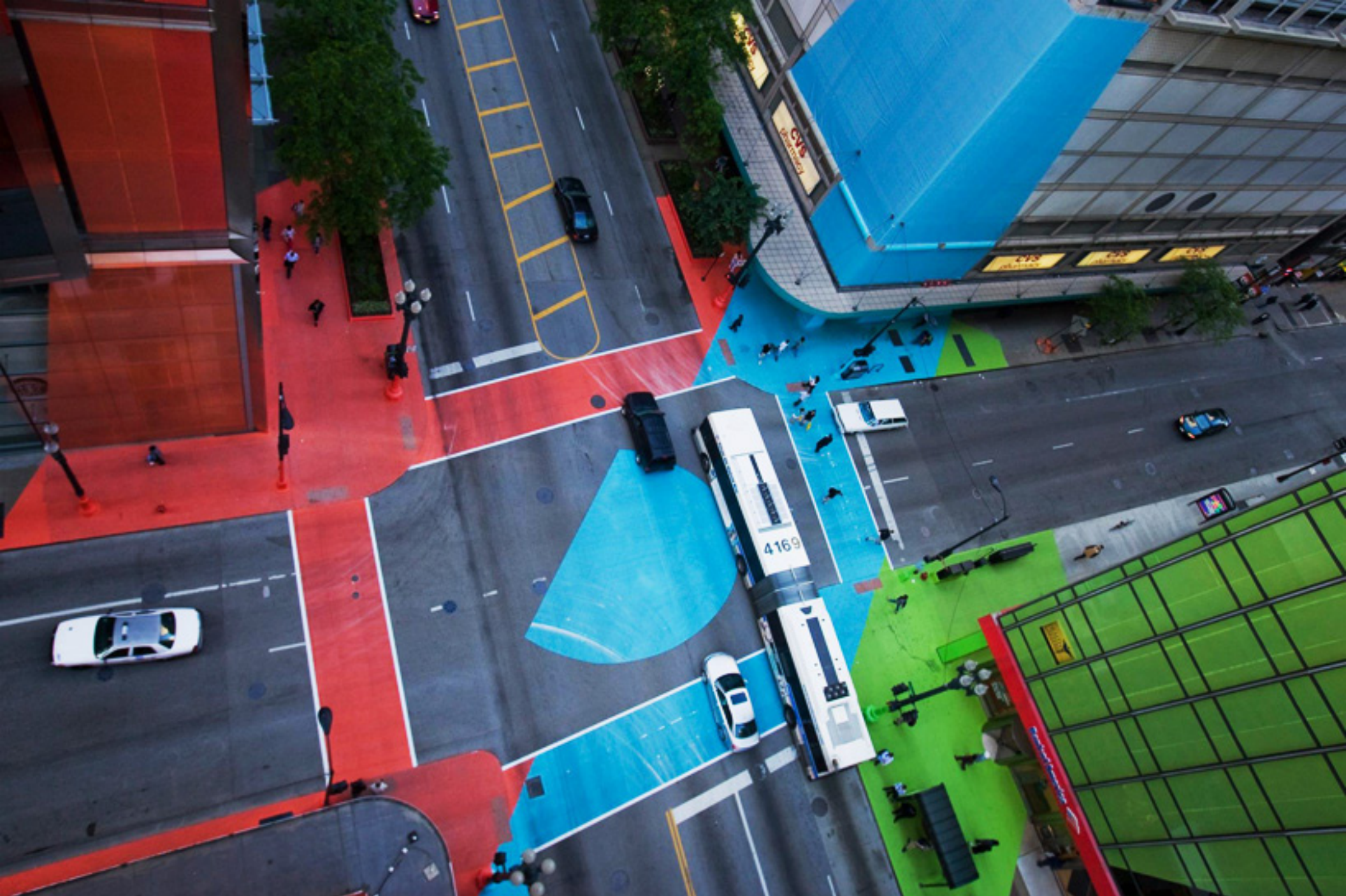
- From *Saturated Space*, a colour research group at the Architectural Association School of Architecture

“In architectural criticism, terms such as ‘supplementary’, ‘ornamental’ or ‘cosmetic’ have been deployed to denigrate colour’s appearance in a building. As something applied to a surface, like other ornament, colour has been deemed dispensable. If ornament could be characterized by Loos as crime, colour, at best, was deception – a secondary, sensory quality, distracting and seducing the viewer and deflecting attention from what really matters about architecture. But it is precisely this power to distract and seduce that is the key to colour’s critical and destabilising potential.”²⁶

- Vittoria di Palma, *Blurs, Blots and Clouds: Architecture and the Dissolution of the Surface*

“The unexamined fear underlying our current architectural discourse is that a too close attention to colour will result in a complete abandonment to decorative and symbolic practices, to the pleasures and stimulation of colour for its own sake.”²⁷

- William Braham, *Modern Color / Modern Architecture*



2.03 (page 133)

Herzog and de Meuron,
Cottbus Technical University
Library, Germany, 2004.

View down spiral staircase.

2.04 (facing page)

Jessica Stockholder, Colour
Jam, Chicago, 2012.

Aerial view of the public art
installation.

Colour and Paint

colour

Early 13c: skin colour, complexion.

Latin: colour of the skin; colour in general, hue; appearance.

Old Latin: colos, originally “a covering” (akin to celare, to hide, conceal.)

chroma

Greek: khroma, surface of the body, skin, color of the skin, also used generically for colour and, in plural, ornaments, embellishments.

khros: surface of the body, skin.

khrozein: to touch the surface of the body, to tinge, to colour.

Colour is entangled in the question of surface because colour is intrinsically understood as a skin or coating. It is visually inseparable from and therefore conceptually tied to the surface of all objects, bodies and buildings. As it pertains to this thesis, colour plays a significant role in the inquiry of surface because it inevitably takes part in the dialectic between the natural/artificial, authentic/fake and bare/decorated.

Colour plays a vital role in how surface is understood and what it communicates. This thesis is not concerned with *what* colours are used but rather *how* they are used. In architecture it is primarily a question of how colour affects the reading of form and material, colour's relation to site context, and its connotative ability. The significance of colour ultimately depends on whether or not a colour appears neutral or natural, and if it used to differentiate

and highlight or conversely to blend in and conceal. *Camouflage* is a categorical example of surface colour manipulation that conceals an object within its surroundings or disrupts its perceptibility. The creation and use of colour in the built environment is never a singularly visual choice - it is also unavoidably a social one.²⁸

Being equated with skin, colour is seldom approached as a spatial element. In architectural discourse at large, colour is foremost viewed as supplemental and atectonic, unrelated to the construction and materiality of architecture. Decisions involving colour are often left to interior designers or decorators. It is viewed as a cosmetic issue relating only to surface, therefore typically left until the later stages of projects to be applied to predetermined built forms. This also tends to be the case in architectural education. Matters of surface are left until the end and colour largely ignored, as priority is given to understanding spatial relationships.

In *Chromophobia*, writer David Batchelor argues that a fear of colour is pervasive throughout Western culture. In just one word, the title aptly captures what he describes as “a fear of corruption or contamination through colour” as seen in the puritanical efforts to make architecture white in Neoclassicism or the desire to cleanse architecture of all decorative excess in Modernism.

The ‘problem’ of colour in architecture is centered on its subjective nature, both physiologically and psychologically.

Josef Albers, an artist and professor in the Bauhaus school of art was famous for his research on colour theory. In 1963 he published *Interaction of Colour*, a book filled with visual demonstrations of colour relativity, which until today provides a valuable resource for designers. It compellingly showcases the unreliability and deceitfulness of colour, as its perception wholly depends upon context. The painter Bridget Riley put it succinctly when she said, “form is absolute and colour wholly relative.”²⁹

In broader visual culture, colour has two faces: it might signify playfulness or democracy, but it is also associated with immaturity, emotion and a lack of refinement or taste. Batchelor writes:

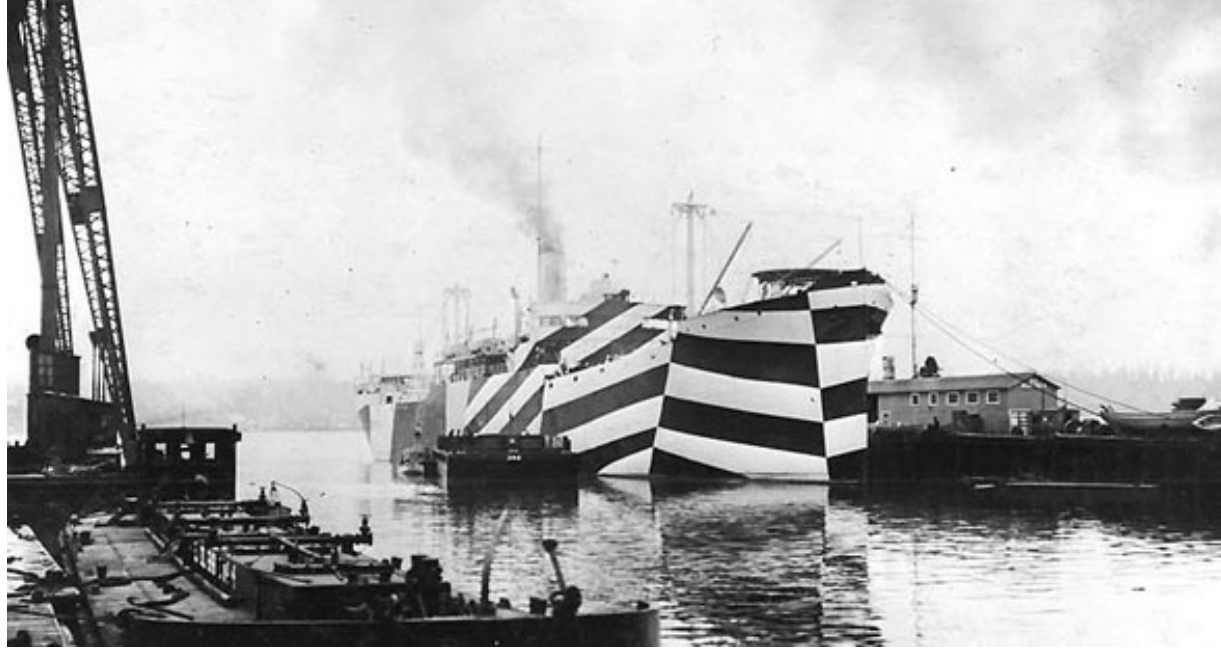
Often regarded as feminine, as too connected to the senses and the emotions, the body and to pleasure, colour threatens to get in the way of the more serious, intellectual and masculine business of drawing and forming.³⁰

Another challenge colour presents is the difficulty considering it as an entity in itself. Surface and form are seen to *possess* colour but colour as an independent element cannot be physically grasped³¹ and its use in architecture is often dictated by the plane or volume it is applied to.

2.05

Dazzle Ship, WWI.

Military warships of World Wars I and II called employed a camouflage technique called 'dazzle' which used painted high-contrast, brightly coloured geometric shapes and stripes. Rather than camouflage via blending in, this tactic makes it extremely difficult for enemies at sea to estimate a dazzle ships' distance and direction of movement.



2.06

Carlos Cruz-Diez, Dazzle Ship, 2014.

A contemporary dazzle ship, painted for the Liverpool Biennial at the Albert Dock.

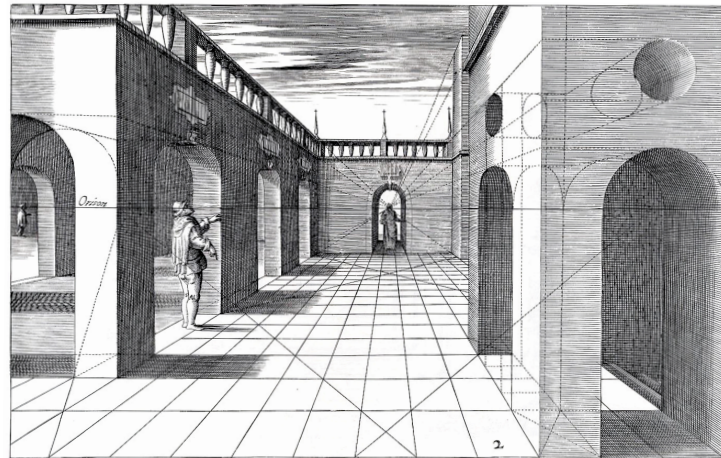


During the Renaissance era, a distinction between colour and form in both painting and architecture was distinguished by the Italian terms *disegno* (drawing) and *colore* (colour). The Renaissance is a significant period for the discussion of colour in architecture because it was during this time that the architectural profession first began to emerge as separate from the other arts of painting and sculpture. This coincided with the invention of perspective drawing, which allowed spatial depth to be rendered much more accurately than in the past.³²

In Renaissance painting, *disegno* referred to the lines, shapes, and forms that were drawn to represent the three-dimensional world. *Colore*, on the other hand, was related to the emotional, sensational and atmospheric effects of colour.

While both concepts were debated in the field of painting, in architecture it was *disegno* that was given clear priority.³³ While the word originally means drawing, *disegno* is also the root word of design, which we know until today as fundamental to the practice of architecture.³⁴ Unlike colour, which was seen as more seductive and difficult to control, architectural drawing of the Renaissance was rooted in reliable mathematically guided principles. The belief in the truth and realism of perspective drawing – which privileged form above all else – was combined with an equal avoidance and mistrust of colour.

This age-old opposition of *disegno* and *colore* highlights the disparity between what is considered rational versus irrational in architectural thinking, and how the former is tied to structure, linearity, and permanence, while the latter tends to concern issues related to surface, such as colour, which are harder to quantify and viewed as more ephemeral.



paint (noun)

a coloured substance which is spread over a surface and dries to leave a thin decorative or protective coating.

- an act of painting something
- cosmetic make-up

painter (noun)

- 1 an artist who paints pictures
- 2 a person whose job is painting buildings

Paint is a non-material: a formless substance inherently tied to other surfaces, yet it is capable of transforming the appearance of every object it touches. Simultaneously veiling them and disappearing within them, a layer of paint can visually alter a volume despite its almost imperceptible thickness that borders on being two-dimensional.

Originating from an innate desire to mark our creations and ourselves; paint is conceptually inseparable from colour, cosmetics, and the dressing or masking of any object, body or building.

The practice of painting surfaces in the production of architecture is largely viewed as completely disparate from the act of painting for the purposes of art. Paint in architecture is physically and visually subservient to the forms it covers. It may modify appearances, but is inevitably conditioned by the surface it is applied to and must

conform to the volume it envelops. Its conventional use is uniform, undifferentiated and smooth, always visually recognizing (or even enhancing) the reading of architecture's imposing geometry, while concealing its materiality underneath.

Contrastingly, in visual art paint overpowers the surface, introducing its own shapes and forms. It has the ability to give flat surfaces visual depth, movement and texture where it previously did not exist. A painting is also usually conceived independently of its surface – it is not about the surface but rather what is applied to it – the formal content of the artwork. This is distinguished from architectural uses of paint where there is no subject matter to view or exhibit, nothing noticeably added aside from a possible colour change or aesthetic enhancement of the architecture itself.

Despite the apparent differences with regards to paint in architecture and visual art, a relationship between painting and architecture has always existed. Painting – no matter what style, historical period or intention behind it – is inextricably linked to surfaces, and therefore to architecture. Painting was literally born out of architecture, and bound to it in the form of murals since the earliest cave paintings. Even after the widespread use of portable easel paintings and canvases became possible, paintings are nonetheless still ultimately produced to be displayed on walls.

“Modernism has rendered ambiguous the role of the wall as a device of definition, confinement and separation and as a carrier of symbolic dressing, for it can at one moment outdo itself with mass and at another deny its essence as diaphanous membrane such that it disappears as a physical phenomenon.”³⁵

- Fritz Neumeyer, *Head first through the wall: an approach to the non-word façade*



2.08 (top left)

Walter Gropius, Bauhaus Dessau, 1926.

Three-storey curtain wall system.



2.10 (top right)

Mies van der Rohe, proposal
for a glass skyscraper, 1922.

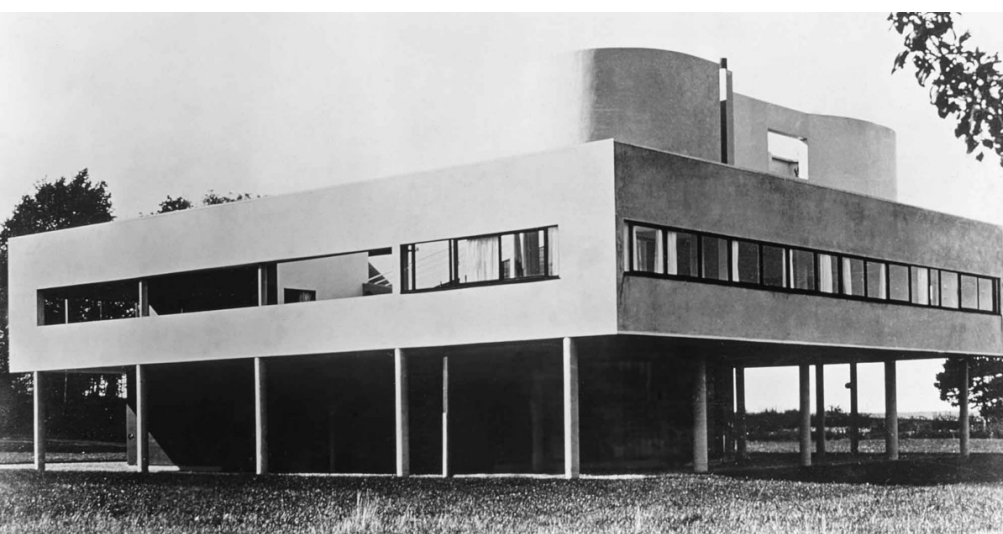
THE MODERN SURFACE

The early decades of the twentieth century mark a clear transition in architecture and visual culture engendered by changes in technology, construction methods and material production at the onset of the machine age. The newfound mass reproducibility of building components in tandem with developments in photography, television, and printing profoundly altered prior conceptions of spatiality, vision, media, and the fundamental nature of art.

In modern architecture the use of structural columns in lieu of traditional load-bearing walls radically freed up the floor plan, allowing architecture to achieve an unprecedented degree of openness, airiness, lightness and transparency. Partition walls could now be designed without confining to the requirements of structural support.

The invention of the curtain-wall similarly freed the façade from the tectonics of load-bearing construction, making it a separate element to be suspended off of a structure. This division of structure and cladding radically altered the role of the architectural surface. While the skin-structure binary was not a novel concept, it was not until the modern age that it became explicitly expressed in architecture, both visually and technically. The authors of *Surface Architecture* David Leatherbarrow and Mohsen Mostafavi write:

Once the skin of the building became independent of its structure, it could just as well hang like a curtain or clothing. The relationship between



2.09 (bottom)

Le Corbusier, Villa Savoye, 1927.

structure and skin has preoccupied much architectural production since this period and remains contested today. The site of this contest is the architectural surface.³⁶

This fundamental separation of skin and structure sustained a notion of the architectural surface as a form of clothing that autonomously hangs off of a body - a notion that has made the question of its role all the more ambiguous, and hierarchically less substantial than the structural supporting body. The status of walling itself transformed, particularly with regards to its dissolution and dematerialization through the use of the all-glass or mirrored curtain-wall. The traditional solid masonry wall now had the capacity to be rendered a thin, autonomous plane, virtually equivalent to surface, a surface now able to disappear completely into the depths of a view.

Spatial enclosures also began to shift away from being defined solely by the Cartesian planes of wall, floor and ceiling, towards a more complex spatiality where elements constituting enclosure were no longer necessarily limited to surface-based boundaries.³⁷ For example, the slender modern *pilotis* employed by Le Corbusier in the Villa Savoye (2.09) created a new kind of subsidiary space beneath the building. Adolf Loos' *raumplan* as seen in the Müller house organized space using a series of stepped levels.

An overall increased sense of openness, movement and flow through modern spaces went hand in hand with an increased visual connectivity between interior and exterior as well as private and public life. At the same time, new ways of seeing enabled by film began to transcend the former two-point perspective spatial representations of Renaissance painting and drawing. These changes led to an expanded sense of three-dimensionality and a growing ambivalence towards the surface's role as delimiting spatial barrier.³⁸ Architecture critic Fritz Neumeyer describes these transformations:

The new ideal was buildings placed freely in space, breathing air and light on all six sides ... The bearing wall as a spatial limit was now superfluous, out of work. ... Ground-related wall-architecture that closed and opened spaces was replaced by the floating transparency of the framework.³⁹

Neumeyer asserts that this dissolution of the wall has long existed in architecture, for example in the wall frescoes and chiaroscuro painted domes of the Baroque and Renaissance eras. In pre-modern architecture, the surface as articulated by Semper was a site of symbolic dressing that necessarily strove to deny the literal materiality of the wall to generate didactic meaning. In modernity however, "construction methods can reduce architecture to almost nothing, can make it disappear into the insubstantial flickering of a mirage".⁴⁰

The 'skin and bones' architecture made possible by the curtain wall fundamentally changed the nature of architectural production until today, albeit under different agendas and circumstances. The former frontality and semantically inscribed traditional facade was replaced by a more anonymous, multi-directional building presence with surfaces consumed by depth.



2.11
Mies van der Rohe,
Seagram building, 1958.

“Architecture being the masterful, correct, and magnificent play of volumes brought together in light, it is the architect’s task to bring the surfaces that envelop these volumes to life, without their becoming parasites that consume the volume and absorb it to their profit...”⁴¹

“Every citizen is required to replace his hangings, his damasks, his wall-papers, his stencils, with a plain white coat of Ripolin. His home is made clean... Everything is shown as it is. Then comes inner cleanness.”⁴²

“Decoration is of a sensorial and elementary order, as is colour, and is suited to simple races, peasants and savages ...The peasant loves ornament and decorates his walls. The civilized man wears a well-cut suit and is the owner of easel pictures and books.”⁴³

“The great works of the past are those based on primary elements, and this is the only reason why they endure.”⁴⁴

- Le Corbusier

Cleansed Surfaces: Rational, Absolute, Authentic and Pure

Many architects during the modern period came to view the surface as a problematic element that needed to be rationalized, disciplined and purified in some way. With architectural surfaces now free to govern their own aesthetic, combined with the ability to be placed independently from points of structural load, the critical response was to ascertain a rational, non-arbitrary approach to their design that would be appropriate to modern modes of construction.

The perceived precariousness and insubstantiality of surface in the modern age ironically led to a preoccupation with controlling it. This was part of a broader discourse regarding the authenticity and truthfulness of architectural materials and a desire to express the clarity of structural organization, volumetric form, and functionalism.

As one of the most important pioneers of modern architecture, Le Corbusier was highly enthusiastic about the promises of the machine age. With his famous credo, “a house is a machine for living in”, Le Corbusier firmly believed that the new technologies of the modern age offered the possibility of a better quality of life for the masses. In his 1923 publication *Toward An Architecture* Le Corbusier looks to industrial buildings and infrastructures designed by engineers (such as grain silos) as models for future architecture, inspired by the purity, simplicity, functionality and universality of their elementary volumetric forms.

