

**ANXIOUS ORNAMENT**  
ORNAMENT IN CONTEMPORARY 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

There is a fundamental conflict between the urge to ornament and the contemporary time. The phenomenon of contemporary ornament in the timeframe of early 1990s to present day is explored in the context of the modernist rejection of conventional ornament. Three properties of contemporary ornament differentiate it from traditional ornament. *Wallpaper* refers to ornament that is scaled freely over the building, often repeated, without consideration of building limits. *Fusion* describes ornament that is surface-thin, subtractive rather than additive. *Interface* outlines a mechanism inserted in the line of communication to distance ornament from its author. Ornament is no longer designed or sculpted as much as generated or presented through a distancing lens. These strategies make contemporary ornament resistant to traditional interpretation; meaning is reduced through simple references and lack of recognizable motif.

Although ornament has been an integral part of architectural expression through time, and its modernist rejection is a moment in the grand timeframe of ornament in architecture, modernist thought influences the contemporary conception of ornament. The three strategies – *wallpaper*, *fusion*, and *interface* – are recognized as tools that contemporary ornament uses to censor itself, reducing opportunities for

expression. Contemporary ornament is an anxious type of ornament; it is aware of its modernist ban and, through the outlined strategies, submits to modernist values.

The thesis builds this narrative through varied examples of contemporary ornamented buildings and various contemporary writing on the subject, synthesizing the three strategies into methodology for personal explorations in ornament.

## ACKNOWLEDGMENTS

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# INTRODUCTION

## THE PERSONAL

There is a hesitation of the hand when it comes to make a mark on an object. What is it that I want to put down? What is it that I want to say? Do I have nothing to say or do I have no words to say it?

Making ornament is embarrassing. I hold a knife in my hand, the other grips a piece of a grey stone, soapstone. It is so soft; I can scratch it with my fingernail. How do I start? Do I etch a flower? What kind of flower? Does it need to have some sort of significance? I do not know much about flowers at all – *did I just seriously consider drawing flowers?* No, that seems silly and sentimental. Perhaps this should be something personal. Personal like a family crest? I do not think I have one, so a crest is out. Am I thinking about this in traditional terms – meaning and symbols – because I have been taught that it is *problematic*. The *problem* at hand is that it would be elitist to employ symbols that only a certain group of people will interpret, neglecting everyone else. But, looking at a blank piece of stone in my hand, I am not sure I will run into this problem. Perhaps geometric lines would be easier for my untrained hand.

As I scratch the stone surface with the knife, I instinctively know I should not be doing this. In the background, weighing my options for

FIG 0.1 (OPPOSITE PAGE) BLANK PIECE OF SOAPSTONE.

etched ornament, my head buzzes with years of architecture schooling, both “*what on earth are you doing*” and “*why can’t you just do it*”. Both voices are belittling and skeptical, taking on an image of a concerned and unimpressed architecture professor, one arm across his chest gripping onto his side, the other holding his entire jaw in his palm, frowning, bewildered. He is confused as to what it is that I am doing and, at the same time, concerned *for* me.

I am not sure what I am doing, either. On one hand, I believe human effort puts value into an object, be it through design or labour; on the other, I find unmarked, simple things both luxurious and pleasing. While I am not a minimalist by any definition, all the projects I have designed in my undergraduate studies have been “clean” – with no trace of ornament. How did I end up with a thesis that takes the form of an investigation into ornament?

The idea of ornament is appealing, but every time I try to make a genuine piece of ornament, I freeze. Almost immediately, the request is met with protest; but it is not clear where that opposition is coming from. Is it years of architecture school preaching a combination of functionalism and appreciation for modernism, or is it personal taste? Maybe it is social class – unpleasant memories of flowery wallpaper in a working class home that stop me from imagining what the ornament I would produce looks like. Do I feel the need for my ornament to be

masculine? Do I feel the weight of the decision of motif? Would I go looking for pattern books to copy?