In line with the machine aesthetic of modernity and the growing capitalist economy was a desire to strip architecture and objects of everyday use down to their essential functions. Ornament, decoration, colour and other forms of surface embellishment became regarded as superfluous excess, criticized as morally and economically irresponsible, and irrelevant in the modern age. For Le Corbusier, these surfaces were capable of being “parasitic” to architectural form.⁴⁵

In *Ornament and Crime* Adolf Loos argues emphatically against the use of ornamentation in architecture as well as all facets of daily life, to the point of criminalizing it:

The Papuan tattoos his skin, his boat, his paddles, in short everything he can lay hands on. He is not a criminal. The modern man who tattoos himself is either a criminal or a degenerate.⁴⁶

Loos pits the ideal modern man against indigenous tribal people of Papua New Guinea to debase ornament as not only primitive but immoral if done by a modern, educated man. He also compares its use to infantile behaviour, asserting that the urge to decorate oneself is a primitive or animalistic impulse comparable to smearing erotic symbols on a bathroom’s walls.⁴⁷ Loos’s famous statement that “the evolution of culture is synonymous with the removal of ornament from utilitarian objects”⁴⁸ emphasizes his belief that being civilized and modern is essentially tied to a cleansing of surfaces.

Underlying this discourse was a moral conviction that the utilitarian and bare provide a more universal, economical, objective and therefore enduring architecture. This was in clear contrast to the concurrently developing fashion industry.

Architects such as Le Corbusier and Loos sought to differentiate modern architecture from the fleeting cyclical nature of fashion and stylistic trends that were emerging as a result of mass production. They made a conceptual distinction between the terms 'clothing' and 'fashion' in favour of the former, applying the notion of clothing to architecture's skin or surface. Modern clothing was meant to be pure, rational and universal while fashion was feminine, trivial and ephemeral.⁴⁹ This conception of modern clothing maintained a hierarchical binary between clothing and body, skin and structure. Clothing was, theoretically, meant only to highlight form.

Integral to the modern rationalization of architectural design and transparency afforded by the curtain-wall was a belief in making architectural construction 'honest'. The hierarchy and functional roles of assembled components in architecture were intentionally made visible, expressed in contradiction to the perceived deceptions of pre-modern architecture's use of surface dressing.

Of additional relevance to the role of surface in modern architecture was the newly emerging notion of authenticity called into question by the widespread use of mass production and a perceived loss of artistic authorship associated with mechanization. In his famous essay *The Work of Art in the Age of its Technological Reproducibility* (1936), Walter Benjamin examines transformations in perception brought about in the modern era. In it he argues that the mass reproducibility of all art forms (via photography, printed media, audio recording and film) inevitably leads to a deterioration of their "aura" or authenticity found only in the original work.

With the ability to mass-produce artistic works including ornament and decorations such as wallpaper, the concept of commercial art emerged as a lowbrow version of art, made for easy consumption by the mass population of a capitalist society. The movement to remove ornament from architecture was connected to the belief that technology would liberate mankind from unnecessary labour.

Ornament was no longer tied to the labour of craft, as machines could now mass-produce ornament on a myriad of everyday objects, including architectural components. Consequently, ornament was criticized by avant-gardes for a loss of artistic value, degradation into a "surrogate art"⁵⁰ as coined by the architect Loos,

and commercial “kitsch” as argued by the art theorist Clement Greenberg in his 1939 essay *Avant-Garde and Kitsch*. The ‘art nouveau’ (new art) movement retained the use of ornament but in a manner unlike its previous usage as a figurative and additive element. Rather, ornament encompassed entire objects.⁵¹ The avant-garde movement eventually supplanted art nouveau, and had a longer lasting impact on much cultural production for the first half of the century in Europe and North America.

Clement Greenberg defined kitsch as the commercial art of popular culture found in advertisements, comic book illustrations and magazine covers of mainstream media. He posited that kitsch was the product of the industrial revolution’s urbanization of the masses and universal literacy,⁵² created to satisfy the cultural needs of many for whom the ‘high’, formal, genuine culture was previously inaccessible. Kitsch was, in his definition, for the ‘poor’ and ‘ignorant’; it borrowed elements of genuine culture for easy mass consumption and profit, at the “detriment of true culture”.⁵³ Kitsch was seductive and “pre-digested”, a “vicarious experience of faked sensations”. Only a cultivated audience could prefer authentic art to kitsch art.⁵⁴

This mode of thought supported Greenberg’s similarly influential views regarding abstract versus representational art. Abstraction at this time was beginning to gain momentum as a heretofore-unknown phenomenon of painting in the twentieth century. Greenberg and his followers believed that abstraction in modern painting was a more genuine and refined form of art because it required more serious contemplation, unlike representational painting that, like kitsch, was easier to digest.⁵⁵ Greenberg also recognized a shift in modern painting from spatial illusion and depth towards a more ‘shallow’ kind of painting that employed flat areas of colour. This was seen as being more true to the medium of paint.

"When one says painting, inevitably he says colour. But colour has properties of shock ... which strike the eye before form..."⁵⁶

"I admit the mural not to enhance a wall, but on the contrary, as a means to violently destroy the wall, to remove it from all sense of stability, of weight, etc. ... Why then to paint on the walls...at the risk of killing architecture? It is when one is pursuing another task, that of telling stories."⁵⁷

- Le Corbusier

Modern Colour and Painting

As with the cleansing and rationalization of modern surfaces, architects and painters of the modern avant-garde sought to deal with colour through classification, standardization and absolutism.⁵⁸ 'Purity' was a theme that continued to appear as an ambition in both painting and architecture, all the while retaining an implicit connection to morality.⁵⁹

"Now painting is a question of architecture, and therefore volume is its means."⁶⁰

Le Corbusier's "Law of Ripolin"⁶¹ advocated an architecture painted entirely in white. The subject of colour was nevertheless continually being debated and explored in circles of the modern avant-garde. Le Corbusier could not avoid participating in that discourse and throughout the course of his career he too strived to understand colour's potential employment in modern architecture and painting.

Purism was an art and architecture movement put forward by Le Corbusier and the French painter Amédée Ozenfant in the early 1920s, shortly after the emergence of Cubism. The movement and manifesto provide an illustrative example of the modern aspiration to control the use of colour within a set of prescribed rules. Colour in Purism was approached as subsidiary to form, used only for its psychological and physiological effects on the reading of form or space. For example, certain colours applied to a plane make it

appear to recede, while others may advance it forward. This was believed to be due to both the optical phenomena of colours as well as their psychological associations with nature, such as blue with sky. The purist palette of colours was thus restricted and divided according to their perceptual experience.⁶²

Le Corbusier and Ozenfant proposed three categories of colour for a "regulated architectural polychromy"⁶³: the "major" (stable, constructive colours), "dynamic" (vibrating, animated colours that move forward or recede) and "transitional" (for tinting).⁶⁴ Their ultimate goal was to reject any use of colour that could disrupt architectural volume. This emphasis on colour "solidity" can be interpreted again as a response to the coloured surface's newfound mobility and changeability in the context of modern fashion and commercial art.⁶⁵

Le Corbusier referred to his purist architectural polychromy as 'architectural camouflage', but in a manner completely opposite to the military camouflage being employed at that time, such as dazzle paint, which was influenced by the fragmentary nature of Cubism. For Le Corbusier, architectural camouflage was employed to both reinforce and downplay various architectural elements as a tool in the modulation of space.⁶⁶



2.12

Le Corbusier, Villa la Roche, 1924.

Use of Purist colours to define architectural form and space.

2.13

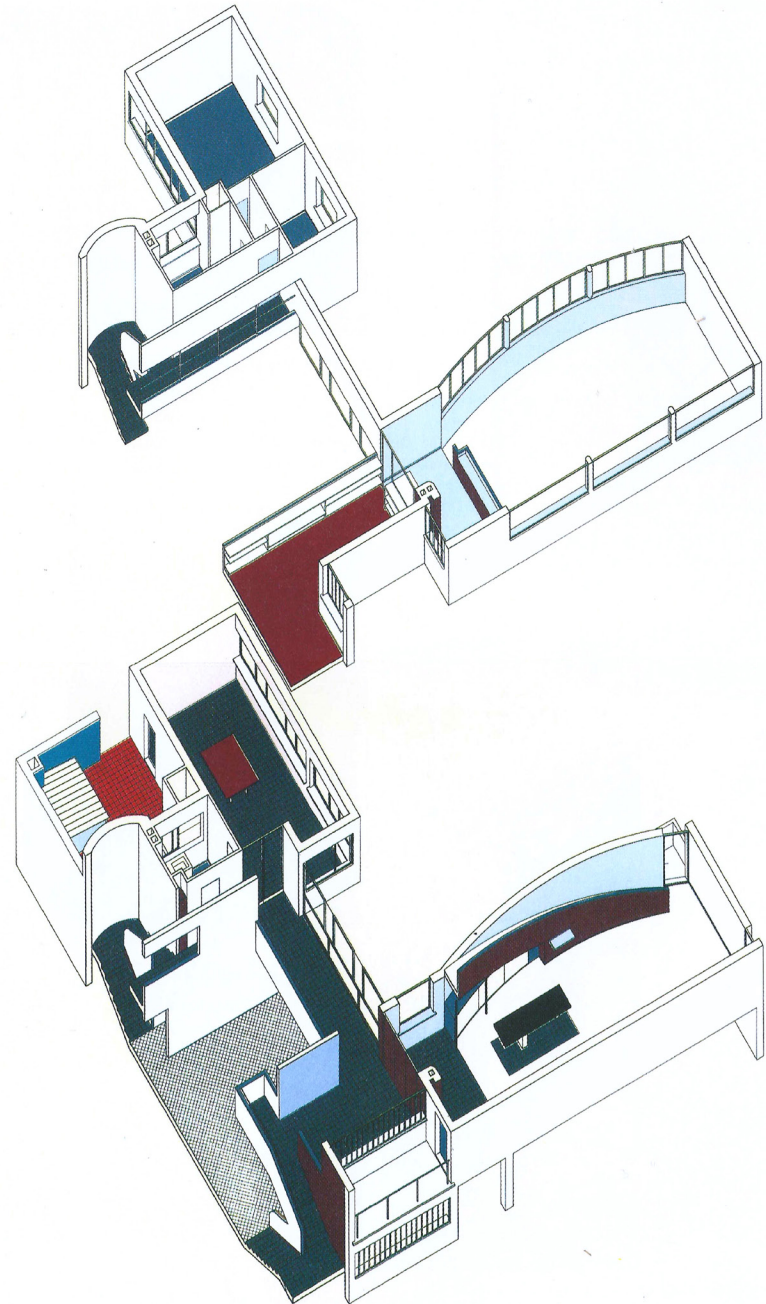
Le Corbusier (Charles-Edouard Jeanneret) *Nature Morte*, 1920.

Oil on canvas, 31 7/8 x 39 1/4 in.

2.14 (right)

Le Corbusier, *Villa la Roche*, 1924.

Diagram showing the 'dynamic' relation of form and colour.



“The plastic expression of space-time painting in the twentieth century enables the artist to realize his grand vision of placing man within painting instead of in front of it ... it is only the exterior surface which defines architecture, since man does not live within a construction but within an atmosphere which has been established by the exterior surface.”⁶⁷

- Theo van Doesburg

The Dutch artist and architect Theo van Doesburg was interested in a similarly ‘structural’ or ‘architectonic’ approach to the use of colour in architectural design. His work in both architecture and painting continually influenced one another as he developed a “painterly conception of architecture”.⁶⁸ Doesburg collaborated with other like-minded individuals in the creation of the De Stijl movement in 1917, a modern group of painters, architects and sculptors.⁶⁹ The principal goal of De Stijl was to establish a unity between architecture and painting.⁷⁰

Although De Stijl’s treatment of surface and colour differed in many ways from Purism, both streams of thought regarded colour as an element capable of “clarifying” or “destroying” architecture, and both approached colour as a tool in architectural expression and orientation within architectural space.⁷¹ Like Le Corbusier, Doesburg strived to use surface and colour to define architectural elements, and to create a “purity of relationships” and “clarity of expression” within architectural space.⁷² He argued that colour

should be regarded as a construction material rather than a secondary decorative element,⁷³ writing:

Colour renders visible the spatial effect for which the architect strives. It is in this way that colour makes architecture complete and becomes intrinsic to it.⁷⁴

De Stijl adopted a concept called ‘Neo-plasticism’ which utilized multiple planes of colour within a singular surface, an approach Le Corbusier criticized as disrupting the reading of architectural form. For Doesburg on the other hand, it was the composition of colours in tension that was key to creating a harmonious balance. In his design for Café Aubette he created “counter-compositions” using diagonals that do not follow wall boundaries but intentionally create a visual counterpoint. Doesburg argued that the built and painted elements work together harmoniously as part of a visual composition in space.⁷⁵

Theo van Doesburg vigorously attempted to employ a rationalist approach to his work by using controlled and ordered compositions. Principles of symmetry, repetition and rotation are evident in his work, and the De Stijl palette was explicitly limited to only primary colours.⁷⁶

(clockwise from top)

2.15

Theo van Doesburg and Cornelis van Eesteren, colour design for a university hall, 1923.

Pencil, gouache and collage on paper.

2.16

Theo van Doesburg, Counterconstruction, 1923.

Gouache on collotype.

2.19

Theo van Doesburg and Cornelis van Eesteren, Maison Particuliere, 1923.

'Neoplastic' relation of form and colour.

2.18

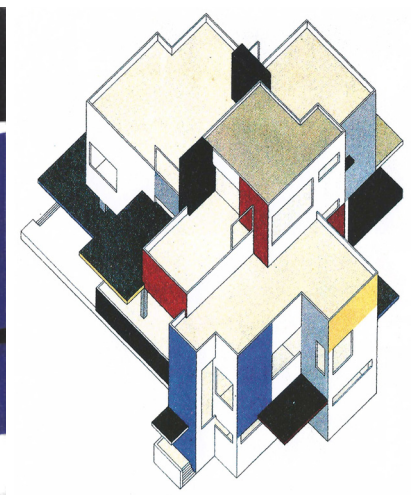
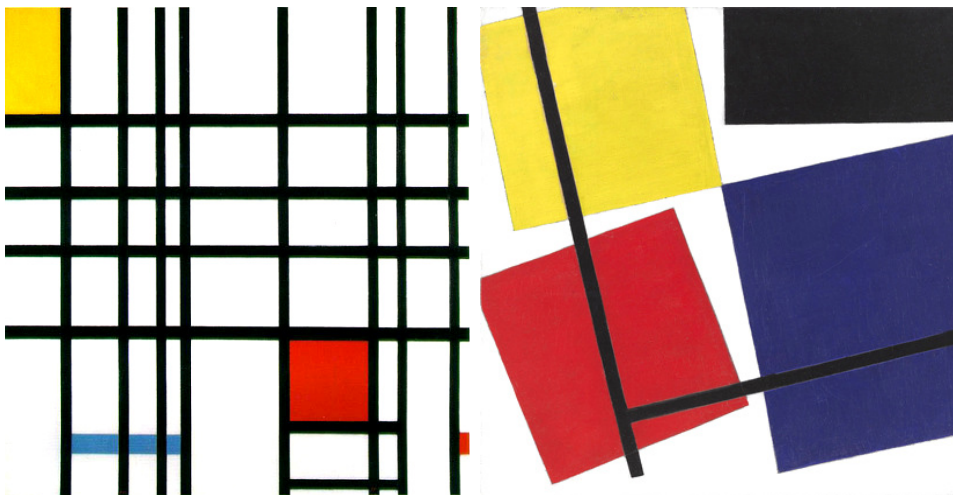
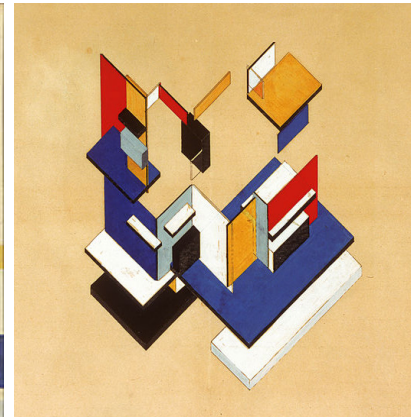
Theo van Doesburg, Simultaneous Counter-Composition, 1930.

Oil on canvas.

2.17

Piet Mondrian, Composition with Yellow, Blue and Red, 1937-42.

Oil on canvas.



“The position that an epoch occupies in the historical process can be determined more strikingly from an analysis of its inconspicuous surface-level expressions than from that epoch’s judgments about itself.”⁷⁷

- Sigfried Kracauer; *Mass Ornament*

“The evolution of skin, the surface with which spatiality is produced, is the evolution of the social. The social subject ... is a product of decorative surfaces.”⁷⁸

- Mark Wigley, *White Walls, Designer Dresses: The Fashioning of Modern Architecture*

“Clothing, as an extension of the skin, can be seen both as a heat-control mechanism and as a means of defining the self socially. In these respects, clothing and housing are near twins.”⁷⁹

- Marshall McLuhan, *Understanding Media: The Extensions of Man*

“Clothing makes the people, wall clothing makes the space.”⁸⁰

- Le Corbusier; Advertising brochure for *Salubra* Wallpaper

Modern Fashion, Naked Clothing

The central argument of Mark Wigley's *White Walls Designer Dresses* is that the archetypal 'white walls' of modern architecture were not actually naked or bare as was emphasized by modernists and those educated in the modern tradition. Rather, the 'pure' or naked modern surface is itself a form of *clothing* intended to *represent* modern *culture* above all else; a culture of mechanization, rationality, purity, universality and transparency.

For Wigley, this clothing is essentially no different than Gottfried Semper's historical dressing or 'mask' that reflects cultural meaning and identity.⁸¹ The cultural transformations advanced by modernity do not remove this dressing but instead modify it accordingly. The common notion that the modern surface was meant to highlight the purity of structural form is contradicted in Wigley's assertion that it was first and foremost a socio-cultural surface akin to fashion:

The truth made visible by the whitewash is not that of structural materials or construction technology but the truth of modern life. The layer of white paint exposes the "structure" of the "edifice" of modern culture rather than the structure of the edifice it is added to.⁸²

Le Corbusier and Adolf Loos articulate a relationship between clothing and culture in their own writing. Both describe clothing as analogous to the architectural surface in their arguments regarding ornament and decoration; using the example of clothing to contrast

the aesthetic of the modern from the primitive. Their resistance to fashion is therefore quite convoluted: by declaring decorative and ornament as outdated and anti-modern, they participate in the very practice of fashion they openly condemn by making a distinction between the new and old, specifically in terms of the surface. The removal of ornament from the architectural surface is not the removal of fashion but actually a new fashion.⁸³

The very concept of fashion is inseparable from modernity, as both emerged simultaneously and depend on one another to exist:

Not only can fashion never be cut off from modern architecture, modern architecture emerges from the very economy of fashion that it so loudly condemns. Indeed, its very rejection of fashion is a product of that economy.⁸⁴

The terms *fashion* and *modern* are also etymologically connected by the root words *mode* and *modo*, meaning current, new, or up to date.⁸⁵ Modernism's supposed privileging of the universal and eternal might appear contrary to fashion, but the very idea of being modern relies on the existence of a 'traditional', just like the idea of 'fashionable' relies on an 'unfashionable'. The "fragility" of fashion is precisely what modern architects sought to avoid, yet, a coat of white paint is extremely fragile.⁸⁶

The quintessential modern ideologies of authenticity and honesty are equally exposed as myths. Wigley argues that the modernist structures were neither stripped of clothing nor were their surfaces stripped of ornament.⁸⁷ Rather, as a site of representation, the modern surface masks *structure* in order to portray *culture*, a culture of stripping down to the pure and essential.⁸⁸

Despite their explicit condemnation, ornament and decoration never truly disappear from modern architecture – they are simply redefined. White paint, planes of colour, marble veining, mirror effects and repetitive geometric patterns are all present in modern architecture, and all are arguably a kind of surface dressing. In his 1925 publication *The Decorative Art of Today*, Le Corbusier clearly acknowledges the presence of decoration in modern culture.⁸⁹ Rather than the complete *elimination* of decoration, he more precisely defines a new kind of decoration for the modern age, as the book opens with a seemingly contradictory statement, “modern decorative art is not decorated”.⁹⁰ Here the role of decoration is simply taken over by the ‘pure’ surface.⁹¹

The critique of ornament put forward by Loos in *Ornament and Crime* ironically leads to his overall fixation with the surface. As evidenced by both his built work and his 1898 essay *The Principle of Cladding*, the surface or cladding is of paramount importance to Loos’s concept of modern architecture and social life. In several of his works Loos employs cladding that even appears quite

decorative, but he makes a clear distinction between masking as an operation of *cladding* and of *ornament*.

The unornamented cladding or mask is viewed as a critical component of modern life. Loos demands that this mask not be confused with the structure, body or being it clothes. Furthermore, Loos stresses that the most ideal modern mask or surface is an inconspicuous one: fitting into modern society means blending in. For Loos this is partially a matter of protection, of keeping inner and outer identities separate:

Modern clothing consists of an anonymous “uniform” that does not display an individual’s identity, but instead serves as a “mask,” a body armour or shield of sorts, which protects individuality from an overwhelming outside.⁹²

Loos denounces ornament specifically in terms of its use as a material *disguise* and as an overt display of symbolic content. The first concern is rooted in the morality of material honesty and authenticity, a condemnation “of wanting to look like more than one is by means of undignified trompe l’oeil effects”.⁹³

A second concern is based on the belief that the ornamented surface presents a permanent outward display of inner identity, an identity that the modern civilized man is meant to keep private and be able to change at liberty. This is part of a larger discourse regarding the newfound mobility and freedom of the modern individual,

as epitomized by Walter Benjamin's anonymous wanderer or *flâneur*.⁹⁴ For Loos, the desire to express one's individuality on the surface for everyone to see is a primitive type of behaviour that indicates a lack of inner character and depth:

Primitive men had to differentiate themselves by various colours, modern man needs his clothes as a mask. His individuality is so strong that it can no longer be expressed in terms of items of clothing.⁹⁵

2.20

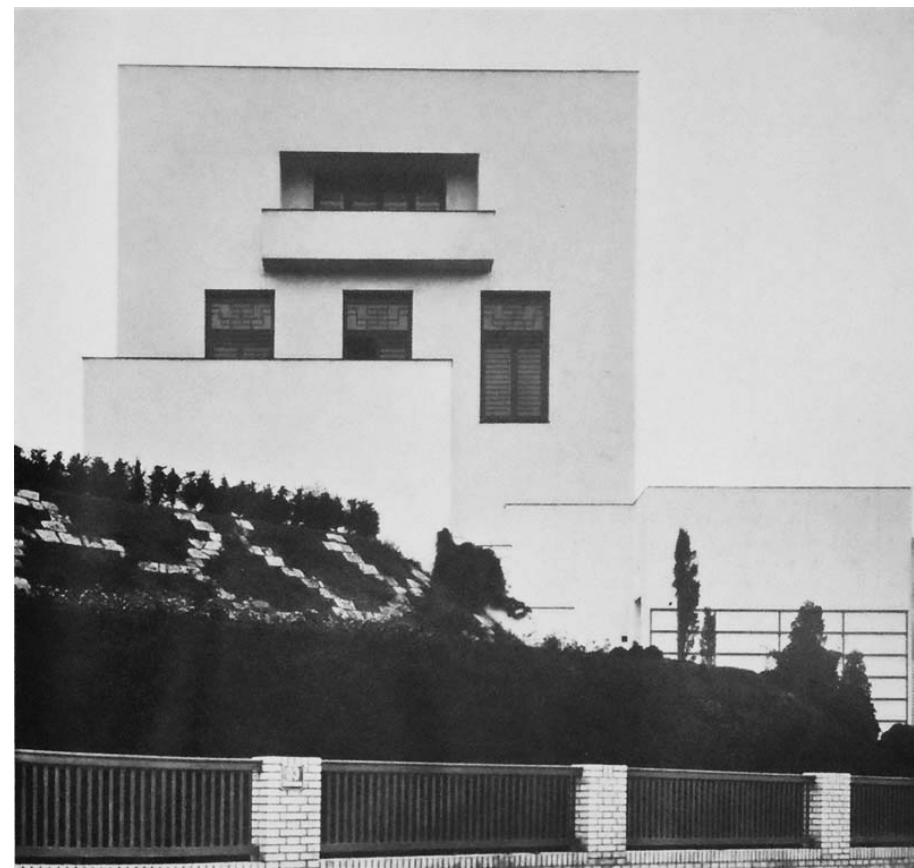
**Adolf Loos, Villa
Müller, Prague, 1930.**

Living room.

2.21

**Adolf Loos, Villa
Müller, Prague, 1930.**

Exterior facade.



“Deprived of ornament, and of load-bearing requirements, walling became “infill”, a covering, container or wrapper; hung behind, within, or in front of the open spaces of a frame. The status of walling as an “image” was thus redefined.”⁹⁶

- David Leatherbarrow and Mohsen Mostafavi, *Surface Architecture*

“Images are the new architecture ... This represents a fundamental transformation of the urban condition of even just the previous fifty years ... An endless flow of images now constitutes the environment. Buildings become images, and images become a kind of building, occupied like any other architectural space.”⁹⁷

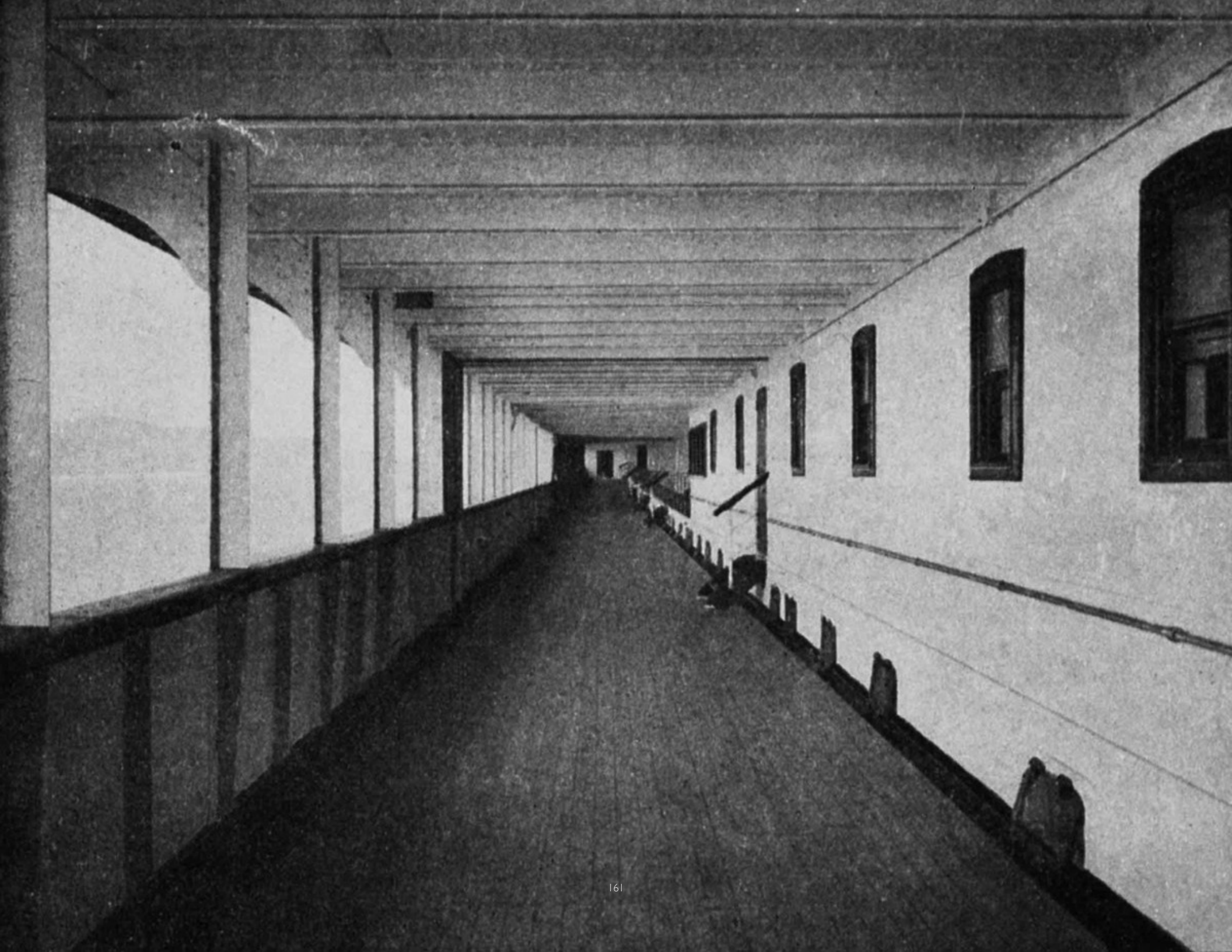
- Beatriz Colomina, *Media as Modern Architecture*

Ways of Seeing: Architecture as Image

Once the wall was free to follow its own logic of expression independent of structure, its role as image was amplified.⁹⁸ A wall could essentially become a window, and a window a view. This was tangential to modern developments of architectural representation through photography and film, whereby space could be virtually experienced on the two-dimensional surface. Since the computer age this condition of architecture as image has continued to grow exponentially.

In early modernity, the introduction of photography radically transformed both the way architecture was visualized and designed. It impacted modern architecture not just by virtue of its ability to document it but also by opening up new modes of perception that did not previously exist.

Of particular interest is how the photograph is conventionally understood as a depiction of the real, yet it is nonetheless a kind of pictorial abstraction and alteration of reality. In this way the photograph can paradoxically be quite illusionistic. Like painting, it is a *representation* of space.



2.22 (facing page)

Le Corbusier, Photograph on the cover of *Vers Une Architecture*, 1923.

2.23

Le Corbusier, Studio of the painter Amédée Ozenfant, 1922.

Le Corbusier intentionally used photographic illusionism to create a “new world of space” that could only be captured in the photographic image.⁹⁹ The use of photography as a device for spatial illusionism is an interesting one in the context of modernity, an age in which society and culture predominantly shunned the use of illusionistic effects such as trompe l’oeil, as well as the two-point perspective of the Renaissance. Yet, modernists relied heavily on illusion to convey their ideas. Illusion is inherent in all forms of representation, and the photograph is no exception.

Le Corbusier wanted to translate the “ineffable” quality of spaces represented in his photographs into architecture itself. Many of these photographs employ a truncated pyramid configuration such that the perspectival depth is exaggerated while simultaneously appearing to extrude beyond the picture plane.¹⁰⁰

Exaggerated frontality, paraline space construction, a palette of advancing and receding colours ... figure-ground reversals ... in the Purist painting all conspire to create consciously contradictory readings at once both planar and spatially deep. The Purist canvas is replete with illusions.¹⁰¹

Le Corbusier’s photographs express Purist ideologies of primary geometric form, solidity, and mathematical order *through* the illusionism of creating depth on the surface. Le Corbusier treated the picture plane of the canvas not as a surface but as a volume with spatial depth.¹⁰²

Space is needed for architectural composition; space means three dimensions. Therefore we think of the painting not as a surface, but as a space.¹⁰³

After Purism Le Corbusier eventually started breaking his own rules with regards to colour and ideologies of ‘pure’ surface. He began using colour as an autonomous and more subjective element. Colour was no longer subservient to form through the articulation of architectural elements and volumes, nor was its use dependant solely upon spatial effects such as receding or advancing planes.





2.24
Le Corbusier, Photo mural at
the Pavillon Suisse, 1933.

2.25
Le Corbusier, Salubra
Wallpaper Collection, 1959.

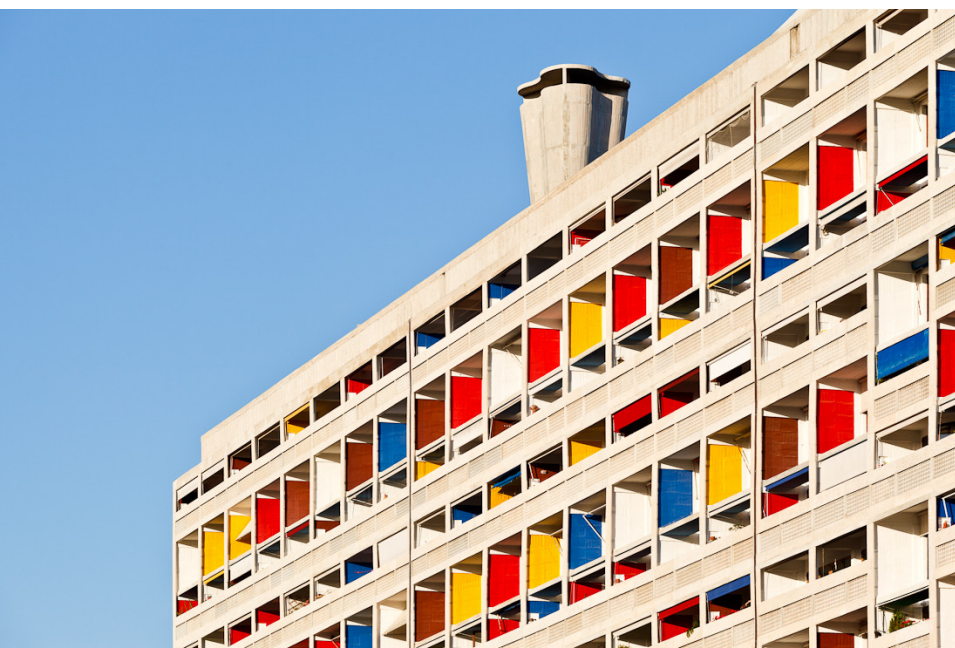
Le Corbusier designed a line of wallpaper colours in collaboration with the wallpaper company Salubra, first in 1931 and again in 1959 (2.25). This presents a significant departure from the archetypal modern dogmas of authenticity, objectivity and universality. While still utilizing a standardized classification of colour, Le Corbusier's Salubra collections embrace the subjectivity of colour, in particular through his use of colour keyboards:

These "Keyboards of Colour" aim at stimulating personal selection, by placing the task of choosing on a sound systematic basis. In my opinion they offer a method of approach which is accurate and effective, one which makes it possible to plan, in the modern home, colour harmonies which are definitely architectural and yet suited to the natural taste and needs of the individual.¹⁰⁴



In his later years Le Corbusier notably produced several murals in a variety of media, including photography, painting, and tapestries conceived as portable murals. His photography "literally became architecture" in his photo-murals for the *Pavillon Suisse* (1933) and *Pavillon des Temps Nouveaux* (1937) through the use of perspectival illusions and depth perception.¹⁰⁵

2.26
Le Corbusier, Unité
d'Habitation, 1952.



2.27

Le Corbusier, Painted
mural at the Pavillon
Suisse, 1933.



“In broad cultural terms, there has been a movement away from dialectical relationships, from the opposition between surface and depth, in favour of an awareness of the oscillating movement from one into the other.”¹

- Alicia Imperiale, *Digital Skins*

“Contemporaneity ... has no depth in which to hide things and is itself not hidden. It lies on the surface of things.”²

- Sylvia Lavin, *What Colour Is It Now?*

“Contemporary architecture replaces the idea of facade with that of skin: an exterior layer mediating between the building and its environment. Not a neutral elevation, but rather an active, informed membrane; communicative and in communication.”³

- Manuel Gausa, *The Metapolis Dictionary of Advanced Architecture: City, Technology and Society in the Information Age*

PART THREE: RE-THINKING

Postmodernity

As a counterpoint to modernist architecture, postmodern architects in the latter half of the twentieth century were critical of modernism's highly utilitarian aesthetic, claiming it to be empty and lacking in humanity. After the war, the modernist dream of functionalism and the machine as a catalyst for social progress was abandoned. Postmodernism placed an emphasis on the use of commercial signage, popular symbols and icons as a way for architecture to be more personable and culturally engaging. Postmodern architects argued that the previously lamented ornamental façade better conveys a building's meaning, being its primary means of communicating with the public. They promoted the use of surface embellishments such as pattern and colour to mitigate otherwise banal buildings, and architecture of this kind was coined the “decorated shed”.⁴ Using the Las Vegas Strip as a point of reference, Robert Venturi and Denise Scott-Brown proclaimed that a building's exterior need not bear any physical relation to the functional requirements of its interior, a term they described as “complexity and contradiction” in architecture.⁵ In their radical manifesto *Learning from Las Vegas* (1972) they write:

We shall emphasize image – image over process or form – in asserting that architecture depends in its perception and creation on past experience and emotional association and that these symbolic elements may often be contradictory to the form, structure, and program with which they combine in the same building.⁶

Despite the re-emergence of imagery and decoration in postmodern architecture, the binary separation between structure and skin was still maintained, if not exaggerated. By diminishing the role of skin to commercial signage and pop symbolism, the notion of the surface as flat, shallow or superficial was given a whole new meaning. Eventually, the postmodern movement's heavy use of stylistic references was criticized as pastiche and outmoded. Its explicit use of pop imagery and metaphors made it difficult for this kind of architecture to remain culturally relevant in the tide of a rapidly changing economy and social environment.

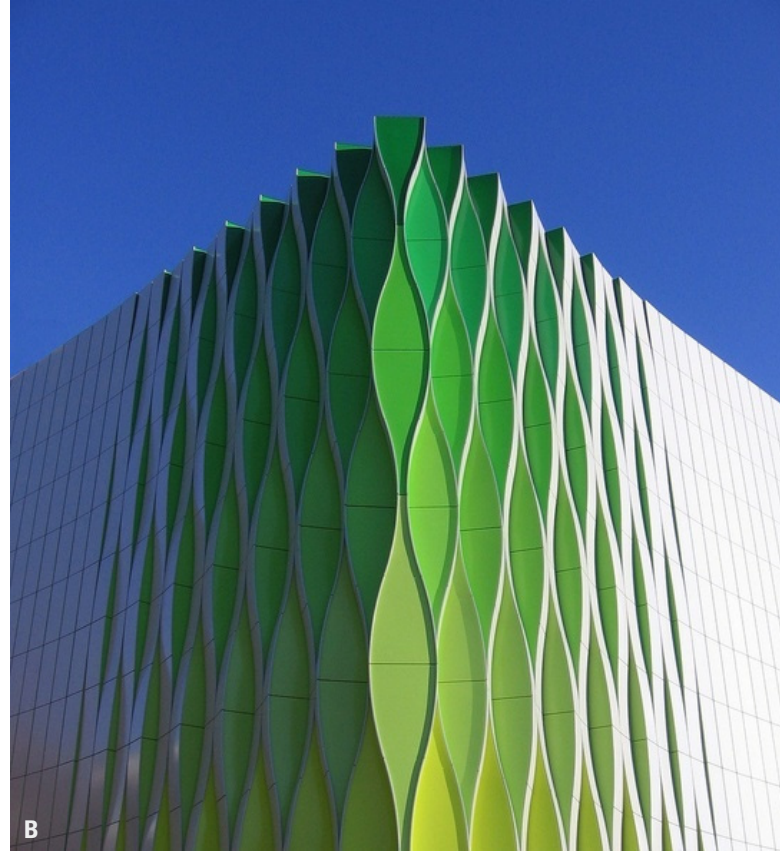


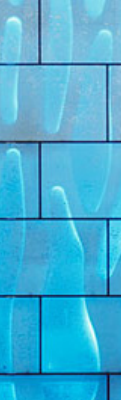
“Contemporary objects and spaces are cloaked in surfaces that have been enhanced, simulated, or engineered, surfaces that masquerade as other materials, surfaces where the physical and the virtual, the real and the imagined, collide. Hard surfaces look soft, and soft surfaces look hard. Smooth planes are rippled, bubbled, or scarred with digital imagery; luminescent fabrics, gels and plywoods glow with preternatural life.”⁷

- Ellen Lupton, *Skin: Surface, Substance and Design*

“There is a curious thickness about architecture’s thinness today. Even as they have grown ever thinner, building skins have developed an appetite for more: more performance, more sensuousness, more intelligence, more, more.”⁸

- Ron Witte, “Substance” in *Immaterial / Ultramaterial: Architecture, Design and Materials*





3.02

- A. ARUP, GreenPix Zero Energy Media Wall, Beijing, 2008.
- B. UN Studio, Research Laboratory, Groningen, Netherlands, 2008.
- C. Baumschlager Eberle, Nordwesthaus, Austria, 2008.
- D. Olafur Eliasson, “Notion Motion” exhibition, 2005-2006.
- E. FOA, John Lewis Department Store, 2008.
- F. UN Studio, La Defense Offices, Almere, Netherlands, 2004.
- G. Faulders Studio, Airspace Tokyo, 2007.
- H. Video projection installation on the Sydney Opera House.

Contemporary Conditions

The surface of architecture is a site of cultural and social representation: it reflects the preoccupations, ambitions and production methods of a given time and place. Just as the surfaces of early modernism were predominantly smooth, flat and ‘pure’, the surfaces of the postmodern era were more often filled with signs and symbols of popular culture. Architectural surfaces today on the other hand, are increasingly sites of visual effects.⁹

In contradiction to the tenets of architectural theory and criticism exemplified by modern ideology, contemporary architectural practice is preoccupied with the design of building skins, often crossing over into the realm of visual art. Decorative, digital, and interactive architectural surfaces progressively blur the line between what constitutes architecture versus decoration, real versus virtual, and natural versus synthetic. Even when a material surface appears to be raw, chances are it has been processed or coated. Many contemporary artists have also begun to observe the immersive capacities of colour and graphic patterns when applied on an architectural scale.

These changes have revolutionized the status of the architectural surface, altering the framework from which to judge and define the quintessential attributes of material authenticity, tectonics, permanence, and depth. This in turn alters the fundamental question of surface.

A re-examination of the use of ornament in architecture is critical to understanding the role of surface in current architectural practice. Ornament has a much different meaning today than it did in its traditional usage. With the current globalized condition of cities and omnipresent social media platforms, the average person habitually partakes in an endless flux of images and information, so it is no longer viable for architecture to communicate political, social or cultural information to the masses. What is the role of ornament in this context?

New technologies, computation, and fabrication techniques of the digital age have rendered ornament a mass-customizable component of architecture, seamlessly integrated within its constituent parts rather than an added operation. It has become a ubiquitous attribute of contemporary life – from ornamental structural systems and forms, to the increasingly popular use of surface patterns ranging from duvet covers to iPad skins; ornament has become “more structural than structure”.¹⁰

The idea of ornament in contemporary architecture can perhaps be more accurately defined as *cosmetics*. The antiquated addition of symbolically infused ornament has now been replaced with an application of pattern and colour that is less semantic and made more intrinsic to the processes of architectural design, fabrication and construction. This integration within material production makes ‘ornament’ more like cosmetics or make-up in the sense that it visually blends into the skin to change the overall composition. Author Jeffrey Kipnis differentiates ornament from cosmetics in describing the work of architects Jacques Herzog and Pierre de Meuron:

Where ornaments retain their identity as entities, cosmetics work as fields, as blush or shadow or highlight, as aura or air. Thinness, adherence and diffuse extent are crucial to the cosmetic effect, which is more visceral than intellectual, more atmospheric than aesthetic.¹¹

Kipnis asserts that the conventional opposition of minimalism and ornament is no longer applicable here. The work of Herzog and de Meuron would appear to fall within neither category as their architectural surfaces produce cosmetic, perceptual effects while using simple repetitive elements.

New production methods and fabrication techniques have also resulted in a kind of *thickening* or deepening of the contemporary architectural surface, as a result of more complex layering and

laminating of skins, the use of virtual interfaces, electronic facades, and urban projection screens, and the increasing commingling of architecture with other media:

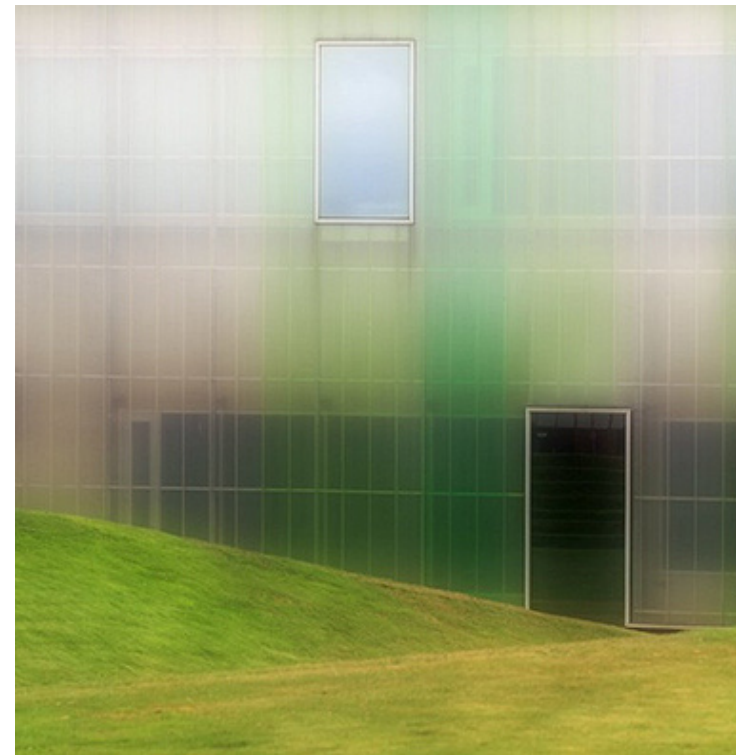
[Contemporary] buildings are clothed in multiple layers that trap and reflect light, from translucent marble to double thicknesses of glass, creating a sense of delay, a thickening of light and space, in place of instantaneous immediacy.¹²

Architect and artist Alicia Imperiale describes the contemporary architectural surface as 'slippery' and unstable.¹³ Innovations in architectural materiality enable the surface to possess ephemeral and responsive qualities such as changing light, iridescence, heat sensitivity, moving screens and motion sensors. Taking this into account would mean to question the surface's status as a fixed, defined boundary:

The cloud is an appropriate symbol of the new definition of transparency: translucent but dense, substantial but without definite form, eternally positioned between the viewer and the distant horizon.¹⁴

Imperiale writes that the clear-cut opposition of surface and depth in modernity is substituted in much contemporary architectural practice with an alternation between the two.¹⁵ This is manifest in the difference in transparency between modernity and the current day, between literal and phenomenological transparency. With the literal, transparency simply provides a view of depth,

but phenomenological or pseudo-transparency, transparency is achieved with the use of multiple layers that make it more difficult to measure scale, depth, and distinguish the real from visual perception, for example with moiré effects.¹⁶



Criticisms: A crisis of tectonics and authenticity?

Contemporary architectural practice's increasing preoccupation with the design of building skins runs parallel to an arguably dematerializing environment, one in which "the surface has become more fundamental than any kind of tectonic".¹⁷ While the importance of materials will never truly be lost, something is to be said about the expanded nature of experience made possible by the virtual world of computers, media and electronics. These experiences exist beyond material tangibility and comprehension as we continue to "inhabit spheres that extend beyond our skin".¹⁸ Contemporary surfaces are no longer simply thin or flat, but present multidimensional environments of their own.

The debate about tectonics versus representation is by extension a debate about the natural versus artificial, authentic versus fake, and reality versus imagination. Many have already argued that the natural and authentic no longer exist. The reproductive addition of mediums, patterns and imagery to architecture's surfaces is commonplace practice today, to the point that there is really no such thing as a pure or authentic material or work of art.