The experience of making ornament is embarrassing. I feel exactly how neurotic the creation of ornament is, how my prior associations and expectations of ornamentation influence the thought process. Out of nowhere, I am flooded with opposition, left to wonder whether its source is exterior or interior. Is it weak to want to make ornament? Or am I just following an instinct for a freer expression - a different architectural detail, visual interest, interaction between a building and its user on the human scale. Is it some sort of “modernist guilt”? Do I harbour an internalized assumption that liking architectural ornament is weak, primitive and uneducated? The assumption stems from a Europe-centric belief that the evolution of culture culminates in rejection of ornament and embellishment, used by the modernist movement to promote its aesthetic. Although intellectually one can see how this logic is flawed – one aesthetic preference, disregarding its mode of production, certainly is not more moral or evolved than all others – it stuck. When confronted with attractive ornament, is it guilt that one feels? Or is it an emperor’s new clothes situation – one must prefer the plain, otherwise one admits to a defect that otherwise would have gone unnoticed? This self-policing around ornament, even discipline, is

a peculiar component of the creation of ornament in a contemporary setting.

The struggle between the intention to ornament and the internal argument against it is what, I feel, permeates the contemporary architectural landscape. In turn, this struggle is what produces the form that contemporary ornament takes – the on-trend, bold controversy coupled with incredible self-consciousness. There is a tension between a traditional way of producing ornament – imitation and iteration – and modernism-enforced quest for complete originality. This thesis is born out of that struggle in my own attempts at ornament and wrangling with the slippery concept of contemporaneity in architecture. It also seeks not only to analyse and critique the production of contemporary ornament but also to document the shift of attitudes towards its production. After all, it is a general curiosity that something that is usually well-liked and appreciated by the general public would produce such animosity and reluctance in designers.

1. Koolhaas, "Junkspace", 175-90.
2. *Weak architecture*, as coined by Ignasi de Sola Morales in the 1987 essay of the same name, it describes contemporary architecture that recognizes that its framework is not based on a central absolute reference point, and that the contemporary time cannot sustain any universality.

As to why it is happening now, perhaps this has to do with architectural education. It seems to me that this is a very peculiar generation. As students of older professors who were taught by modernist architects, and of the younger ones who were taught by disillusioned post-modernists, they hold both the modernist ideals and their deconstruction. They build our imaginary projects in both the *Junkspace*<sup>1</sup> and the perfect plane, all without a concrete absolute reference,<sup>2</sup> with more digital tools at their disposal than ever before ready for use and abuse. With this new

set of tools, ornament is rediscovered, yet produced differently than before and with much trepidation.

*introduction: the personal*

**FIG 0.2** UTRECHT  
UNIVERSITY LIBRARY BY  
WIEL ARETS ARCHITECTS,  
2004.





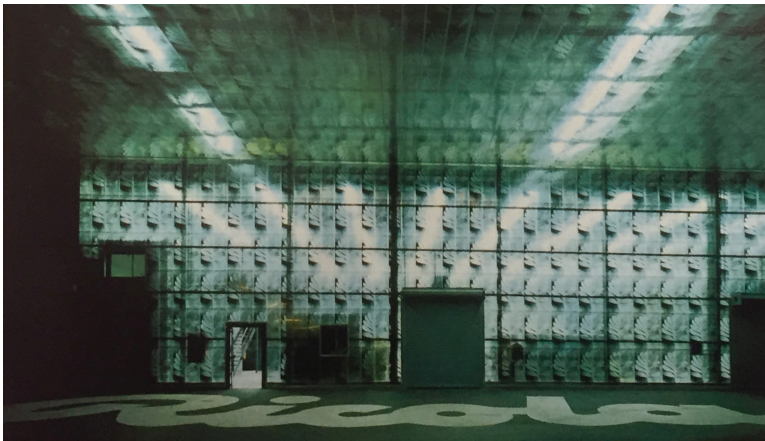
## THE GENERAL

Although “contemporary ornament” may sound like an oxymoron to most, recent architecture has been wearing ornament that hides in plain sight. Projects like the Eberswalde Library (1999), with its use of photography developed in concrete, the Ricola-Europe Storage and Production Building (1993) with its leaf-printed translucent panels, and the dark and beautiful Utrecht University Library (2004) with a