Coloured film on glass, graphics digitally printed on composite panels, wallpapers, vinyl flooring, polished concrete, stained wood, perforated screens and media facades – the list goes on. In all cases, the raw materials of architecture have, in one way or another, been processed, stamped, cut, coated, printed, etched or laminated, and basically re-imagined. Current digital technology has rendered the

possibilities endless, and a surface can quite effectively be made to look like anything.

This then begs the question, if you believe something to be beautiful, does it matter whether or not you know it to be real or true? Imagination and suspended disbelief are part of what makes us enjoy all forms of artistic and cinematic effects. A desire to go beyond the limits of reality is a uniquely human condition. The trompe l'oeil ceilings of the Baroque period are historic examples that can attest to this, hence the expression that we currently live in an age of the "digital Baroque".

In the late sixties, cultural theorist Guy Debord criticized burgeoning capitalism's creation of a 'society of the spectacle'. He argued that its images, advertisements, and other forms of consumer seduction alienate the individual under false pretences of happiness.¹⁹ A few decades later, theorist Jean Baudrillard wrote extensively in critique of capitalist society's economic dependence on simulations, articulating further that contemporary representations no longer maintain any connection to reality: "Today abstraction is no longer that of the map, the double, the mirror, or the concept. Simulation is the generation by models of a real without origin or reality: a hyperreal".²⁰ The fear inherent in his writing is that in a world consumed by hyperreality, the real is no longer distinguishable from that which is simulated, or may no longer truly exist.

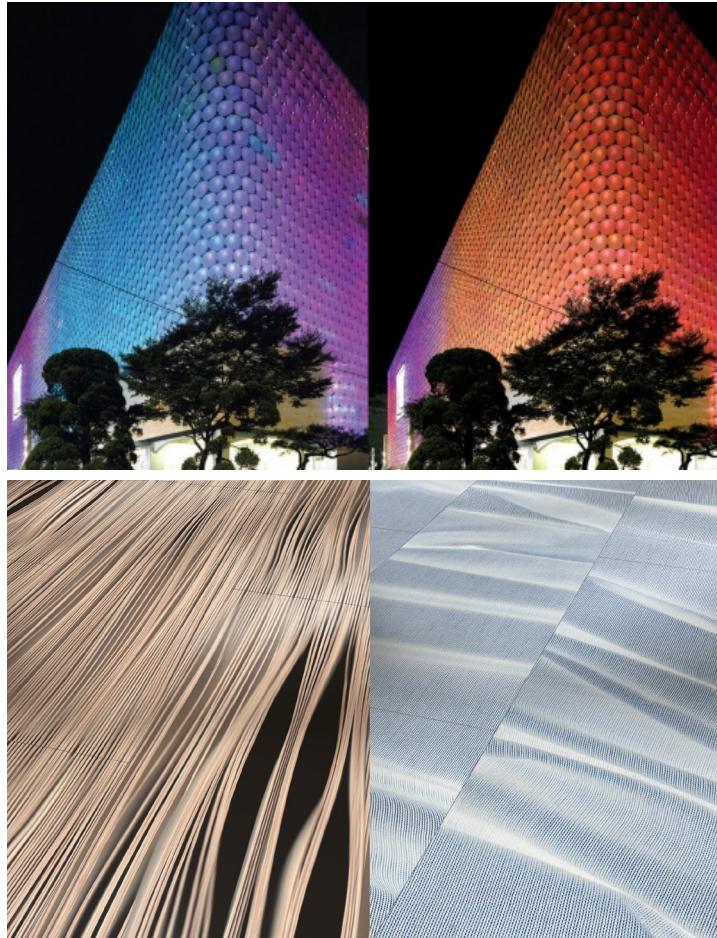
3.04

UN Studio, Galleria Department Store Facade, Seoul, 2004.

3.05

UN Studio, Driftwood and Silk Squares, 2008.

“The dualism between the natural products wood and silk, and the artificiality of laminate flooring is expressed by linking various elements from outside to the inside, whilst acknowledging and extending the act of simulation.”²¹



Looking back to the surfaces of architecture, it is easy to see how these lines of thought apply; after all, architecture is a product that can be mediated and marketed like any other, and it is a practice that is unavoidably connected to the production of two-dimensional images. Even before today’s media saturated world, architecture has always necessitated visual forms of representation.

The concern of numerous critics today is that many contemporary buildings seem to be superficial in the negative sense of the word – preoccupied with seducing audiences with attractive imagery and visual effects that generate so-called ‘affect’. Rather than simply housing activities and events, the contemporary architectural project is increasingly gaining recognition as an event in and of itself, particularly with regard to its surfaces: surfaces that emit light, change colour, project moving images, amongst other spectacular effects. The creation of affect is thus seen to collapse the distance between the subject (person) and object (building) much like in the context of cinema, attracting and confounding the viewer by bearing no tangible relation to time, site context, production methods, materiality or even gravity.

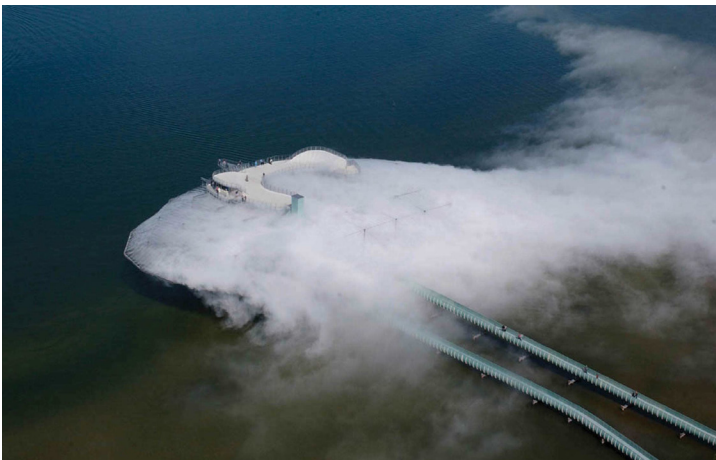
The negativity associated with an architecture of spectacle is also tied to the role that advertising, branding, and consumption plays, with surface typically viewed as an accomplice of consumer culture. In his book entitled *The Art-Architecture Complex*, Hal Foster criticizes the affective quality of much contemporary

3.06

Ateliers Jean Nouvel,
Danish Radio Concert
Hall, Copenhagen, 2002.

3.07

Diller Scofidio and Renfro,
Blur Building, 2002.



architecture as bewitching viewers “at the possible cost of social and/or psychic arrest”.²² He argues that its flashy “mystical” visual effects simply hypnotize the viewer rather than engaging them in a relational way. In direct reference to Guy Debord, he describes such architecture as “an enigmatic object the production of which is mystified, a commodity-fetish at a grand scale”.²³

One of architecture’s most effective tricks might even be its own disappearance – while developments in technology have allowed new architectural constructions to become ever lighter and thinner, the use of transparent, translucent and or reflective materials has evolved in conjunction, with the creation of ethereal pseudo-transparencies. This is however, not to be confused with invisibility due to anonymity and lack of relation to place.

The history of architectural construction is also a history of delaminating, an evolution from formerly massive load bearing walls to composite assemblies of multiple layers. In the current digital, post-postmodern age, new materials are not only more thin, higher performance and evocative, but are also better able to simulate natural materials. Synthetic architectural finishes are available in every imaginable material aesthetic, whether wood, stone or metal. Many new suburban developments made to look like traditional homes employ formerly massive compressive materials such as brick as a lightweight veneer – a cladding system that emulates older forms of construction in appearance when in

reality the structure is a wooden or metal frame. Stone can be processed as a thin and translucent material. Clouds reflected on a façade could just as easily be an image laminated between panes of glass (see 3.20, page 187). The surfaces of architecture have become increasingly artificial, immaterial, and illusory, not only because of new material invention, but also because traditional materials are being treated in different ways.

Poised between nature and culture, architecture ... has always shown two faces at once, the real and the unreal. However much artifice architecture has historically indulged – and it has – the face of reality has always shone through as a matter of technological, physical necessity. One could not see the trompe l'œil angels without also seeing the heavy vaults they were painted on. ... When so many building types are reduced to card-thin containers; when any shape dreamed of can, with computers, be rigged with light steel, plastic, gypsum, and glass; ... only economic constraints can keep us from building our most extreme architectural fantasies.²⁴

Core to the issue of authenticity is the sentiment amongst architecture critics and practitioners alike that contemporary culture is losing “a healthy balance between what is real in life and what is not”, a balance “that architecture has historically been instrumental in providing”.²⁵ Critic Juhani Pallasmaa laments this loss, which he believes is connected to a prioritization of the visual over the corporeal:

The architect's responsibility is to penetrate the surface of what is most often commercially, socially, and momentarily conditioned desire. ... Today's architecture seems to have abandoned life entirely and escaped into pure architectural fabrication. Authentic architecture represents and reflects a way of life, an image of life. ... Today's buildings do not seem to reflect any real and authentic way of life.²⁶

This lack of authenticity has been problematized for what I have interpreted as two key reasons. The first is, as put forth by Baudrillard, a fear of eventually not being able to differentiate between the real and fake. While the realm of imagination is connected to all other forms of art – such as painting, sculpture, literature, film, and music – when it meets the pragmatism of architecture it risks becoming a superficial indulgence at the scale of the entire habitable environments structured by architecture. Michael Benedikt explains that, although the art of illusion and imagination is a necessary facet of life and a source of delight and beauty, it becomes worrisome when actual day-to-day experiences and lifestyles are no longer what they seem.

A world without circuses is not one I want to live in, nor a world of circuses where nothing is what it seems. The authenticity of an architecture that takes as its goal the embodiment of quiet realness should be possible to achieve.²⁷

A second reason is the perceived loss of the physical, bodily relation of the individual to their surroundings. This is seen as a result of an increasing reliance on visual stimuli over the corporeal or tactile. This notion is evident in the use of electronic social media, characteristically viewed as an inauthentic form of communication that has come to substitute 'real' social interaction. When applied to architecture, a loss of embodiment takes place both when we occupy places virtually (e.g. through architectural images, Google street view, television) and when the tectonics of architecture is no longer apparent. Architectural historian Antoine Picon defines tectonics as:

structure understood as an integral dimension of architecture that makes architecture legible: structure as a principle of ordering architecture.²⁸

In extension of this definition, tectonics is also an expression of material production and construction techniques. When materials of architecture are or masquerade as other materials, the individual's visual and bodily relation to the physicality of a material, its methods of production, and the compressive or tensile forces of a structure, is made more ambiguous. The importance of such a relation is valued for its relation to reality: to time and place, and to the act of making. Picon argues that for many contemporary architectural practices "the surface has become more fundamental than any kind of tectonic."²⁹

Kenneth Frampton elaborates this argument in *Studies In Tectonic Culture* where he shows a clear preference for the poetics of construction over the "consciously distanced and exclusively semiotic character" of contemporary culture.³⁰ He posits that the tangible, physical experiences of touch and time are vital to one's understanding of their environment; that "the body reconstitutes the world through its tactile appropriation of reality".³¹ Form affects us and in turn we affect form, such as when we can feel the deformation of worn stone steps under our feet, when we witness the discolouration of weathering steel over time, or when we can perceive the production processes of a material as expressed in their texture or type of assembly. Such experiences are not conceivable in a media façade programmed by a computer.



3.08
Studio NMinusOne, Digital Window, RAD
(Responsive Architecture at Daniels):
Surface as Interface, University of Toronto.



3.09
Studio NMinusOne, Sky House, RAD
(Responsive Architecture at Daniels):
Immersive Spaces, University of Toronto.

COSMETIC, (A)TECTONIC, (IM)MATERIAL

“Architecture's new confounds are not just making buildings visible but are encouraging them to find ways to make perception enter the realm of experience rather than vision, to make images that produce material impressions, to make experience that is vivid.”³²

-Sylvia Lavin, *Kissing Architecture*

Herzog and de Meuron

The work of Herzog and de Meuron provides a provocative example of the architectural skin envisioned as a kind of topography that fundamentally collapses the disciplinary distinctions between volume and surface, tectonic and atectonic, material and immaterial. Their treatment of the architectural surface is topographical in the sense that it is designed and perceived as a continuum rather than a finite, discrete entity or a passive covering within a fixed frame. Rather, the surface is read more like a field that seems to continue infinitely. Skin is treated *as* architecture in that its capacity as a spatial condition is continually investigated in the firm's work. This concept is explored through their use of rhythmic modulations and gradations of colour, pattern, or image, which are either imprinted on surfaces or perceived through the manipulated assembly and aggregation of surfaces.

The concreteness of material and the immateriality of image are paradoxically combined to create unique physical and visual perceptions. In the Eberswalde Library for example, image

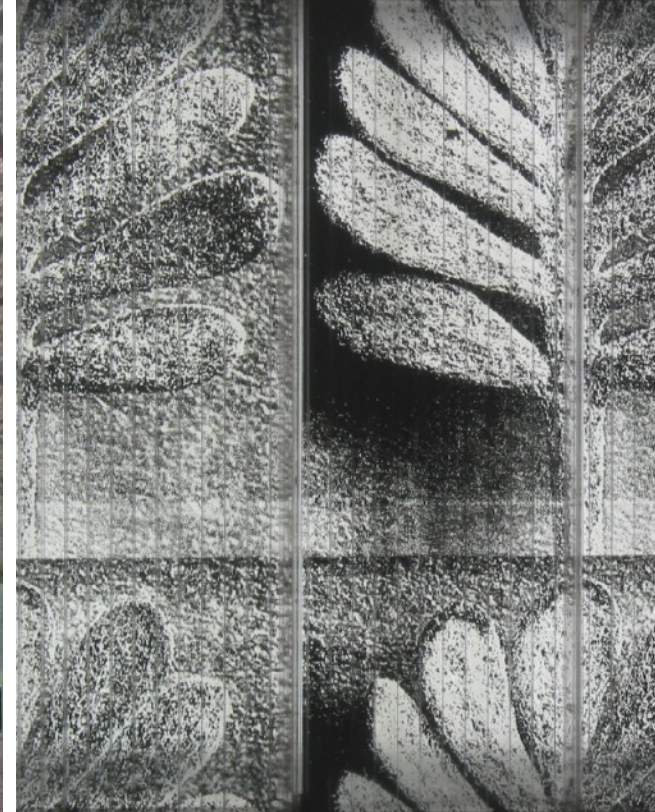
becomes a building material and a serially repeated module (3.12). Herzog and de Meuron did not apply images or patterns to the surfaces here to make a plain box look more visually interesting, nor as decoration in the postmodern sense of the word. Unlike the “decorated shed” concept of Venturi, the effect of the cosmetic skin is not to convey the figurative or symbolic but rather to shape the reading of the building's volume, character, program and relation to site.³³ The building reconciles the traditionally incompatible modernist cube and tattooed skin condemned by Loos, which visually lightens dissolves its monolithic form:³⁴

The architecture provides a point of intersection between mass and its sublimation in imagery and thought, between immateriality and its reification.³⁵

The natural/artificial and real/imaginary also collide in projects such as the Ricola Europe Mulhouse (3.10) and the Pfaffenholz Sports Centre (3.13). In the Ricola building, a leaf motif is integrated into the building's material surfaces, at once alluding to nature and acknowledging the artificiality of its modular mass production. In the Sports Centre the outer skin is naturalized with markings that resemble vegetative matter, making it difficult to distinguish between glass and concrete. Wall, floor and ceiling appear to be part of a continuous material landscape.³⁶ Here and in several other works of Herzog and de Meuron, a building's primary means of presence and expression is through its surfaces.

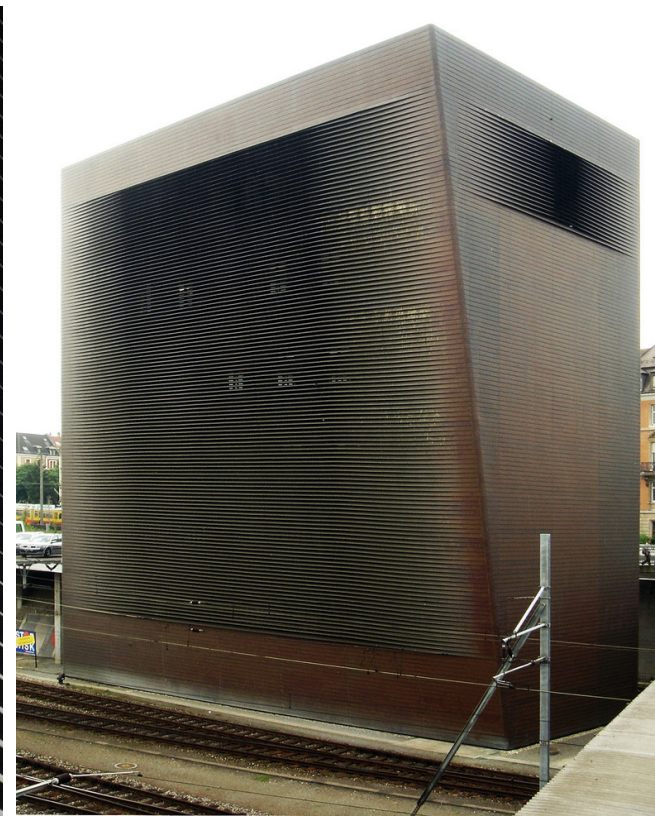
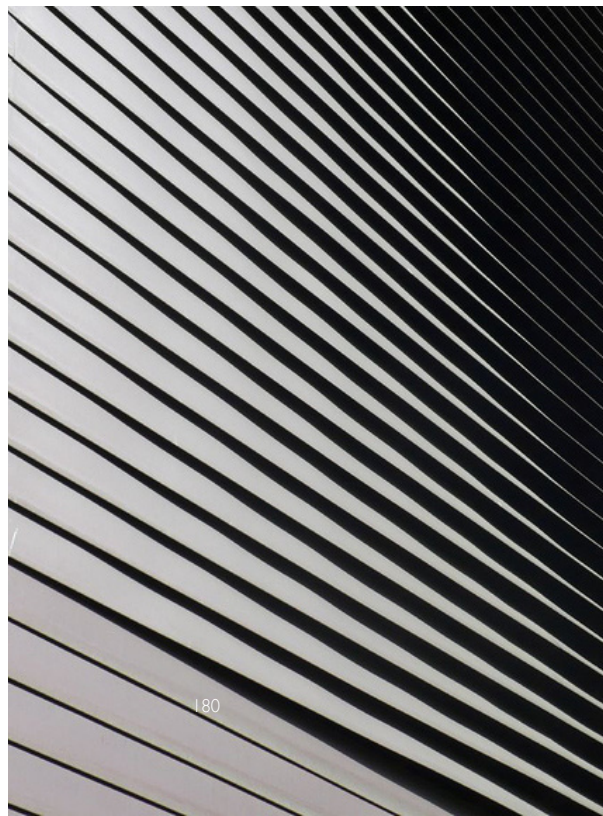
3.10

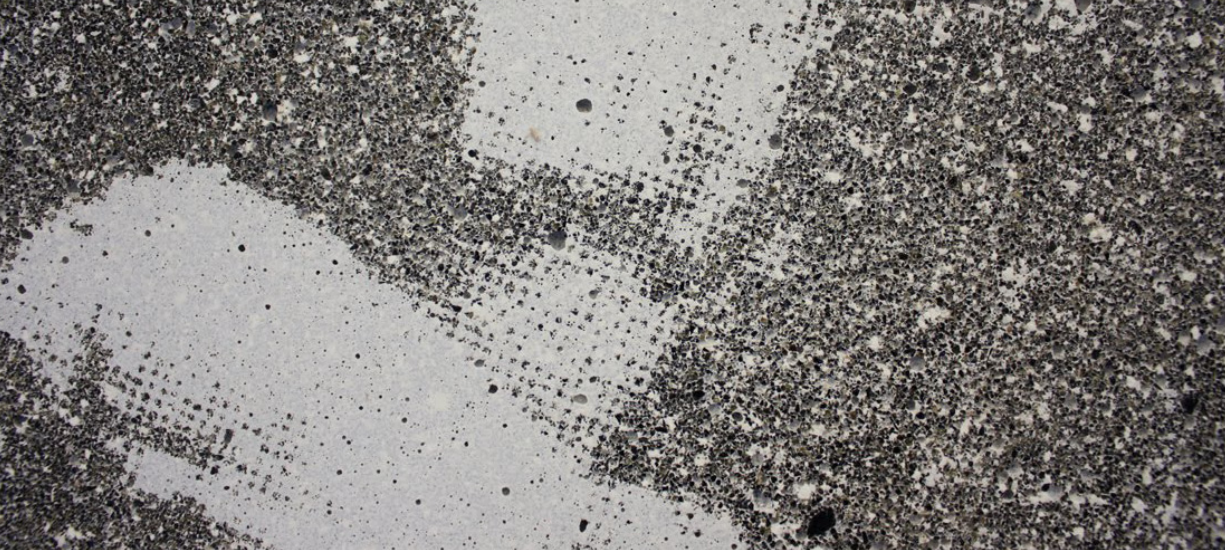
Herzog and de Meuron, Ricola
Europe Mulhouse, France, 1993.



3.11 (*below*)

Herzog and de Meuron, Signal Box,
Switzerland, 1999.







3.12

**Herzog and de Meuron,
Eberswalde Technical School
Library, Germany, 1999.**

Glass and concrete panels are materially unified with imprinted photographs.

The imprinted concrete is a contemporary revival of the 14th century technique called *sgraffito*, where dark coloured plaster is covered in lighter coloured plaster and then scratched to produce an image. Herzog and de Meuron use a concrete cure-retardant to generate a similar aesthetic.³⁷



3.13

**Herzog and de Meuron,
Pfaffenholz Sports Centre,
Switzerland, 1993.**

Sauerbruch Hutton

Sauerbruch Hutton are widely known for their use of colour. Their unique approach to colour in architecture is not based on a particular colour theory or classification of colour, nor is colour merely an element used to ‘beautify’ an otherwise standard building. The practice treats colour as a material of architecture or kind of building block. Matthias Sauerbruch has stated:

Colour for us is like brick. You wouldn't raise an eyebrow if someone like Louis Kahn designed another brick building. So it's just because colour is being so underused at the moment that coloured architecture stands out.³⁸

The notion of colour as tectonic³⁹ subverts established doctrines of architecture regarding the use of colour. This paradox is exemplified in colour's comparison to brick, a traditionally heavy, solid, durable material, while unnatural colours are usually associated with the ephemeral or trivial. In the work of Sauerbruch Hutton these apparent opposites are made compatible. As a building block, colour is used to reconcile the overwhelming imposition of a building's mass with its human usage. The architects compose a building volume out of smaller scale units of coloured surfaces that together allow the building to have a vivid, sensual, engaging presence within its context that neither clashes nor blends in.⁴⁰

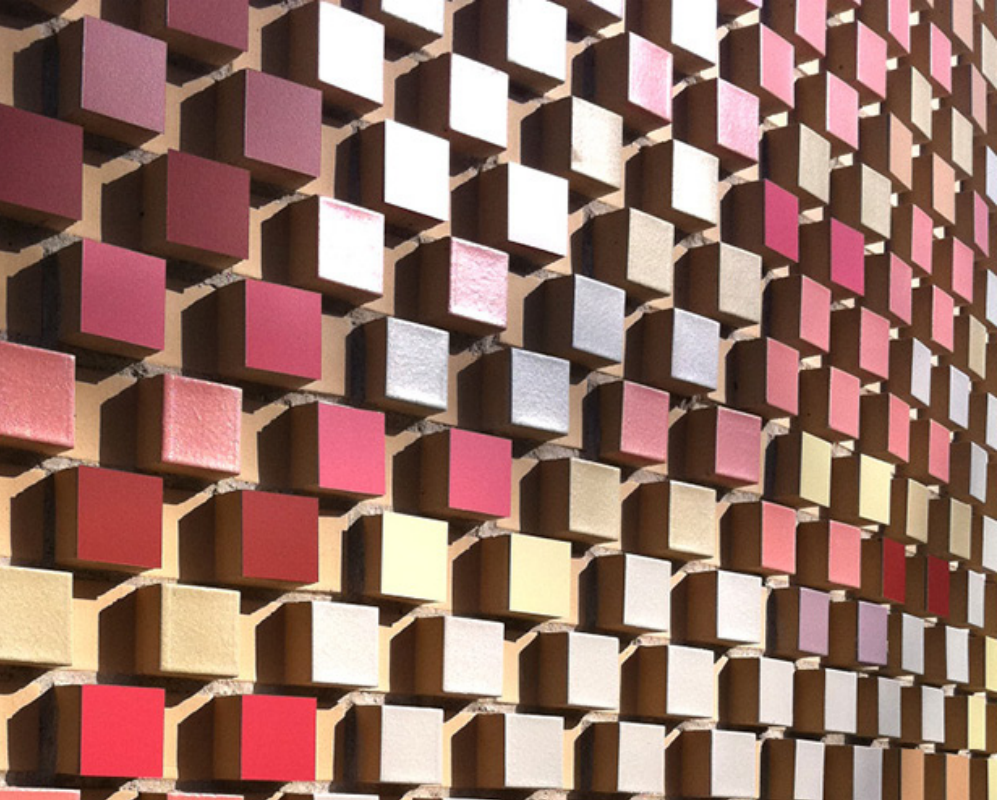
Sauerbruch Hutton's approach is more empirical than theoretical. They tend to “look for particular qualities in [a] place and bring them to the surface...rather than imposing a pre-conceived order upon a place”, remarking, “we don't see buildings as representations of abstract ideas or as supra-systems of theory, ideology or history, but first of all as places to be inhabited, used ... and enjoyed”.⁴¹ Colours are chosen based on continuous experimentation and by studying the surrounding context of a given site.⁴²

The practice employs a notion called “das Wesenhafte”, the character or essential “being” of a building, which they believe is instrumental to how it is experienced.⁴³ This goes beyond the necessities of structure and programmatic function. At the same time, they argue that architecture must go deeper than pure spectacle by engaging the viewer or occupant whose environment it shapes. An unexpected similarity occurs between Sauerbruch Hutton's surfaces and the paintings of Bridget Riley, as both involve the viewer on a perceptual level, and the physical distance between viewer and surface is a critical aspect of that experience.









3.15 *(left and middle)*
Sauerbruch Hutton, Sedus High-bay
Warehouse, Dogern, 2003.

3.16 *(right)*
Sauerbruch Hutton, K House,
Munich, 2013.



3.17 *(left)*
Sauerbruch Hutton, Saint Georges
Center, Geneva, 2012.

3.18 *(middle)*
Sauerbruch Hutton, Fire and Police
Station, Berlin, 2004.

3.19 *(right)*
Sauerbruch Hutton, Maciachini,
Milan, 2012.

Kengo Kuma

In a similar vein to both Herzog and de Meuron and Sauerbruch Hutton, Kengo Kuma opposes the view of architecture as an object that imposes itself upon a given context. It is from this perspective that Kuma develops his unique approach to materiality. Kuma strives to carefully break down or blur the architectural mass through a “particization” of its surfaces:

...particization mean[s] undermining the monolithic object-like appearance of a building and rendering it less definitive or solid so that it becomes permeable, ephemeral, and appears to have less bodily substance, almost as if it were a phenomenon.⁴⁴

Kuma pursues “an architecture in which the form and silhouette disappear, leaving only materiality”.⁴⁵ While this is not physically possible, as a concept it reflects a desire to create an architecture that is sensually and experientially rich.⁴⁶ Priority is given to the physiological and perceptual experience of architecture, an experience that depends on the interplay between material forces and immaterial or fictive impressions. Kuma rejects the use of iconic or figurative forms. The traditional notion of a building façade is replaced by a landscape of skin, a “perceptual field of intangibles”.⁴⁷

3.20

Kengo Kuma, JR Shibuya Station Façade Renovation, 2003.

“Boundaries separating architecture from visual images, materials from non-materials, and reality from virtual reality have all but disappeared. Everything is mutually dissolved in liquid form. ... The actual clouds that are reflected on the glass overlies the printed “image” of clouds on the glass. The result is a state of ambiguity: one cannot at first glance tell which clouds are more real than the others.”⁴⁸



3.21

Kengo Kuma, Chokkura Plaza and Shelter, Japan, 2006.

The pattern of holes is simultaneously decorative and tectonic, as it lends the oya stone a greater lightness, transparency and the sense of an undulating rhythm of weight.⁴⁹



3.22

Kengo Kuma, Lotus House, Japan, 2005.

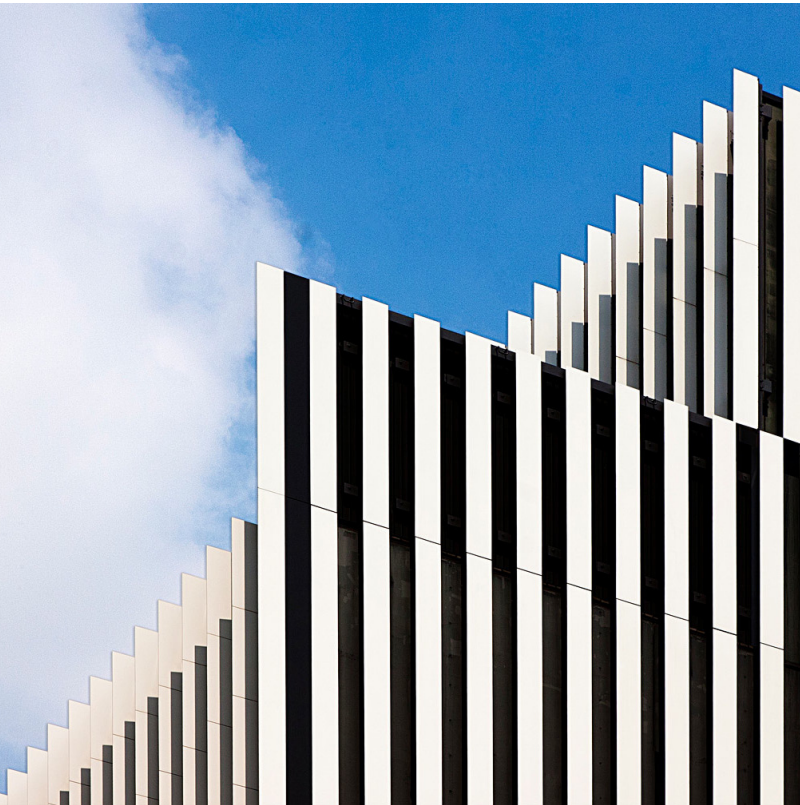


3.23

Kengo Kuma, LVMH Headquarters, Japan, 2004.

The use of onyx blurs the distinction between reality and image, nature and artifice, transparent and solid. 4mm translucent onyx stone is sandwiched between 2 panes of glass, in juxtaposition with films of screen-printed onyx graphics.⁵⁰





3.24
Kengo Kuma, Suntory Museum, Tokyo, 2007.



3.25
Kengo Kuma, Sake No Hana, London, 2007.
Double-layered bamboo window screens create
a moiré visual effect.

ALTERNATE MEANINGS

“As a noun, surface is elusive enough, but as a verb it is impossible, one of those words that is its own antonym, that does and undoes itself. To surface is, of course, to emerge, to appear, to reveal, to show up ... but to surface a surface is also to treat it, to cover it, to coat it, to clad it, to camouflage it, to conceal it – to, in the end, perhaps, relentlessly accumulate and laminate and narrate surface into its opposites, form and space?”⁵¹

- Thomas Demonchaux, *Coat Check: Surface, Clothing, and Architecture*

When used as verbs, the meanings of surface and appearance interestingly have opposite connotations to their negative usage as nouns. Appearance is by definition an impression, what something *seems* to be as distinct from what it actually is – but *to appear* is to become clearly visible. As a noun, the surface is a boundary that encloses an internal depth or truth, but as a verb it means to fully appear, emerge, to come into view.⁵²

The surface is therefore something we simultaneously associate with concealing, (being the outermost, covering layer) and revealing. Like a mask or clothing, the surface carries with it the contradiction of being both a disguise and a reflection of inner character. In this way, the very term surface or skin can be quite ambiguous. In his philosophical book entitled *Surfaces*, author Avrum Stroll goes to great lengths to explain the meanings of

the title word, both conceptually and scientifically. Ultimately he demonstrates that there is not one definition of surface but a multitude.⁵³

In *Hiding* by Mark C. Taylor, the author explores various cultural ideologies of skin, from its dermatological meaning to the subjects of tattooing, fashion, cosmetics, art, and architecture. While this thesis is focused on the surface of architecture, the very idea of a building as having ‘skin’ is inseparable from its analogy to the human body. The practice of architecture is rooted in this relationship, with questions of scale, proportion, and openings necessarily thought of in relation to the human physique, just as other visual, tactile or acoustic qualities of architecture are evidently conceived in relation to human sensory perception.

The connection between architecture and the human anatomy is also rooted in architecture’s historical anthropomorphism. Other than the obvious assimilation implied when a building’s structure is referred to as a ‘skeleton’ or when cladding is described as building ‘skin’, architecture has historically emulated human characteristics in other ways. A building façade, for example, is traditionally thought of as its face (the etymological connection between the two words being clear) and windows as eyes for viewing. In some cases the similarity is made quite explicit. In 19th century Europe there was a period of time when certain architects sought to create

architecture parlante – architecture that speaks – holding the belief that architecture’s exterior appearance could induce social reform, for example, by inciting fear through the design of prisons.

In *Hiding*, Taylor reiterates the fact that, physiologically speaking, the skin is actually an organ, and goes on to destabilize the notion of skin as simply an outer layer of the body. He delaminates the epidermis into countless layers of cells that regularly generate and shed away on the surface, moving on to describe bones and organs in as layer upon layer of tissues and cells.

Applied to architecture, this biological conceptualization of surface has interesting implications. It calls into question the distinct and often hierarchical oppositions between skin and body, surface and depth, inside and outside:

If depth is but another surface, nothing is profound ... this does not mean that everything is simply superficial; to the contrary, in the absence of depth, everything becomes endlessly complex.⁵⁴

As much as the surface or skin is seen as superficial in everyday language, it is paradoxically essential to human life – not just biologically speaking, but socially and culturally. The idea of a body without skin or skin without a body is horrifying because the two are intertwined. The notion that one is less important or supplemental to the other is a fictive construct.

Conceptualizing this in architecture means to equate skin and structure; to imagine an architecture made entirely of skin, to think of skin *as* architecture, rather than an element that hangs off of it. This skin of architecture might be formed and withheld by structure, but it is the skin that we ultimately touch and see - it is “*the meeting, not just of the senses, but of world and body.*”⁵⁵

Excerpt from the Television Show *Grey’s Anatomy* ⁵⁶

CRISTINA: Now Mrs. Davidson, this form simply says that you consent to the donation of your husband’s major organs. Heart, lungs, liver and kidneys. *(She hands Shelly a clipboard which she signs and hands back)* Now I need to ask you a few questions. Are you willing to donate his corneas?

SHELLY: *(shocked)* You want his eyes?

CRISTINA: Um, corneal transplants can give someone back their sight.

(Shelly pats her daughter reassuringly)

SHELLY: I suppose that’s okay.

(Cristina hands her over another form to sign. Shelly signs and hands the form back. Bailey watches looking a little sad)

CRISTINA: What about his skin?

SHELLY: What?

(She looks like she’s going to be ill and struggles not to cry)

CRISTINA: It’s used to help burn victims.

SHELLY: You want to cut off his SKIN? . . . What about the funeral? You want me to have a funeral, and have people look at him, have-have his daughter look at her father and he doesn’t have any skin? *(her voice breaks)* It’s his SKIN!

(She struggles hard not to cry. Her daughter takes her hand to comfort her. Cristina leaves the room abruptly. Shelly cries a little and pulls her daughter in for a hug. Bailey leaves the room as well and walks quickly after Cristina down the hallway).

"The accusation that used to be levelled at ornament - that it was deceit ... might actually be seen as an indication of strength at a time when social interaction is determined by simulation - by cosmetics, trick images and the projection of multiple personalities. When reality is experienced primarily at an aesthetic level, ornament becomes a means of experience."¹

- Herzog and de Meuron

"Just as transparency does not always contribute to cultural sense, so embodiment of meaning does not depend upon thickness or depth. While the dematerialization of the wall can result in vacuous and impoverished architecture, it can also allow for the development of new modes of figuration."²

- David Leatherbarrow and Mohsen Mostafavi, *Surface Architecture*

"...In what ways is the superficial serious? (...) First, the superficial is a reaction against functionalism's hold on architectural expression. Second, the superficial is deeply engaging to audiences, and therefore extends architecture's role as social practice. Shared experience in turn forms communities, alters behaviour, and contributes to culture. Third, the superficial is the excessive introduction of materiality and geometry into the processes of organizing space such that spatial description becomes corporeal rather than abstract. This expands and engages audiences without abandoning architectural ambition or disregarding disciplinary knowledge."³

- Heather Roberge, *Pretensions of Form: A Conversation*

CONCLUSION

Reimagining Materiality

When I first embarked on painting murals, I was quite unsure about how it could evolve into an architecture thesis. Along the way I came to realize that despite the relatively arbitrary and intuitive nature of art, my pursuits were very much architecturally inclined. This is not simply because a mural happens to go on a wall, nor was it the result of using architectonic elements in my painting. My ideas and research, sketches and drawings for unrealized murals, experimental panel paintings, and the murals that I did manage to produce were all part of a broader investigation: how can I shape architecture through reimagining its surfaces?

From the beginning this demanded a reassessment of the architectural discipline as I had previously come to understand it. I was questioning the very idea of what materiality means to architecture, because paint has virtually no thickness and it is neither solid nor tectonic. To build architecture is, by contrast, to frame, to stack, to assemble and to delimit, to use thick, measured materials and to calculate structural forces, all in the creation of space. As a substance, paint is applied only to the surface and it has no tangible bounds. Paint is to the architect a mere finish, not a material. In fact, paint is the very opposite of material: like drywall, its primary role in architecture is to conceal all signs of materiality, joints, and structural supports.

On the other hand, paint operates first and foremost on our visual senses, and with that alone its impact can be quite powerful. There

is after all, a reason why Le Corbusier once said that a thin film of paint is capable of “destroying” a wall, and he obviously did not mean that in a physical sense. Why else can a mere graffiti tag be so offensive?

In the end, this thesis is not really about paint or painting, but about *surface*. Paint essentially produces a new surface that transforms architecture’s outermost skin and therefore its identity and presence. It does not matter if a wall is one millimetre or one metre thick, because the surface is all we see of architecture, and is technically what we inhabit. The dematerialization of contemporary surfaces – through computerized material fabrication processes and a variety of mediums other than paint – has shown me how conditions of architecture can be experienced on and through the surface: architecture’s materials do not have to be ‘authentic’ or thick, and the practice of architecture is not solely concerned with tectonics or form-making.

The works researched in this thesis begin to uncover this positive notion of the surface as a producer of atmospheres, physical sensations and immersion, qualities that are inherently spatial or environmental. What these architects and artists have done with surface ‘cosmetics’ such as artificial light, synthetic colours, new responsive materials, old materials treated in novel ways, and the creation of patterns or perceptual ‘fields’ of assembled modules through parametric design; demonstrates the ability of

surface to do *more*, to enable architecture to be read in new ways that generate engaging, meaningful experiences. Ultimately this reflects a contemporary stance that counters the traditional view of the architectural surface as an element that must either passively conform to or otherwise unfavourably negate architectural form.

This contemporary outlook has persistently informed my approach to painting throughout this thesis. It goes back to my initial thesis question regarding the fundamental nature of architectural practice and the role that surface plays within it: is architecture obliged to physical tectonics or visual representation? While it might be easier to dismiss representation as less important or insubstantial, without it the practice of architecture becomes mere building. The outer skin or surface of architecture does not just represent the architecture behind it or in front of it, but can generate architectural experiences traditionally regarded as tied only to material or spatial depth.

The architecture of Herzog and de Meuron, Sauerbruch Hutton and Kengo Kuma among others has influenced my own attitude towards the role of surface in architecture. For them, materiality in architecture is neither purely tectonic nor representational but a combination of the two, an intertwining of concrete physical properties with the virtual, perceptual, and ethereal. This idea of a “synthetic materiality”⁴ undoes the conceptual opposition of surface and depth or the visual and physical. The digital revolution

has certainly contributed to this condition, as it has enabled the production of materials that from their inception integrate image, pattern, and colour with physical matter. In my own creative explorations, paint has been the primary medium with which I investigated these aspects of surface and materiality. I endeavored to look beyond paint’s conventional role as a passive, uniform concealing agent, to instead manifest its potential as a visual material in architecture. By the very same logic that paint (or the surface) can destroy architecture, it can also build it.

Architecture as Skin, Paint as Architecture

As the title *Second Skin: Painting Architecture* suggests, my thesis is full of dualities. ‘Second Skin’ makes a direct reference to the role of architecture as a second skin for the human body, but also the idea that paint (or any kind of colouring or marking) is a skin itself. ‘Painting Architecture’ does not just mean painting on architecture but implicitly suggests that, as a skin, paint can also embody architecture.

In my paintings I strove to blur any sense of an added layer of paint, to make it appear as though the paint was integral to the material, or a plane of view into its depths. In some instances I was able to leave the material bare or the wall exposed, which allowed me to compositionally dissolve the distinction between the painted and unpainted. This in turn enabled the raw material and tectonics re-emerge with new meaning and perceptual force.

I challenged the idea that materiality in architecture lies only in its tangible physical properties such as texture, strength and weight. I chose to look at it in two ways simultaneously, to embrace it as reality and fantasy, fact and representation, physical and perceptual. From the onset this sensibility has had a conceptual relation to the cosmetic surfaces of Herzog and de Meuron, the perceptual paintings of Bridget Riley, the immersive atmospheres of Yayoi Kusama and Carlos Cruz-Diez, and the denial of architecture's mass or object-hood engendered by the materials of Kengo Kuma.

"The skin provides a good opportunity for enquiring into the material imagination because it is bilateral, both matter and image, stuff and sign."⁵

– Steven Connor, *The Book of Skin*

This bilateral condition is arguably a key characteristic of contemporary culture. The prevalence of material simulation and digitization attest to this. We are at once here and wherever it is we are virtually occupying on our television, phone or computer screens. These changes have certainly influenced the way architecture is both designed and produced.

"Mankind has always dreamed of overcoming the material burden of the world to retreat into a world of pure mind. Over the centuries this dream has taken a variety of forms and in today's age of information, it seems


to be more relevant than ever before: the ideal world, a world without matter."⁶

– Herzog and de Meuron, *The Virtual House*

In a multitude of ways, contemporary conditions make this tension between nature and artifice ever more apparent. In this context the idea of surface is more important than ever and at the same time devalued because we live in such an image-saturated environment. A recent lecture by the architect Jesse Reiser puts these two points of view into perspective. On one end we have the exaggeration of the natural, raw qualities of architectural materials; on the other there is the "hyperreal" architecture that is made to appear as much as possible like its digital rendering.⁷ How do we reconcile these two apparent opposites without resorting to misappropriations of the modern reductionist box, a typology that has more often than not been used for sole purposes of economic efficiency only to result in bleak urban landscapes; or alternatively the fabrication of 'spectacular' architecture where success is defined more by its marketed image than the quality of its built environment?

This inquiry cannot be resolved by simply resorting to the modern myth of transparency or the supposed 'honesty' of materials and construction. The modern discourse of pure surface and honest materials was paradoxically partaking in the very realm of fashion it criticized. Architecture cannot avoid possessing colour or skin. The modern white wall and curtain-wall were simply indicative of





a new fashion, a modern form of clothing stripped of ornament. In today's context, many commercial developments are stripped of clothing in a more phenomenological sense, which is to say they are devoid of character and cultural or social identity. In *Surface Architecture*, David Leatherbarrow and Mohsen Mostafavi criticize today's common curtain-wall tower as lacking the presence that early manifestations of its type intended, such as Mies's Seagram building.⁸ Beyond literal shelter or weather protection, human culture requires a 'dressing' of some kind, whether minimal or elaborate, to dress our surroundings and ourselves.

Superficial Architecture

"The superficial is the embrace of the synthetic and the real, the technological and the natural, the fleeting and the permanent."⁹

- Heather Roberge, *Pretensions of Form*

"We choose to describe how architecture can perform its role while being variously thick and thin, transparent and opaque, and to envisage an architecture that acknowledges this ..."¹⁰

- David Leatherbarrow and Mohsen Mostafavi, *Surface Architecture*

My thesis confronts the notion of superficiality in architecture to expand its definition beyond connotations of triviality and

unimportance. I think that the original terms from which to define superficiality or authenticity in architecture have irreversibly changed. Simulation and representation have both become so commonplace that we have moved far beyond the 'withering aura' that Walter Benjamin once described – we occupy a different place in time.

Superficiality in architecture today is ironically nothing to do with surfaces being too thin, ephemeral or decorative. That idea is the result of narrow-minded and outdated architectural pedagogy. A superficial architecture in the negative sense is one without presence: architecture that does not invite, delight, comfort, or engage. The fact of the matter is, with only a few cans of spray paint a dark narrow alleyway just might become a site bursting with creative energy, a place that generates delight and fosters community, while the polished steps of an office tower might not be quite as well enjoyed or meaningful a place. A coat of paint can create an architectural presence where there previously was none.

When architecture engages our perceptual imagination, it is not just the architecture performing but in part an activation of the viewer. As a site of both tectonics and visual representation, the surface is essential to architecture's social impact and role in place making.

ENDNOTES

Part One: Painting

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APPENDICES

APPENDIX A

Trompe l'œil mural at a floral shop





This was my first mural at a floral shop in Galt, Cambridge, painted in a 'trompe l'œil' style at the request of the owner. The window shutters were fabricated out of new plywood and painted to appear old.

APPENDIX B

Design proposals for a Mexican restaurant

These are a few of the drawings included in my proposal submissions to the city of Cambridge Municipal Heritage Advisory Committee to refurbish the restaurant discussed in Part One of the thesis. The photographs of the existing conditions were taken in 2013.