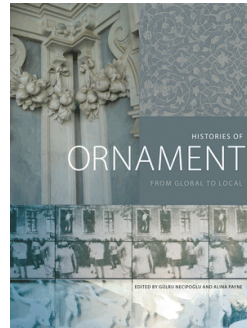
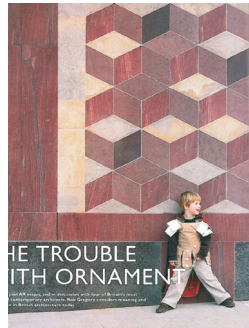
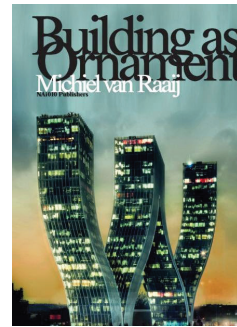
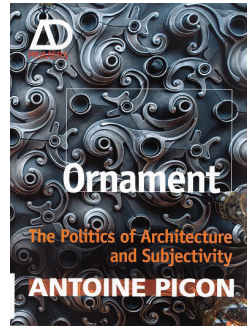
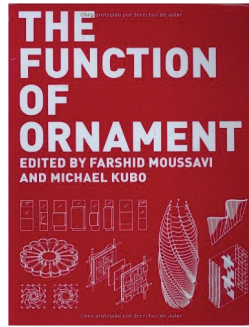


**FIG 0.3** INTERIOR LOBBY OF UTRECHT UNIVERSITY LIBRARY BY WIEL ARETS ARCHITECTS, 2004.

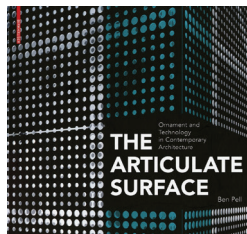
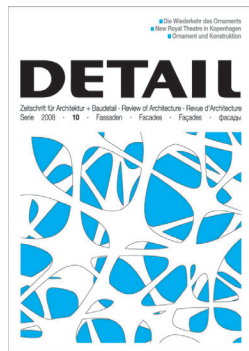
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**FIG 0.5** COVERS OF BOOKS AND ESSAYS ON CONTEMPORARY ORNAMENT, CLOCKWISE: *THE FUNCTION OF ORNAMENT*, ED. FARSHID MOUSSAVI AND MICHAEL KUBO, *ORNAMENT: THE POLITICS OF ARCHITECTURE AND SUBJECTIVITY* BY ANTOINE PICON, *BUILDING AS ORNAMENT* BY MICHEL VAN RAAIJ, "CONTEMPORARY 'ORNAMENT': THE RETURN OF THE SYMBOLIC REPRESSED" BY ROBERT LEVIT, *PATTERN: ORNAMENT, STRUCTURE AND BEHAVIOR*, ED. ANDREA GLEINIGER AND GEORG VRACHLIOTIS, *THE ARTICULATE SURFACE* BY BEN PELL, *DETAIL MAGAZINE 2008 VOL. 10*, "THE TROUBLE WITH ORNAMENT" BY ROB GREGORY, *HISTORIES OF ORNAMENT: FROM GLOBAL TO LOCAL*, ED. GURLU NECIPOGLU AND ALINA PAYNE.



on design



relentless image of papyrus cast into panels and fritted on glass, put contemporary ornament back on the global architectural stage. This new ornament is different from what buildings exhibited a hundred years ago<sup>3</sup> or even from what they bore 40 years ago. The lines are simpler, the ornament is flatter and distributed across the façade, in a departure from both traditional and post-modern ornament. Over the last century ornament went from being rejected, to rehabilitated, to being reinvented, the phenomenon of contemporary architectural ornamentation from the 1990s to the present day.

Although contemporary ornamented buildings are an anomaly in architecture and far from ubiquitous in this time frame, this phenomenon received a disproportionate amount of attention from architectural critics and design publications including *Histories of Ornament: From Global to Local* by Gurlu Necipoglu and Alina Payne (2016), *The Function of Ornament* by Farshid Moussavi and Michael Kubo (2006), *Ornament: The Politics of Architecture and Subjectivity* by Antoine Picon (2013), *Building As Ornament* by Michiel Van Raaij (2014), *Ornament: A Modern Perspective* by James Trilling (2002), *The Articulate Surface* by Ben Pell (2010), and architectural journal issues and essays (such as Robert Levit's "Contemporary "Ornament": The Return of the Symbolic Repressed" (2008) and Jeffrey Kipnis' "The Cunning of Cosmetics" (1997)). I will lean heavily on these recent analyses on contemporary ornament, while attempting to synthesize my own stance on the subject. None of these writings examining ornament

3. I would like to acknowledge that the notion of traditional ornamentation here limits itself to the European tradition, excluding, for example, the Eastern and Islamic traditions of ornament.

seem to shy from using the word “ornament” even though the designers of the buildings featuring ornament often do<sup>4</sup>.