Revised Proposal for 49 Main Street
Colour scheme for front and rear facades



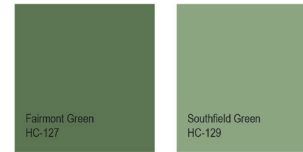
Front Elevation at 1:75



Rear Elevation at 1:75

Drawings and design by Stephanie Boutari
Date: November 25, 2013

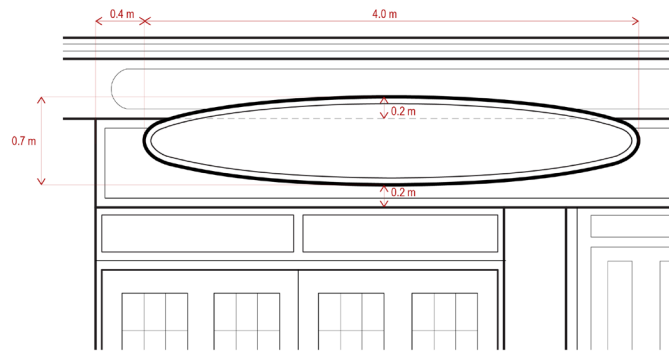
Revised Proposal for 49 Main Street
Paint colour swatches for front and rear facades



Colours chosen from Benjamin Moore's Heritage Colours Selection
See attached paint swatches in the hard-copy submission for greater accuracy

Drawings and design by Stephanie Boutari
Date: November 25, 2013

Revised Proposal for 49 Main Street
New signage: placement and dimensions

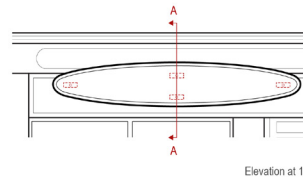


Elevation at 1:25

All dimensions shown are in metres

Drawings and design by Stephanie Boutari
Date: November 25, 2013

Revised Proposal for 49 Main Street
New signage: details

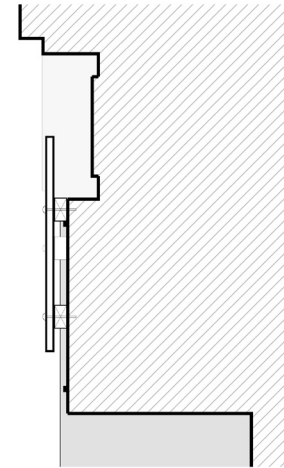


Elevation at 1:50

Material: The sign will be made out of painted MDO (medium density overlaid) plywood. MDO plywood is typically used for painted exterior signage due to its weather-resistant resin overlay.

Thickness: 1 inch

Connections: the sign will be mounted using construction nails and wood spacers. Their approximate locations are indicated in the elevation and section above.



Section A-A at 1:10

Drawings and design by Stephanie Boutari
Date: November 25, 2013

MY FIRST MURAL

I was lucky enough to get hired by Elaine Martin, the florist and expert gardener who owns From the Potting Shed to paint a large mural in her shop. Me, who only had paintings from high school to show her (except for two or three) and who has never painted anything larger than about four feet by four feet. I was even luckier to have subsequently been featured in a local paper for that mural.

This was my first mural ever, as well as paid job for painting in general. It made me realize how much I missed painting, and how great it felt to work at such a scale, and to essentially create a public work of art.



Since I am writing this after the fact I will only put some photos of the complete work for the purposes of documentation. It is, after all, the push that got me started again. My next project will (hopefully) be the restaurant down the street from the

floral shop - El Rinconcito Mexicano. It is quite a big undertaking but I am very excited about it. The owner, Patricia, would like me to essentially re-ramp the entire restaurant, including the front and back exterior walls, and re-design the main entrance. They are on the verge of selling the business, and the owner hopes that a new image - and artwork - may help bring in more business.

THIS SKETCHBOOK is just a way for me to jot down notes, ideas and do various drawings or sketches throughout - not necessarily pertaining to thesis but more as a vent for my brain and creative thought processes. As such, I am treating it as a journal - both written and visual.

MY THESIS DILEMMA..

At the end of the day I need to produce a printed book for thesis. But I am trying to bring back my old self - which has been lingering for quite some time now - the part of me which feels much more comfortable creating by hand. Whether or not this translates into digital format is a question to answer at a later stage. For now, my vision is that MY THESIS BOOK IS A SKETCHBOOK: AN ANNOTATED ARTIST'S JOURNAL.

MURAL 1: "FROM THE POTTING SHED"

Photos of the mural - client requested a trompe l'oeil of an old stone wall with vines growing on it (of morning glories)



and a conversion of the existing door into a garden shed door. The walls and door were originally white, door handle was gold. The window sill and shutters were installed and made out of bare plywood which I then painted to appear old.

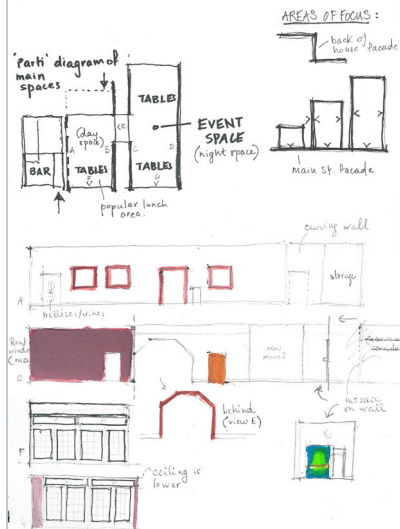
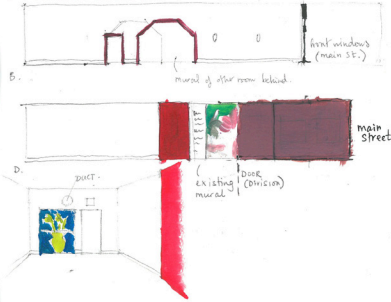


EXISTING CONDITIONS

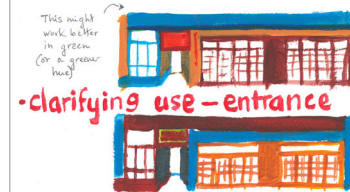
Problem areas / Opportunities for improvement:

- peeling paint, interior and exterior
- confusing entrance
- signage
- lighting - inconsistent / not working
- door items that don't fit - flag banners, silver/gold plates/wall hangings left from previous owner, large black wood mounted lamp holders
- general clutter / disorganized
- back entrance - graffiti
- no signage
- lack of Mexican colours.

INTERIOR ELEVATIONS



COLOUR SKETCH



-clarifying use - entrance

-establishing identity



Preliminary ideas on the use of colour

colour combinations



Factors to consider:
 - City regulations on colour
 - Harmony with adjacent buildings

EXPERIMENTING WITH COLOURS

These Mexican inspired colours are perhaps too bold and bright to use across the entire wall - these colour sketches demonstrate that their intensity would only make the space seem even busier and more cluttered than it already is. In this context I don't think that either of these schemes work.

complex patterns might also appear too busy, unless set within a rigid framework.

painting of a scene set in Mexico.

PATCHES OF COLOUR

- undefined boundaries, blending into each other
- would not apply to a whole wall but a defined, delineated section of it.

TILES

I have considered employing a motif of tiles or tile-like patterns painted across portions of the walls in the restaurant as a way of incorporating Mexican colours and themes into the architecture itself.

The painting to the left is my (simplified) interpretation of a typical Mexican 'Talavera' style ceramic tile. I would be able to repeat this design or others with a similar level of detail at the scale I am thinking of - it would simply take too long. Even stencil would not be appropriate for circular shapes. The way these tiles are used in actuality requires not one or two designs, which are mass produced and repeated across a wall as a band or bordering an opening. In this context however, I wish to REINVENT or REINTERPRET this aesthetic, a modern and more inspired as opposed to literal fashion. Above I have generated random shapes and patterns using typical Mexican colours. I have done the same below, however this time the forms have been directly inspired by prevalent shapes in classic Talavera tiles (see photo on opposite page).

My goal is to create a look INSPIRED BY CERAMIC TILES, MOSAIC and TERRACOTTA TILES and not aiming to create a strange local or faux tile finish - realism is not my intention here.

abstract fragments with mosaic/fragments in quality that might be easier to apply on a large scale. a perfect opportunity for irregularity.

I am not at all sure what I will do between each tile but some sort of division, however subtle, will be necessary - whether white, grey or black, even varying tiles/shapes.

Here I have attempted to reduce the patterns to two colours per tile, with a clear foreground and background. This could potentially be successful if a solid background colour combinations within a fixed palette of colour (VARIATION WITHIN REGULARITY)

I like the warmth of the orangy terracotta colour on the walls however I am still undecided on what kind of pattern to introduce to the base of the wall. The issue is that, AT THIS SCALE IT ALL LOOKS GOOD! My next step regarding the patterned wall base will be to make 1:1 SCALE MOCK UPS.

One outcome of my paint/sketch/ink methodology has been an inspiration to do a COLOUR WASH on the walls - to intentionally create a look of uneven colour as opposed to a solid, 'perfect' application whereby any flaws or imperfections on the walls would only be accentuated.

accent colour / gradient colour change

photo frames

Main Street

pointed window w. Mexican scene

pointed window w. Mexican scene

multicoloured pattern - tile/mosaic styles

I prefer the ceilings to be left white and perhaps a lighter accent colour or gradient change, such as illustrated below. 'Heavier' colours suit down in the wall.

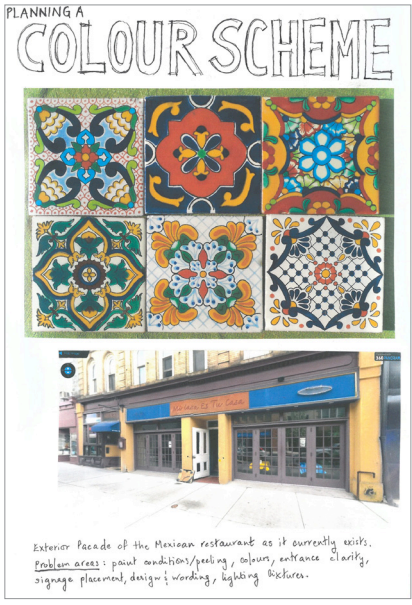
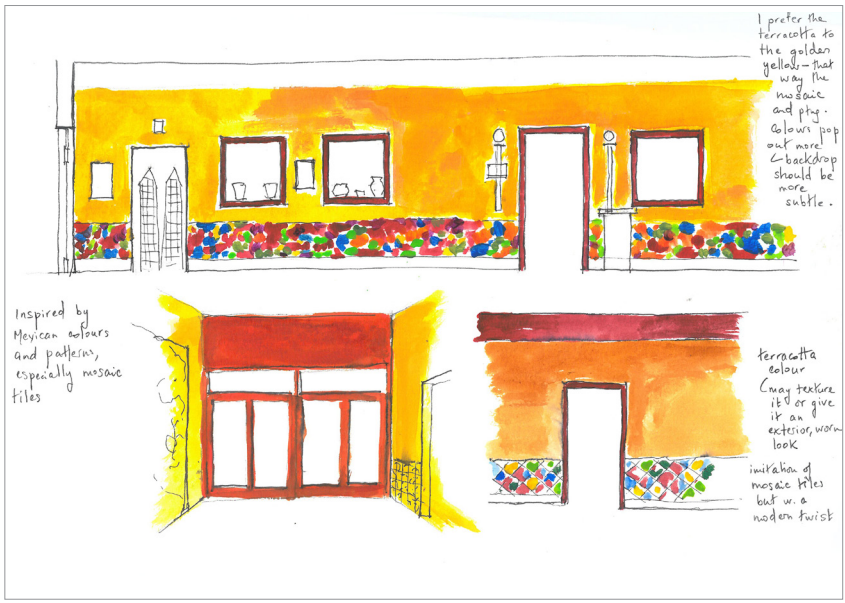
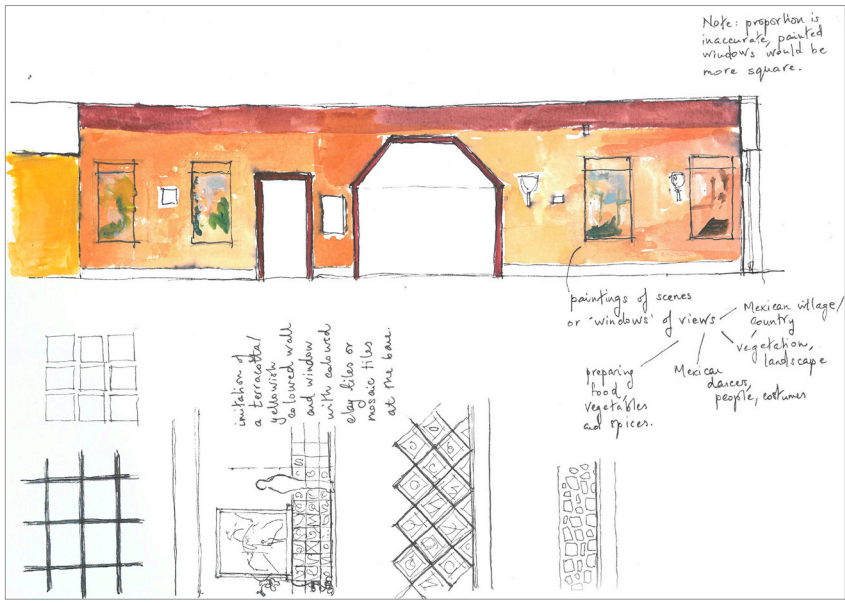
the above could be applied as a band alone (waving) without continuation of the colour onto the ceiling.

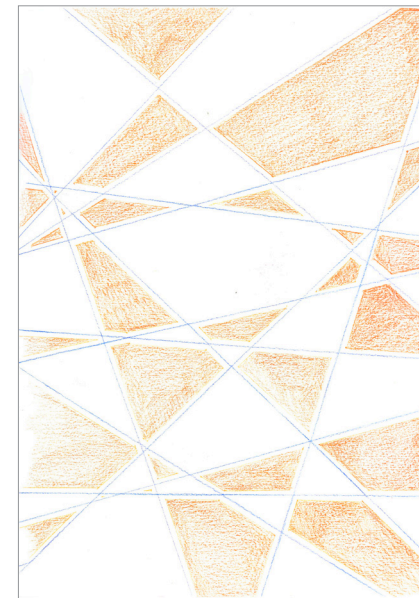
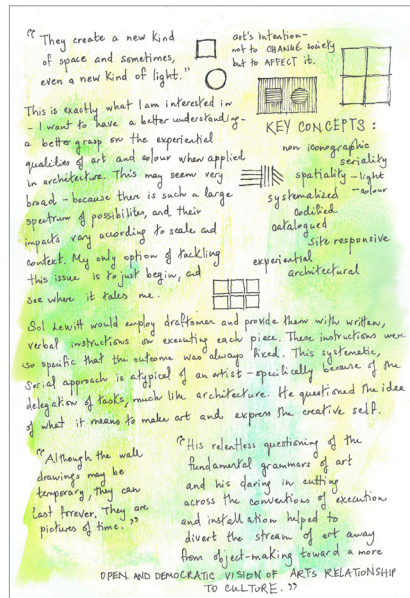
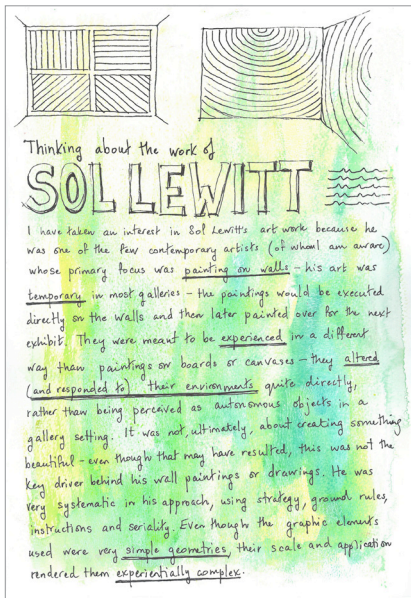
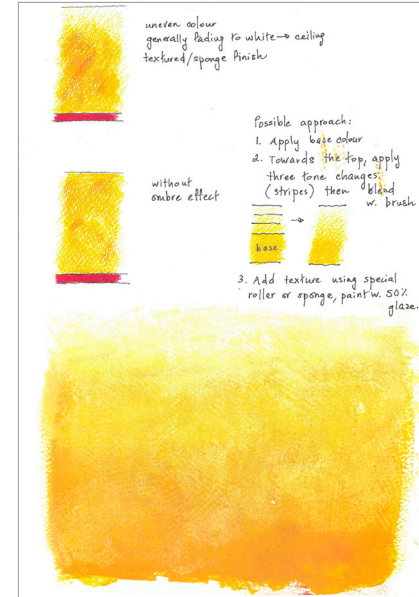
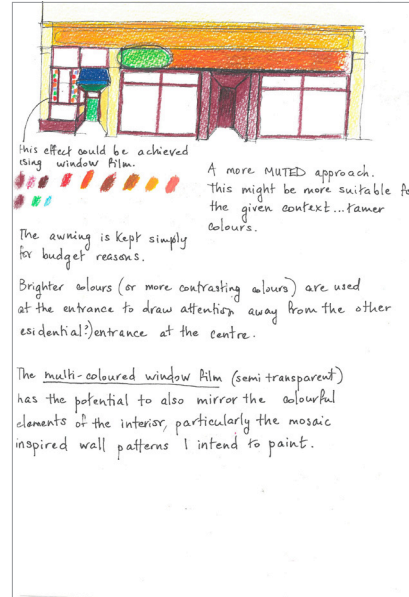
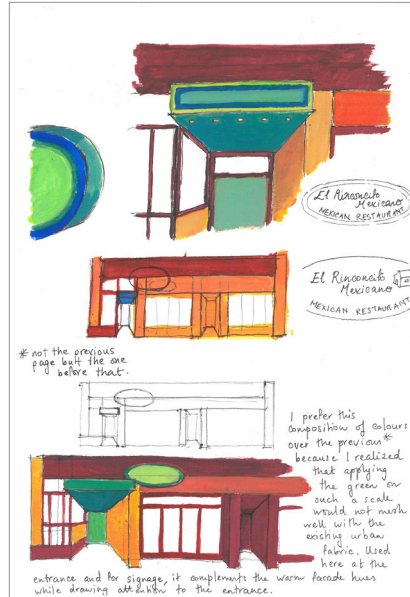
ANTONI GAUDI

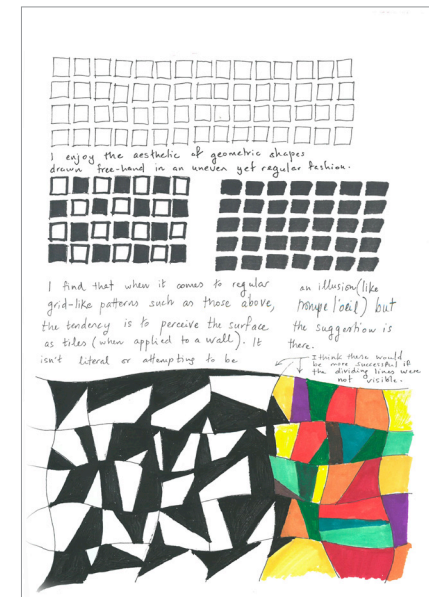
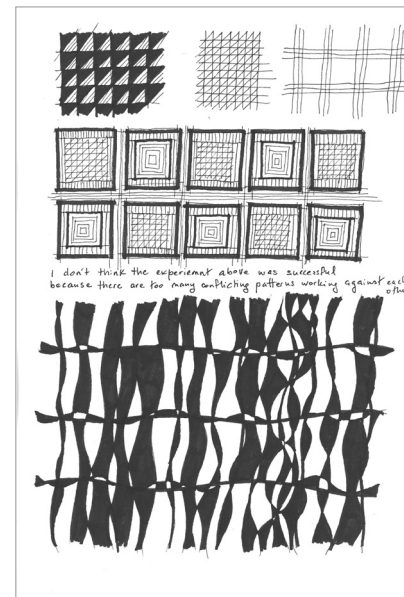
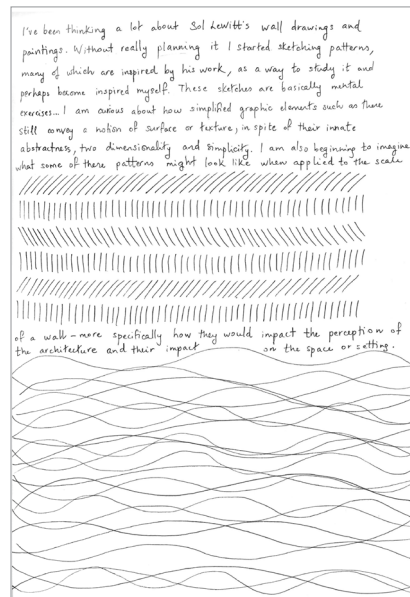
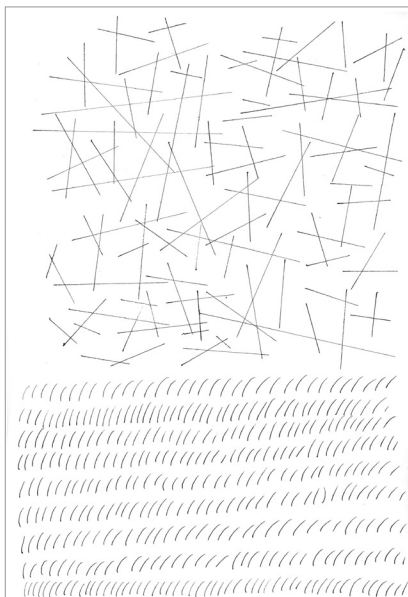
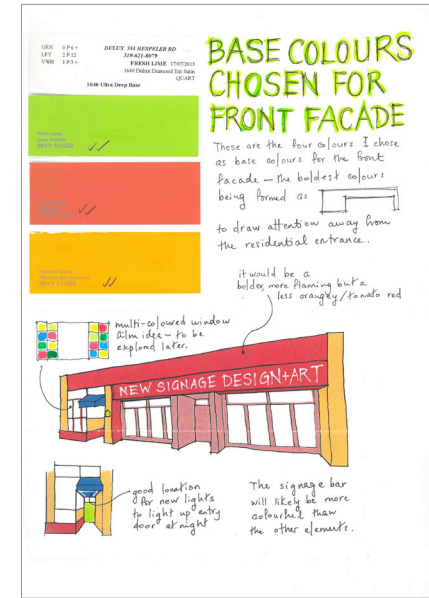
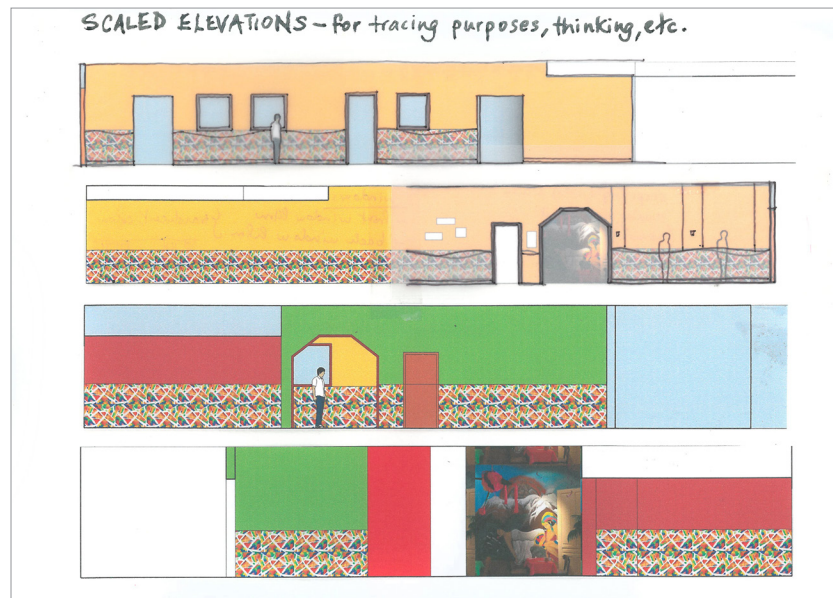
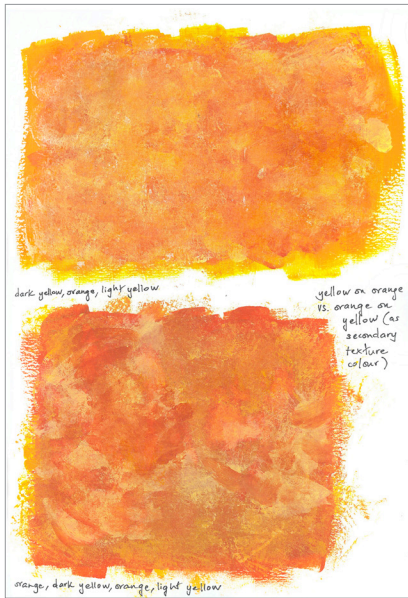
used fragments of assorted ceramic styles, mixing various patterns within a unifying style and colour palette. I enjoy the vibrant, playful nature of these works and I would like to incorporate elements of them - especially their irregularity - into the mural.