4. “Images we use are not narrative, they don’t represent.” - Jacques Herzog “Conversation with Jacques Herzog (H&deM)”, interview by Jeffrey Kipnis, in *El Croquis*.

5. Through observation only, developer-led single family housing, one type of project that does not require an architect, does not feature contemporary ornament, often exhibiting ornamental detailing imitating older styles, but developer-led larger scale housing that requires an architect sometimes does. Single family residential projects individually designed by an architect do sometimes exhibit contemporary ornament; ones designed without one generally do not.

6. Although *contemporary* is a widely used term to describe architecture from the 1990s onward, some architectural critics see it as a continuation of post-modernism. See Charles Jencks’ book *The Story of Post-Modernism*, Chichester: John Wiley & Sons, 2011, where he does not draw the distinction between the two periods.

Contemporary ornament appears in all types of projects – cultural, commercial, residential, educational and industrial; however, ornament is observably absent in buildings built without an architect<sup>5</sup>. It seems to be an architect-led phenomenon, rooted in architectural theory and education; its production must be linked to the way architects are educated, and architectural theory as a whole.

Because I am dealing with with the break between our understanding of ornament in the last century and its contemporary revival, the phrase *traditional ornament* will refer to the mode of ornament prior to the modernist architectural period. Even though this encompasses a wide range of styles and periods, and the grouping is overly simplistic, this reflects the current attitude to ornament in contemporary time. Very few architects today have a comprehensive knowledge of traditional ornament; it has become the domain of historians. The word *contemporary* will denote not only the timeframe of 1990s to present day, but also the emergent style of architecture (and its own style of ornamentation), to contrast with both modernism and post-modernism<sup>6</sup>.

Ornament as a concept is notoriously difficult to define, especially if considered in its many different iterations and time frames. Escaping the confines of traditional forms of ornamentation, contemporary ornament is slippery. Some architectural critics consider anything more than the



**FIG 0.7** BEIJING NATIONAL STADIUM BY HERZOG & DE MEURON.



**FIG 0.6** MAC 5-7 OFFICES BY SAUERBRUCH HUTTON ARCHITECTS, 2010.

most stripped-down form of modern architecture an ornamental flourish. Others limit ornament to purposeful additions to the façade. Here I use a broad working definition for architectural ornament: intentional visual interest within building façade and interior<sup>7</sup>. This definition is broad enough to encompass the ornamental colour variations of the MAC 5-7 Offices (2010) by Sauerbruch Hutton, intersection between structure and ornament in Bird's Nest (2008) by Herzog & de Meuron, and fritted shapes on the cladding of Ryerson Student Learning Centre (2015) by Snohetta, and the traditionally ornamented terracotta tile-clad Guaranty (Prudential) Building (1896) by Louis Sullivan and Dankmar Adler, and even the butterflyed veining of marble in the Barcelona Pavilion (1929). This broad working definition of ornament as intentional visual interest

7. By this definition I am consciously excluding ornament at the scale of the entire building as discussed in Michiel Van Raaij, *Building as Ornament*.



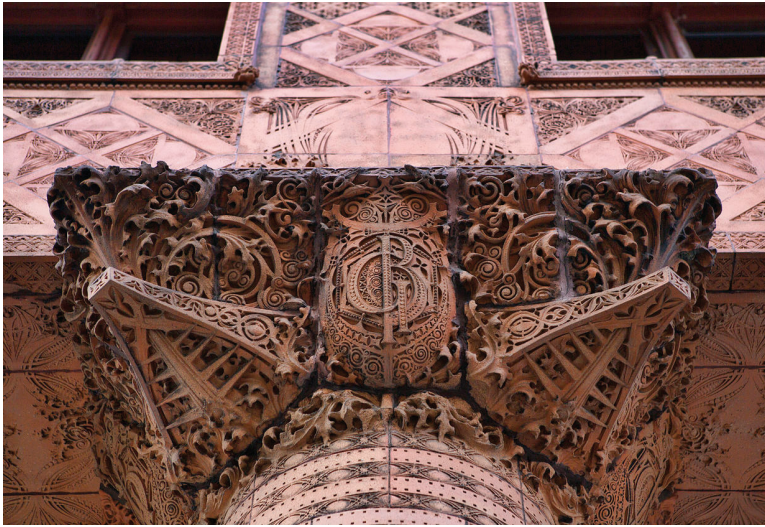
*introduction: the general*

**FIG 0.8** RYERSON SLC  
BY SNOHETTA, 2015.

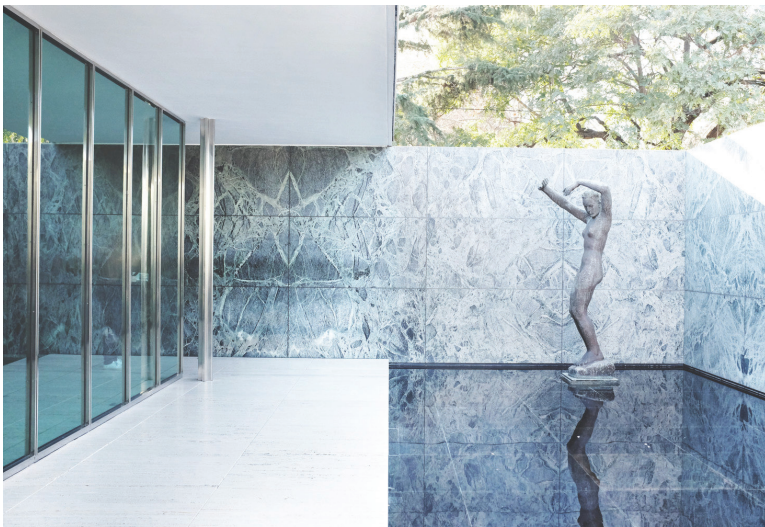


within building façade and interior enables us to draw a continuous line of its use throughout 20<sup>th</sup> and 21<sup>st</sup> century.

Chapter 1 sets up the 1990s as a unique moment in the history of ornament. It discusses modernism's rejection of ornament as a valid



**FIG 0.9** COLUMN CAPITAL DETAIL, GUARANTY (PRUDENTIAL) BUILDING BY OF LOUIS SULLIVAN AND DANKMAR ADLER (1929).



**FIG 0.10** THE BARCELONA PAVILION BY LUDWIG MIES VAN DER ROHE, 1929.

architectural expression. The chapter follows the perceived breakdown of modernism's communication, and post-modernism's subsequent rehabilitation of historicist ornament. The chapter discusses the setting and context that precipitated the look of contemporary ornament of the 1990s and beyond.

Chapter 2 describes and considers new contemporary ornament. Contemporary ornament looks very particular, which hints at certain "rules" that deem ornament "acceptable." This thesis pulls on these common threads to find what drives the shape of new ornament. Chapter 2 describes these three common threads present in contemporary ornament. One, unlike traditional ornament which delineates hierarchies in the building and emphasizes elements of the façade, this new type of ornament is spread equally through the entire façade in a repeating, scalable pattern, reminiscent of *wallpaper*. Two, contemporary ornament is thin. To avoid the perception of ornament being additional or extra, it is *fused* with the building surface; in contrast to traditional architectural ornament that is often additive, contemporary ornament is cosmetic or subtractive. Three, ornament is distanced from authorship. Contemporary ornament is conceived of through an *interface*, be it generated by a digital algorithm, the lens of a camera, or another way to introduce a distance between the author and the completed work.

In Chapter 3, this thesis examines the problem of meaning in contemporary ornament. It discusses the premise that contemporary ornament does not lend itself to a traditional interpretation. The chapter



discusses the strategies by which the meaning of a piece of ornament is muted, be it by avoidance of symbolism, extremes in specificity, a lack of motif, or by distancing ornament from possible interpretations.

Chapter 4 questions the authenticity of new ornament by providing anti-examples of those strategies. It includes built architectural examples in recent years and sets up the methodology for personal attempts at making ornament. Two physical objects featuring ornament and a prototype for large-scale ornament are discussed in this chapter, as well as the successes and failures of such experiments.