My aim is to reference the ceramic styles of Mexico (and Spain, naturally) but not attempt to imitate in a realistic or "trompe l'oeil" manner. COLOUR is the key tool here, in creating a sense of home away from home and connecting to Mexican roots.

In this experiment I have abstracted the ceramic fragments. While the visual effect is promising, this method is not suitable for application on the scale of the given mural.







CONTINUED...
I haven't played or organized these images in chronological order, nor labelled all of them because it is not critical for the purposes of my study. Clearly, some of these drawings were executed much earlier than the free form curvilinear pieces seen on the previous page, as this was the direction Lewitt's work evolved towards. I selected all of these images based on my perceived impact that they would have on the viewer's experience of the space itself. Many of these pieces evoke three dimensionality and create illusions of

depth, receding or protruding planes, and as a whole, are very architectural. I am also interested in how materiality comes into play - even though it's not his intention, these walls are inescapably materialized by his work.

The graffiti movement has an interesting history, which I believe began in New York City sometime in the late 1960s. The concept of graffiti however, as always existed, for as long as humans have been around, we have had the desire to make our mark on our surroundings. Evidence of this dates back to the cave paintings of Lascaux, France, or even the lost city of Pompeii where there are numerous examples of messages/names engraved or scratched onto walls. I am fascinated by the aspect of mural art for any art form by an artist's hand to built form because it reflects the raw, human instinctual desire to communicate through art and architecture. Architecture as a platform for art truly expresses this, particularly in the past when communications were far less advanced and global like they are today.

GRAFFITI

The graffiti movement in NYC really took off when kids began tagging subway trains with their names - often secret identities/nicknames. The switch from walls to trains drastically increased their visibility and recognition. It all began with a basic desire to leave one's mark somewhere visible to the public. Imagine the sense of pride one would feel in seeing their name all over a city block, let alone a neighborhood, or entire city (made possible by the subway trains). Furthermore, the exposure of these trains to tourists catapulted the movement to cities worldwide. This, however, never changed the fact that this activity was highly illegal and many artists (writers) worked under extremely dangerous and high risk situations to pursue their passion. The movement also began as a territorial activity, revealing which gang members resided in which areas. If a writer were to tag a surface belonging to the wrong gang, the consequences were severe.

- name tagging/initials
- stylized lettering
- logos
- identities
- pieces
- Three kinds of graffiti today and then:
 - tag
 - throw up (letters, larger letters, usually bubble and made to look three dimensional)
 - piece (short for masterpiece - art works of varying style, subject and scale)

These works are much more minimalist and abstract than I intend to work, however they are still interesting because it becomes clear what the 'bare bones' of these illusions are: **contrast**. The forms are extremely simple yet they establish **movement** (left), sense of foreground/background (top) and even allusions to an opening or portal of some kind (top right).

When I look at this particular wall drawing, James Turrell's light exhibit at the Guggenheim comes to mind - the installations of light planes directly on walls in particular. These planes of light were installed completely flush with the walls, yet they created an illusion of three dimensional geometric forms or openings.

Even though flat colour is used here, a sense of three dimensionality is still conveyed. Perhaps this is because the colours chosen are distinctly different in terms of their 'lightness'. The way to test this would be to produce a grayscale image of the colours.

Inspired by a collage by Jacqui Boncelet, entitled Windows and Screens, 2002. It was made in preparation of ideas for the Didot Arts Centre.

Thinking about... what simple geometries of colour or shades in monochrome alter the perception of a surface → movement, extrusions, receding, depth, verticality, horizontality, widening, lengthening, shortening, enlarging, shrinking.

backing up a wall into compartments further reduces the scale perception.

At the scale of a wall, horizontal vs. vertical linear pattern visibly alters the perceived proportions and scale. * See Sol Lewitt wall drawing on previous page.

Experimenting with the desaturation (or gray scaling) of colours to see how light or dark they actually are, versus how we might perceive them.

desaturated boxes (of right page). The yellow in fact reads darker than the red, which I did not expect. Note: photo was taken before the blue layer of ink was added.

modified boxes: red and yellow triangles swapped, pencil over the darker shade to highlight their contrast. These boxes look more three dimensional now.

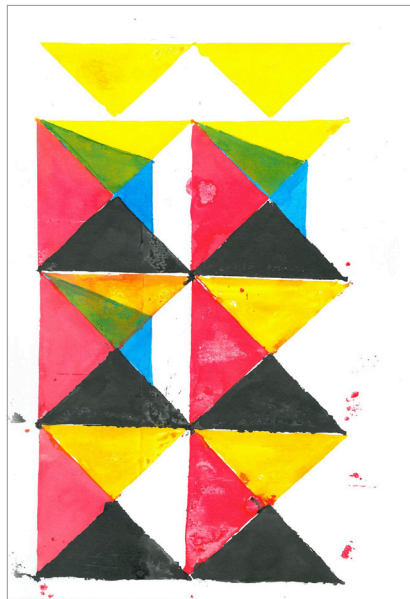
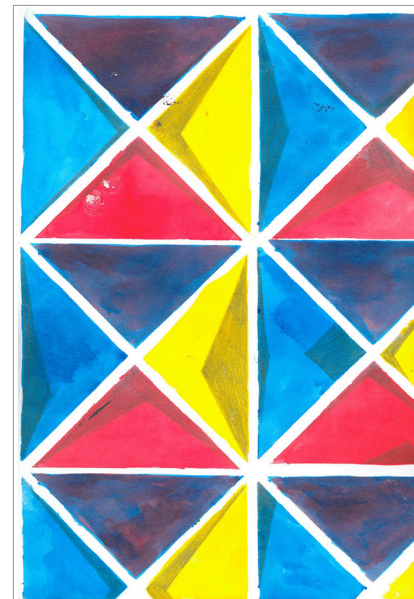


PHOTO TAKEN BEFORE PAINTING

On the one hand, Doesburg stresses the importance of colour and the 'surface' of architecture, which I agree with, particularly with his reasoning. In the final analysis it is only the exterior surface which defines architecture, since man does not live within a construction but within an atmosphere which has been established by the exterior surface. On the other hand, I am not sure that I agree with his rules for how colour/painting must be applied.



EL Rinconcito Mexican AUTHENTIC MEXICAN CUISINE

EL Rinconcito Mexican AUTHENTIC MEXICAN CUISINE

EL Rinconcito Mexican AUTHENTIC MEXICAN CUISINE

I took a step back from working on El Rinconcito after we had a meeting with the city - one member of the planning department and another from heritage. If it were up to me, we never would have had that meeting, however the owner was worried about potential fines for changing the building's facade colours. We were told in the meeting that we can't proceed without approval from the Municipal Heritage Advisory Committee, which meant waiting until October 17th for their next meeting: another two months.

preferred colour. (could complement the green border)

else would all be on one surface (painted) lighting may be an issue...

alternatively if a separate piece were added, lighting could be created behind or the white element lit-up (if made of vinyl by a signage manufacturer)

Problem with this red is that the same colour used above.

make larger


make smaller

probably a blue to match existing awning



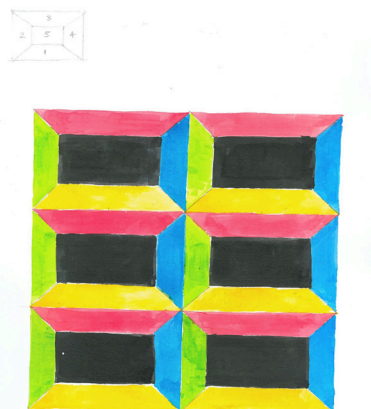
El Rinconcito Mexican AUTHENTIC MEXICAN CUISINE

Compositionally speaking I think that this needs to be adjusted in areas - shifting more of the white imagery to the right so that there isn't that awkward gap between the red and so that the very left section does not appear overcovered in comparison.



Notes on Colour - continued.
Fernand Léger - On Monumentality and Colour, 1943 (see a **slide** later **Mean** **Dessburg**)
 • Colour as an essential, important component of everyday life
 • media/publicity has taken advantage of this and as a result "is" destroying the "landscape" with, for example, "vibrant-coloured posters, billboards"
 • media has also "injured the public" to be preoccupied with "decoration"
 "So colour and its dynamic or static function, its decorative or destructive possibilities in architecture, is the reason for this study. Possibilities for a new orientation in mural painting exist; they should be utilized. A bare wall is a dead anonymous surface. It will come alive only with the help of objects and colour. They can give life to the wall or destroy it. A stained, coloured wall becomes a living element."
 • wall transforms by colour and interesting problem in modern architecture ("modern mural transformation")
 • colour must be "set free" - no longer bound to specific representative objects
 • wall has to be freed to become an experimental field."

Grayscale experiments continued.



• pure colour or isolated colours, not bound to any object, "plastic activity" of their own
 • road signage/publicity → colour as "object" (billboard) thus removal of decorative wall papers for a preference of pure white walls (limited, boring)
 • argues for "coloured space" and "polychrome organization of a street and city"
 • psychological and social influences of colour e.g. "artificially increasing speed or improving employee morale"
 • colour as "dressing up" reality, concealing "truth" as a matter of human behaviour, necessity, "a decorative life."
 • "The men who like truth, who like to think of living with it raw, without any retouching, are scarce."



more successful visual result here → creating monochrome blocks against a black backdrop renders them clearer, this was the desired effect.



Again, the above image reads much more clearly as folding planes than the left top and bottom.
 Experiment in superimposing line drawings to see if "they compromised" the legibility of the planes.

Design Proposal Front Facade

Key Changes:
 Strategic signage
 Colour removal
 Vibrant artwork
 Improved external lighting
 Structure, light and walls to support Public artwork



A more attractive and permeable storefront for Main Street and Main Square.



The signage proposed here are intended to illustrate a basic design concept for the new signage. Subject changes and refinements will be necessary during the development and execution of the final product. There are a few more colour options that are currently under consideration.

Design Proposal Back Facade

Signage repositioned

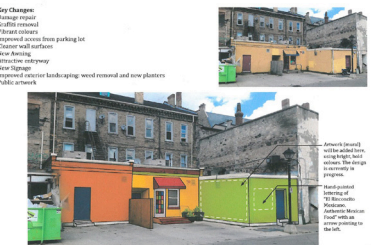


Architectural rendering of the back facade showing the proposed signage and artwork.

I decided to go ahead and submit a proposal, despite the apprehensions of the heritage committee member we met with, and the restaurant owner's subsequent fears. I even wrote a letter to the Mayor, asking if there was any way he could expedite the process to reduce the risk of having to wait until next summer. He was friendly and responsive, but nothing much came out of that. What bothers me most about this whole situation is the fact that the final aesthetic decisions will be made by a group of people who have simply been given authority - not people who necessarily have any artistic or creative inclinations, or know a thing about design. This is what I want my thesis to fight for - greater involvement of citizens in affecting change in their cities - that is what creates community pride and a sense of ownership / belonging.

Design Proposal Back Facade


Key Changes:
 Strategic signage
 Colour removal
 Vibrant artwork
 Improved access from parking lot
 Clearer wall surfaces
 New lighting
 Attractive entryway
 Improved access landscaping, wood removal and new planters
 Public artwork




Architectural rendering of the back facade showing the proposed signage and artwork.

COLOURFUL EXPERIMENTS

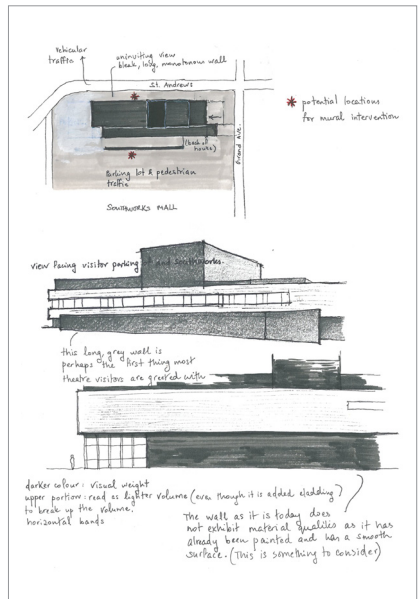
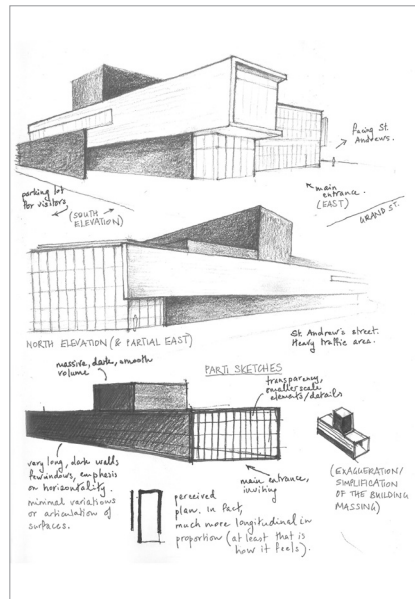
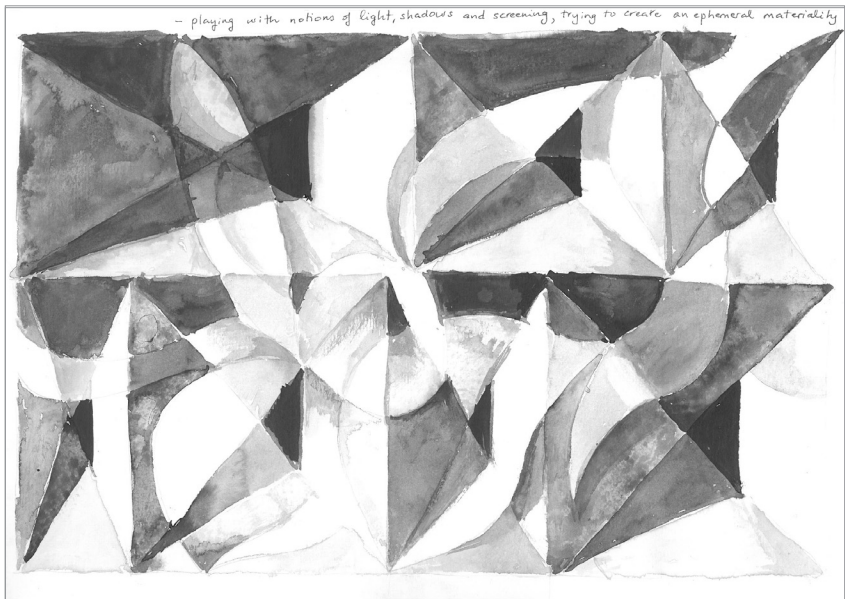
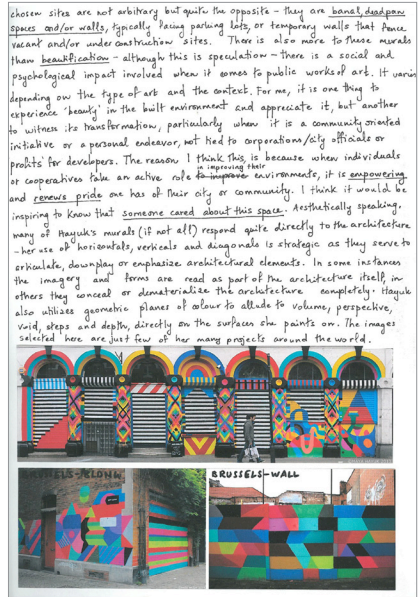
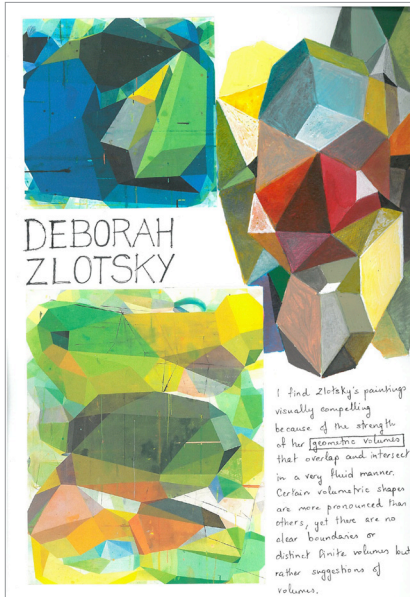
Some time ago, while I was thinking about El Rinconito and developing design iterations, it occurred to me that the whole site behind the restaurant has so much potential (the Main Street parking lot.) The building right beside the restaurant, for example, is an optimal location for a mural - or basically a great opportunity for an architectural rehabilitation through the use of colour and paint on its exterior surface. After speaking with the building owner I had learned that the facade in fact looks the way it does because of moisture problems. The stucco/plaster was added many years ago as a quick cheap solution which now was failing, and the owner intends to take down the whole surface in order to recover the original heritage structure behind (of old stone masonry) until that work begins, he is open to the possibility of a temporary artwork being executed (for one year) - this would be an interesting way to test the potentials of murals and coloured facades to create/enhance a sense of place.

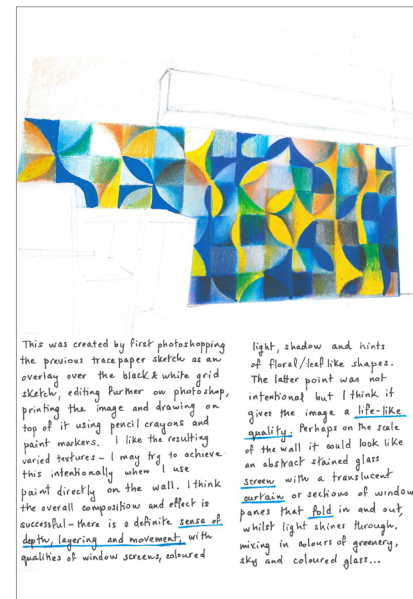
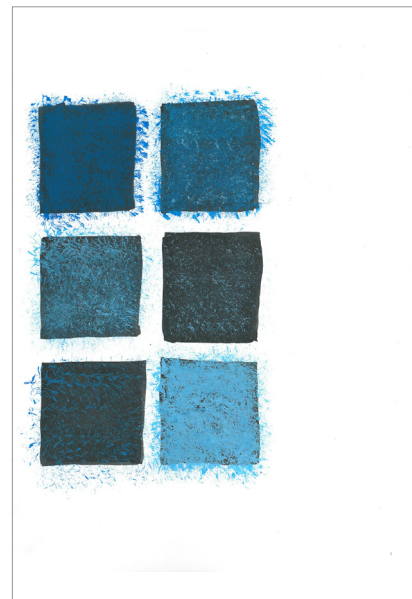
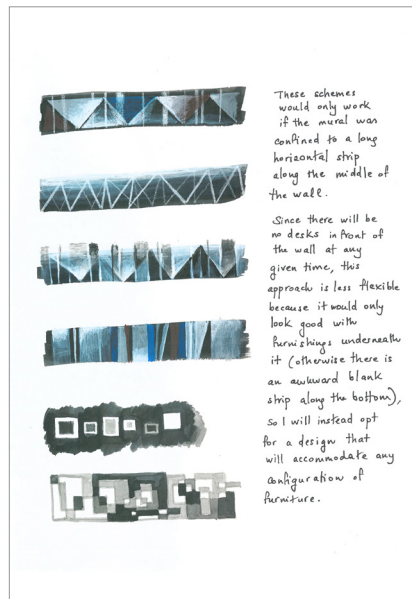
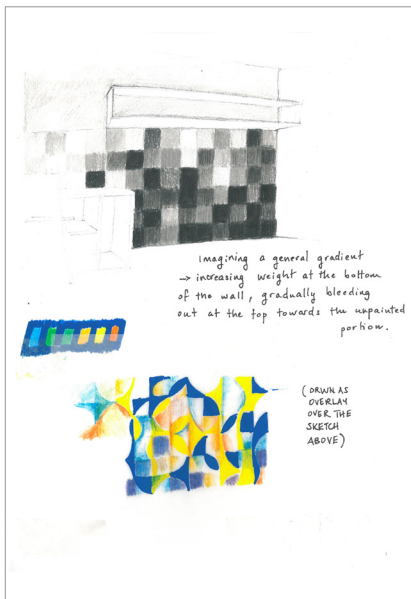
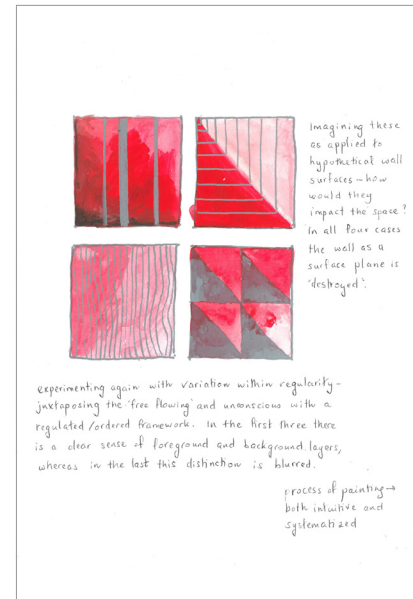
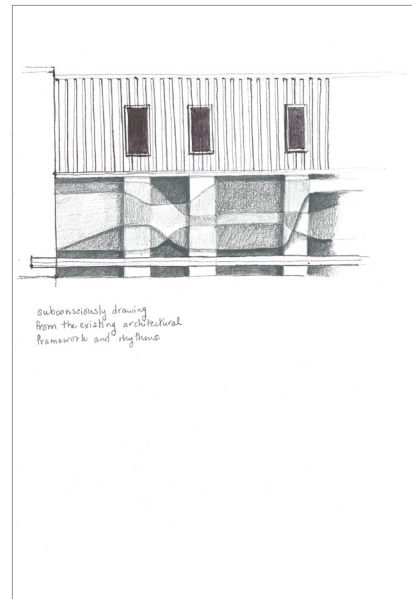
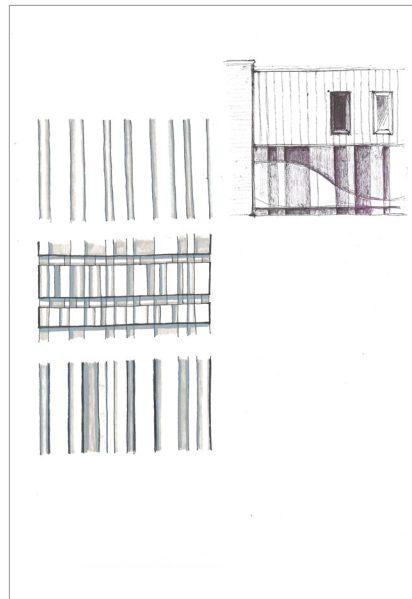
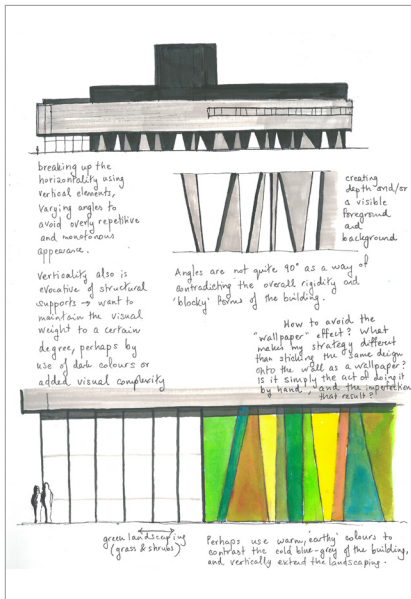