Chapter 5 attempts to put the properties of contemporary ornament discussed in Chapter 2 and the problem of its muteness in meaning into the larger context of theory on ornament. Ornament's role in architecture and its theoretical relationship to the building are used as a lens to expose inconsistencies in its contemporary iteration. The properties described in Chapter 2 are presented as strategies to reveal modernist values in a contemporary context.



# CHAPTER I: A NEW ORNAMENT

Although ornament has been an integral part of architectural expression since its inception,<sup>8</sup> and its modernist rejection is a moment in the timeframe of ornament in architecture, modernist thought has a very large influence on the contemporary conception of ornament. Early modernist architects re-examined the basic requirement for things to be ornamented, assigned morality to it, and rejected it. In doing so, the modernist period brought about a new default – the unornamented wall, the perfect plane – in the name of defined function and simplicity. The mode of ornament of the 1990s to the present day is a direct consequence of a unique moment in the history of ornament. Several sets of conflicting ideas on ornament, inherited and deeply entrenched in the culture, create an uncertain present for its production. This uncertainty ultimately changes the way ornament is used and produced.

Ornament has always had an opposition<sup>9</sup> even before modernism. The strengthening connection between simplification of lines in design and functionality was a growing undercurrent in the 19<sup>th</sup> century. As intricate ornament became more affordable due to machine

8. See the discussion on Gottfried Semper and Alois Riegl in Chapter 4.

9. For a discussion of the many facets of suspicion of ornament, see Part 2 of James Trilling, *Ornament: A Modern Perspective*. He dedicates half of this book to analyzing cultural anxieties about ornament that inform its modernist denouncement.

production, it was less associated with wealth. The labour of the artisan was no longer an inherent component of produced ornament.

The 19<sup>th</sup> century's distrust<sup>10</sup> of ornament crystalized into a proclamation of total absence in "Ornament and Crime."<sup>11</sup> This essay by Adolf Loos, first given as a lecture in 1908, then published in 1910, has acquired the status of a cultural icon. It is notorious for being the "inaugural battle cry"<sup>12</sup> of modernism and the symbol of rejection of ornament from architectural vocabulary. "Wasted labour" and "primitive urges," – while Loos' words were a satirical provocation, the underlying sentiment nevertheless took on a life of its own. The aesthetic choice of non-ornamentation acquired a moral undertone – Loos exposed a slippage between morality and aesthetic preference. In "Ornament and Crime," it was painted not as a choice, but as an innate moral leaning. One was either the primitive beast or the modern man;<sup>13</sup> any leaning towards ornament was proof of inferiority or a character flaw. Le Corbusier, one of the pioneers of the modern movement, later translated this more literally into "inner cleanness"<sup>14</sup> in his *The Decorative Art of Today*, as if ornament was the dirt that polluted not just the architecture, but also the soul. Therefore, ornament came to represent weakness of character, to join the deceptive, the devious, the monstrous, the excessive<sup>15</sup> – the usual negative attributes connected to ornament. Loos painted the natural progression of modernization as culminating in a total lack of ornament.

While the modernist movement made many links to industrial, social and political upheaval, in terms of ornament, it presented an

10. Trilling, *Ornament: A Modern Perspective*, Chapter 5.

11. Loos, "Ornament and Crime" in *Ornament and Crime: Selected Essays*, ed. Adolf Opel.

12. Payne, *From Ornament to Object: Genealogies of Architectural Modernism*, 1.

13. The 19<sup>th</sup> century discoveries of tribes untouched by civilization, their ornamentation and tattooing traditions contributed to the distinction between the unornamented modernity and uncivilized appreciation of the adorned.

14. Le Corbusier, *The Decorative Art of Today*, 188.

15. Trilling, *Ornament: A Modern Perspective*, Part 2.

ahistorical or anti-historical stance, rejecting any previous styles of ornament. The modern look becomes a symbol of social modernization, abolition of the class system, internationality. In the book *The Articulate Surface*, Ben Pell writes, “the Modernist surface consequently became an abstraction – unadorned and symbolic only of the forward movement of the Modern era”<sup>16</sup> which exemplifies how much the *lack* of ornament was used to signal a particular style. Hitchcock and Johnson noted as early as 1932 that “absence of ornament serves ... to differentiate superficially the current style from the styles of the past... ”<sup>17</sup> Whatever the declared higher goals of modernism were as the agent of social change, aesthetically modernist architecture became defined by its lack of ornament.