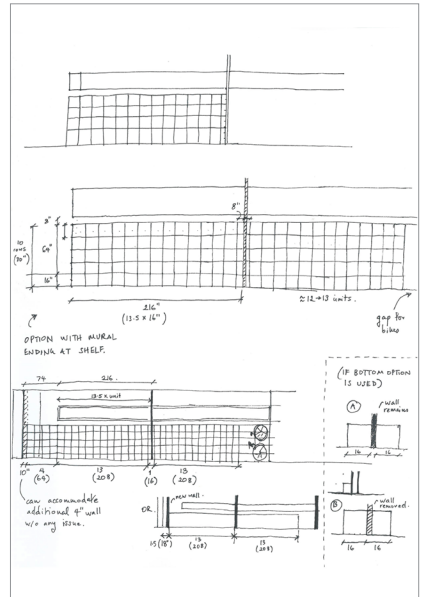
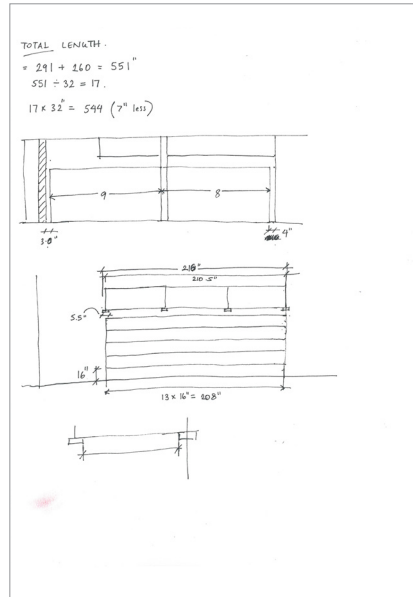
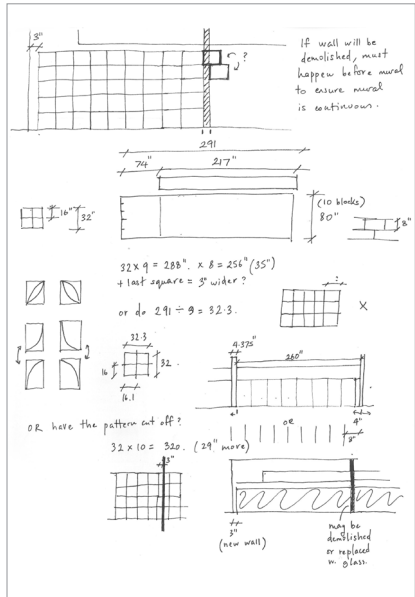
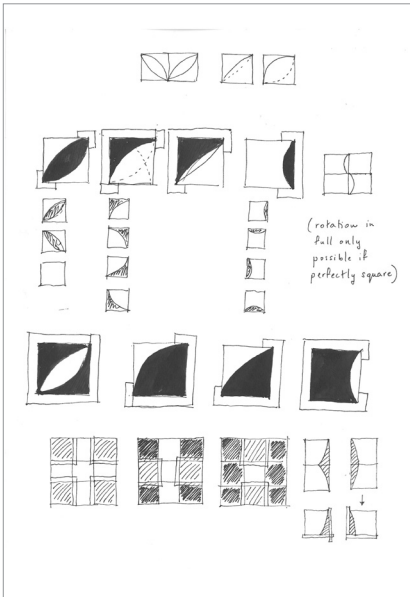
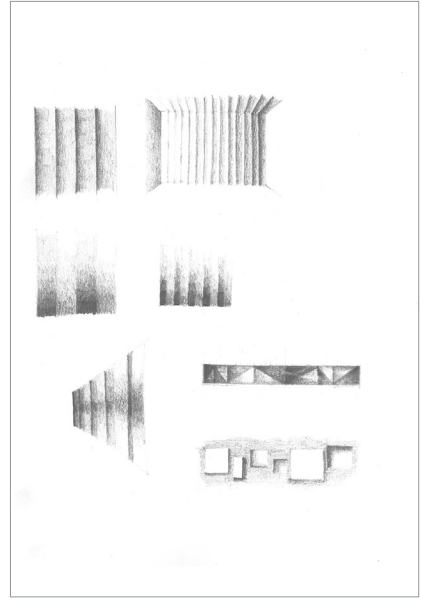
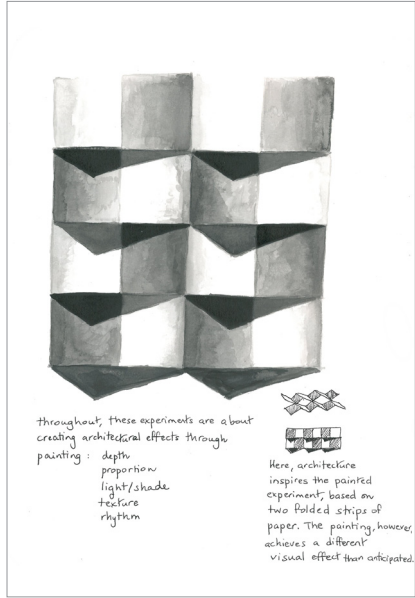
GREAT OPPORTUNITY FOR A MURAL/PUBLIC ART

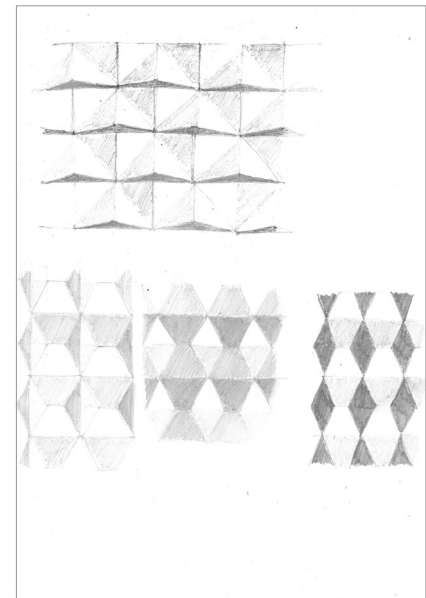
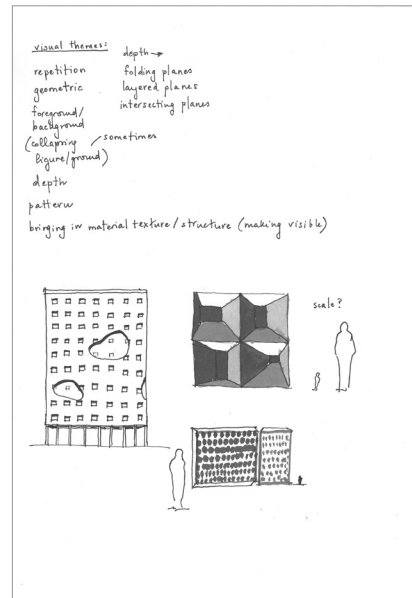
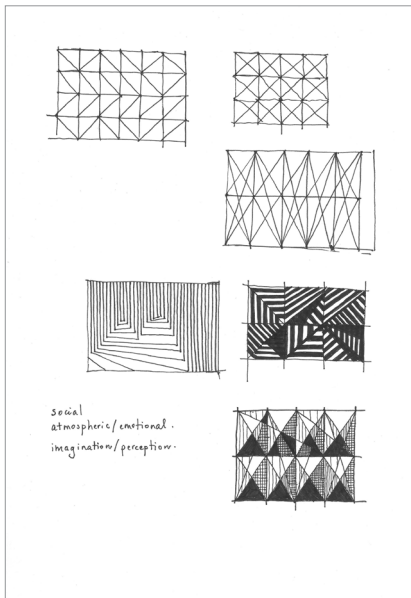
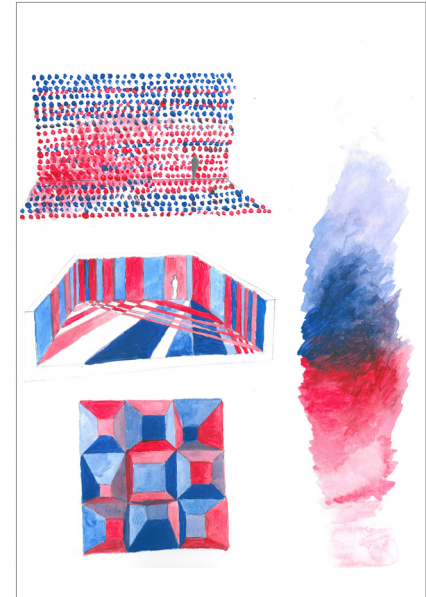
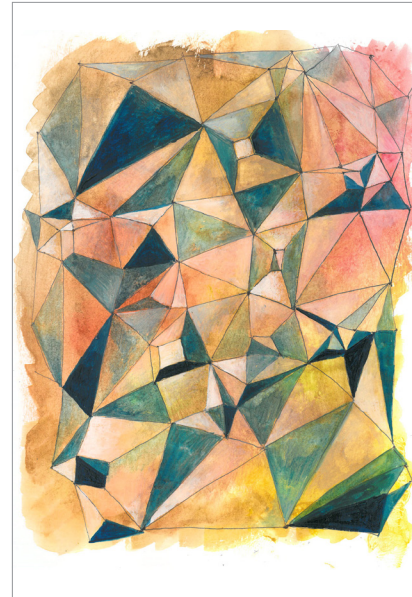
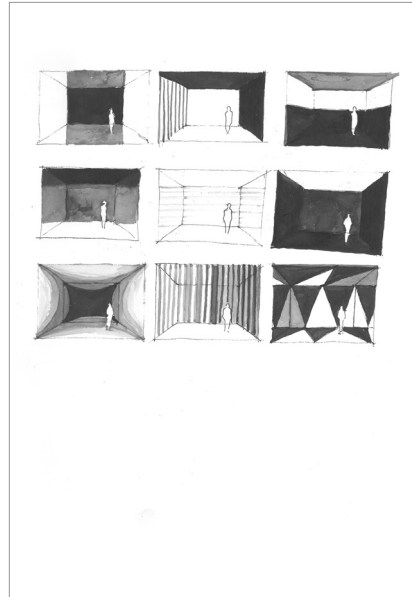
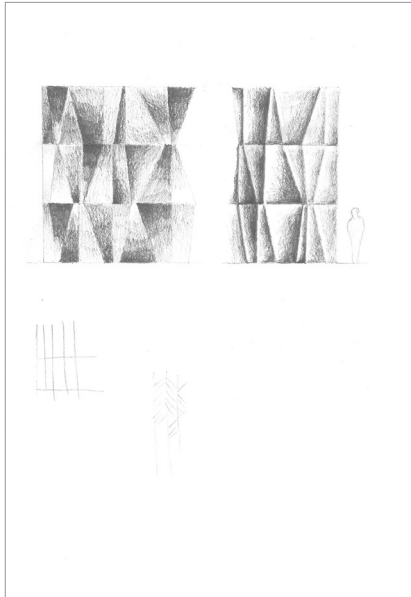


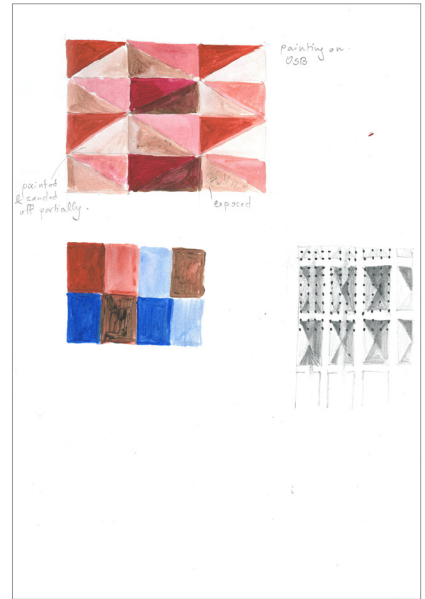
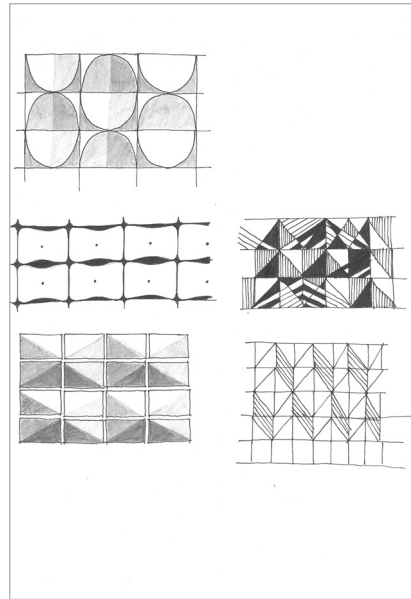
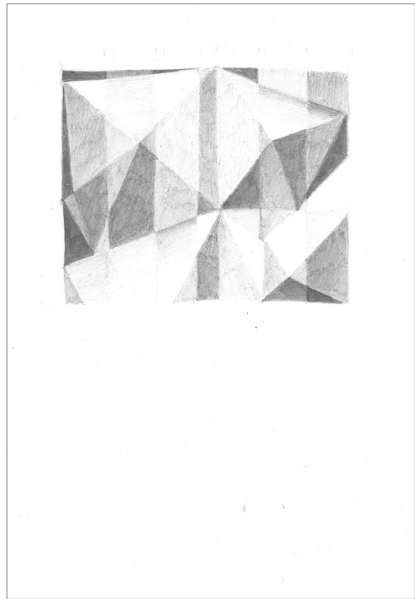
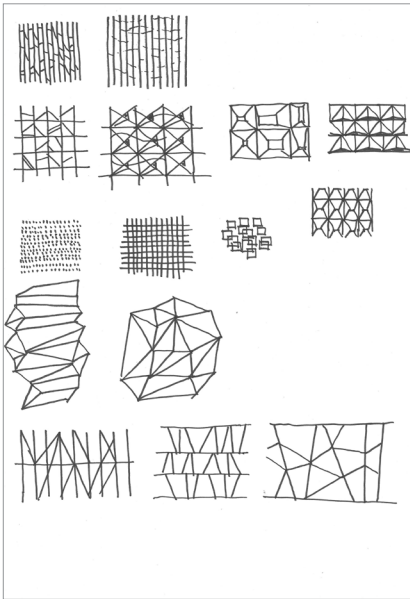
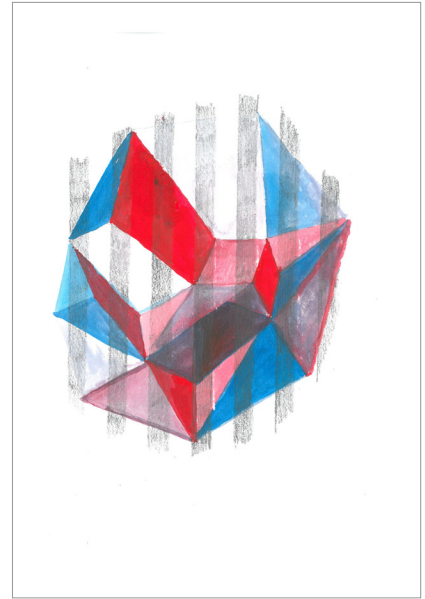
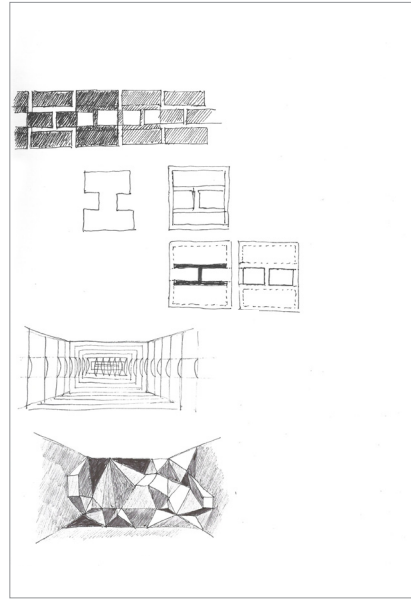
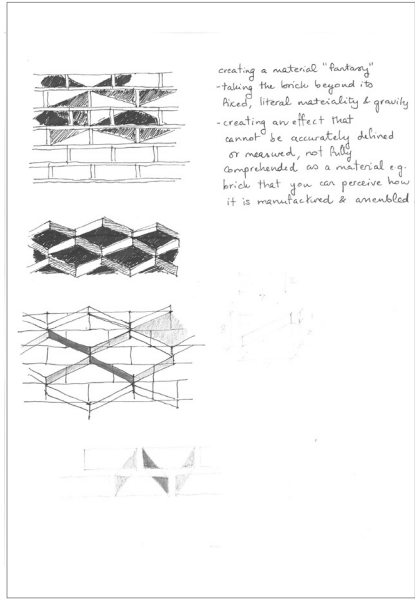
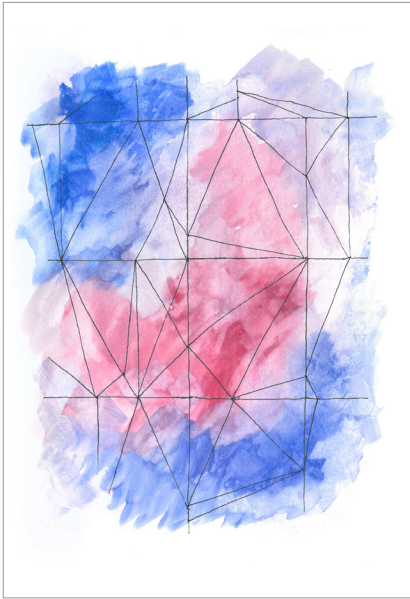
REIMAGINING A SECTION OF THE FACADES THAT LOOK ONTO THE MAIN PARKING LOT. THIS PERSPECTIVE IS ALSO SEEN FROM THE COFFEE SHOP AND DANCE STUDIO THAT CURRENTLY EXIST ON THE OPPOSITE SIDE OF THE PARKING LOT. THE DIVISION OF COLOURS STARTS TO HIGHLIGHT DIFFERENT FUNCTIONS, CREATING A 'mini' back-street behind Main. It also breaks down the scale to that of a pedestrian, while at the same time, the bold











APPENDIX D

Media excerpts

May 2013

Arts and Entertainment

Cambridge Citizen | Page 11

the Downtown Galt Core

The artist that brings paint to life

TRISHA PORTER
COLUMNIST

When you walk into From the Potting Shed on 25 Main St., the first thing you'll see is the stone wall with green vines and morning glories growing on it. It gives the flower shop an old, French garden feeling but you may be surprised to know that despite how real it looks, it's actually a painting.

“The idea behind trompe l’oeil is to basically deceive the viewer into thinking something is real.”
— Stephanie Boutari

An architectural student at the University of Waterloo, Stephanie Boutari, has spent most of the last four weeks in the back of the small, cozy shop with a paint brush in hand, painting what's called a trompe l'oeil. This type of mural, which name translates from French as 'trick



Stephanie hard at work creating the archway.
PHOTO BY ANDIE DAHL



Stephanie Boutari, poses with her creation after the work is complete at From The Potting Shed flower shop.
PHOTO BY ANDIE DAHL

The owner of From the Potting Shed, Elaine Martin, was looking to have a mural painted, and Boutari's future sister-in-law, who currently works at the shop, told Martin of Boutari.

Trompe l'oeil was Martin's idea. She gave Boutari artistic freedom in how to paint the mural but she basically wanted the stone wall with morning glories growing on it, Boutari said. "But in terms of the specific layout and all the details, that was coming from my imagination. But I'd also be discussing with them and they'd have suggestions, it was kind of back and forth but for the most part I had freedom in terms of how I'd go about it."

Boutari really enjoyed the entire process of creating the mural. "First I'll have the idea then I'll lay out then I'll step back to make sure the composition is right and then I'll add the detail. I'm always most satisfied when a section is done, when it's turning out the way I had imagined it in my head. So it's always when each little piece, each little detail is added, that's when I get the satisfied feeling but I still enjoy the process of building it up." One thing Boutari found

most challenging about the painting was the size of it. "Not only just because it's large but the fact that it has to be life-sized and that it's meant to be viewed from a distance. I've painted realistic paintings before but the scale was never one-to-one so that was something that I really had to take into account." Since Boutari didn't grow up in the country, it was difficult at first for her to paint things that she'd never seen in real life. "Oh I'm just not a flower expert either, so morning glories, for example, I didn't know how large they should be," she said. "I just basically trained myself to step back every time just to make sure that it looks good from a distance too cause sometimes you can get so absorbed in the tiny little details when you're this close to wall and no one really sees that."



Even the butterflies seem to come to life on Stephanie's wall.
PHOTO BY ANDIE DAHL

Cambridge Citizen, May 2013.

Page 2

Cambridge Citizen

May 2014

Stephanie Boutari's Artistic Diversity

by Scot Ferguson-Barber

Shortly after we published the May Issue, which featured a story on graffiti, I was walking down Melville St. and I espied a painter, fully masked, painting a mural on the end wall of The Bread Factory Building. I was pleasantly surprised when she removed her mask and it was Stephanie Boutari, an artist we had featured last year.

An architectural student at the University of Waterloo, Stephanie who came to Ontario from Bahrain seven years ago, has always had a passion for art and from that she branched into architecture. She is engaged to a fellow student from Cambridge, and plans living here after she graduates.

The article we did last year was about her first mural, a "trompe l'oeil" on the back wall of The Potting Shed on Main St. This type of mural, which translates from French as 'trick of the eye', is designed to make the viewer believe what they're seeing is real or three-dimensional. The idea behind trompe l'oeil is to basically deceive the viewer into thinking something is real. Bright and abstract, this new piece is completely different. A block from Dunfield Theatre, it can easily be seen by people driving on Grand Ave. As a novice artist, this is a major exposure for her. As she continues to explore her 'artistic side,' I believe, and hope Cambridge residents will be treated to much more of Stephanie Boutari's delicious eye candy.



Stephanie Boutari hard at work on The Bread Factory building.
Photo by Judee Richardson Schofield



The finished mural at the Bread Factory.
Photo by Scot Ferguson-Barber

Front Cover
Photo and cover design by Judee Richardson-Schofield



Stephanie with her "trompe l'oeil" mural at The Potting Shed. Photo by Andie Dahl

Cambridge Citizen, May 2014.

Jun 27, 2014 | Vote 0 0

Make way for a funkier, cooler Waterloo

Waterloo Region Record
By Paige Desmond

WATERLOO — Tenants are already staking claim on the first of two office buildings being developed as part of Waterloo Corporate Campus at Weber Street North and Northfield Drive.

Intermarket Developments Inc. is spending about \$160 million to revamp the site of the former NCR plant into a mixed-use project that includes office space, data centre, retail, restaurants and grocery store. NCR still operates a research and development office on Northland Drive.

The Record got a sneak peek Thursday of what Mark Kindrachuk, president of Intermarket Developments, calls funky, cool office space in the suburbs.

"We spent a lot of time on the design and the architecture and you usually don't see that in the suburbs," Kindrachuk said.

He added: "People usually think of the suburbs as kind of bland."

Intermarket Developments and Triovest Realty Advisors are delivering the project, with the first phase almost complete. It's near a future light rail transit stop.

It's designed to attract tech and other businesses, but not compete with the likes of the Tannery in downtown Kitchener or the thousands of square feet of former BlackBerry space that became available earlier this year.



Waterloo Corporate Campus

Mathew McCarthy, Record staff

Gary Scholl and Mark Kindrachuk show the interior of one of the buildings at the Waterloo Corporate Campus, built on the former NCR land on Weber Street, Thursday.

Waterloo Region Record, June 27 2014.