The reach of “Ornament and Crime” and the persuasive designs of early modernists proved to be powerful. As modernism – unadorned and white-walled<sup>18</sup> – became the primary and defining aesthetic style of the early and mid-20<sup>th</sup> century, un-ornamented architecture stood in for the new, the metropolitan, the ahistorical. Carved columns and ornamentation had come to symbolize the old and traditional. The new aesthetic was so influential that ornament, deemed distasteful or, at least, not current, was as good as banned from fashionable architecture. A new default of non-ornamentation had been established. Theoretically, this was where all ornament ceased production; in reality, it disappeared from the architectural landscape slowly as modernism became the dominating force in architecture. For the most part, representational ornament had

16. Pell, “The Articulate Surface: Introduction” in *The Articulate Surface*, 8.

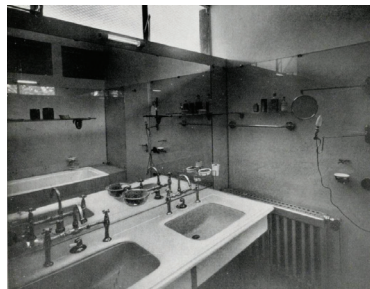
17. Hitchcock and Johnson, *The International Style*, 68-69.

18. Wigley, *White Walls, Designer Dresses*.

**FIG 1.3** GOLDMAN & SALATSCH BUILDING BY ADOLF LOOS, (COLLOQUIALLY CALLED LOOSHAUS), 1910.



**FIG 1.1** EXPENSIVE MARBLE DISAPPEARS FROM THE BATHROOM OF A BAUHAUS MASTERS' HOUSE BY WALTER GROPIUS, AS PUBLISHED IN BAUHAUSBAUTEN DESSAU, VOL 12, MÜNCHEN 1928, PAGE 132.



**FIG 1.2** BATHROOM OF A BAUHAUS MASTERS' HOUSE BY WALTER GROPIUS, UNRETOUCHED PHOTOGRAPH FROM THE ARCHIVES OF HARVARD ART MUSEUMS.





**FIG 1.4** THE BARCELONA PAVILION BY LUDWIG MIES VAN DER ROHE, 1929.

left the architectural landscape. More importantly, the craftspeople who made ornament had disappeared from the production of fashionable architecture.

Although modernist rhetoric denounced ornament, it is worth a second to stop and wonder if ornament was really “banned,” or if it was reinvented under the guise of a ban. Anyone visiting the *Barcelona Pavilion* by Ludwig Mies van der Rohe, 1929, can attest to an ornamental quality of its bare marble walls. The *Goldman & Salatsch* building by Adolf Loos, 1910, (colloquially known as the *Looshaus*) makes use of richly-veined green marble on the façade, and his spatially complex colourful interiors speak to more than his own personal evocation of “glisten[ing]... white walls.”<sup>19</sup> The luxury of materials in early modernist architecture may have converted one kind of luxury to another. As Robin Schuldenfrei notes in the essay “Sober Ornament”<sup>20</sup>, there might have been a disconnect between the discourse of inherently beautiful functionality and the use of

19. Loos, “Ornament and Crime,” 8.

20. Schuldenfrei, “Sober Ornament: Materiality and Luxury in German Modern Architecture and Design” in *Histories of Ornament: From Global to Local*, ed. Gurlu Necipoglu and Alina Payne.



**FIG 1.5** SEAGRAM BUILDING (LOOKING UP AT THE ORNAMENTAL STEEL MEMBERS) BY LUDWIG MIES VAN DER ROHE, 1958.

21. Venturi, *Complexity and Contradiction in Architecture*, 40.

luxury materials and hand-made production in practice. She illustrates the point by pointing out a willful retouching of a photograph from the Bauhaus Masters houses where the published photo has the marble sinks edited to appear to be porcelain.

In *The Function of Ornament* Farshid Moussavi and Michael Kubo form their argument for continuity of ornament through the modernist era by an achronological recounting of ornamented projects in the 20<sup>th</sup> century. Their retelling includes projects not traditionally seen as ornamented, revealing their decorative qualities by putting them in context with contemporary examples. For example, Mies van der Rohe's *Seagram Building* is included due to its non-functional vertical elements (or "rhetorical I-beams"<sup>21</sup>) dominating the façade; The *Beinecke Rare Book and Manuscript Library* by Gordon Bunshaft of Skidmore, Owings, & Merrill due to its use of marble veining as visual texture. Implied in the selection of projects in *The Function of Ornament*, is the argument that ornament had always been a part of modernist architectural language, only that the bounds of the definition of ornament had been expanded. Certain types of ornament were deemed acceptable despite the "official" exclusion of it from the orthodox modernist vocabulary.

In the late 1960s, disillusioned with the modern project, architects and critics started questioning modernist architecture's anti-historical stance, internationality, and the unintended effects of modernism's social vision. Post-modernist thought was especially critical of what had become the modernist aesthetic style and its narrow expressive range, uniformity,





**FIG 1.6** BEINECKE RARE BOOK AND MANUSCRIPT LIBRARY BY GORDON BUNSHAFT OF SKIDMORE, OWINGS, & MERRILL, 1963.

its monotony and capacity to effectively communicate – “forced simplicity results in oversimplification.”<sup>22</sup> Post-modernist architects acknowledged the new default of simplified, unornamented architecture and offered alternatives to it. They advocated an approach inclusive of both complexity and abstraction instead of subtractive simplification. One of the approaches was looking back towards architectural convention, that is, historical ornament. Post-modern architects started to search for ways

22. Ibid, 17.



FIG 1.8 HANS HOLLEIN, FACADE FOR LA STRADA NOVISSIMA AT THE VENICE BIENNALE 1980.

23. McLeod, "Architecture and Politics in the Reagan Era: From Postmodernism to Deconstructivism," in *Assemblage*.



FIG 1.7 JAMES STIRLING, ARTHUR M. SACKLER MUSEUM, 1984.

to incorporate historical ornament onto new buildings, but used it in a way that undermines any possible associations this historic ornament had with its history. Hans Hollein's submission for the 1980 Venice Biennale does just that – ornament grew in scale, traditional motifs were exaggerated and ironically simplified – the 5 orders of architecture bear little connection to their referents. Even James Stirling who used historical ornament in more somber ways like in the Arthur M. Sackler Museum (1984), undermined potential associations by exaggerating at least the scale.

Nevertheless, ornament was now framed as a conscious choice, there to use or not.

Mary McLeod's essay "Architecture and Politics in the Reagan Era: From Postmodernism to Deconstructivism"<sup>23</sup> traces the path of post-modern architecture and its politics. While initially representing endless freedom in reinvention and re-use, post-modernist architects' use of ornament and historicist references attained their own associations, largely unrelated to its rhetoric, but rather its use. Contrasting with modernist oversimplification, post-modernist "excess" coincided with the capitalist culture of the 1980s and its exuberance. It became appropriated from the avant-garde to the mainstream and associated with corporate America and Reagan-era conservative politics. Pink marble colonnades became corporate culture of the 80s and 90s. Thirty years later, Vittoria di Palma notes, "if ornament is to be reframed and redeemed for our contemporary times, it primarily needs to be saved not

from modernism's criminalization, but rather from post-modernism's initial rehabilitation."<sup>24</sup>

24. Di Palma, "A Natural History of Ornament," 30.

These are the circumstances that contemporary ornament was born into. Most contemporary architecture had ceased using traditional ornament in any form, disengaging from its post-modern associations, falling back onto modernist unornamented default.

With the advent of the digital turn in architecture, however, ornament appears on buildings again. It is neither the undermined historicist references of post-modernism, nor traditional ornament applied to new buildings. The designs seem to have developed a new, contemporary language that is able to straddle uncomfortable territories. This ornament is digital, ushered in by advances in both computer-aided design and CNC machining; and by a new type of craftsman who does not craft by hand. Its new look is fairly consistent, which points to the existence of a framework to produce such ornament. This framework is discussed in terms of properties or strategies – its mode of expression.



## CHAPTER 2: MODE OF EXPRESSION

Traditional ornament used to delineate hierarchies by focusing on particular elements of the building. It was often additive or sculptural. It was an index of craft, it communicated with its audience by both symbolism and overall decorum.<sup>25</sup> What was true and effective in traditional ornament, does not hold true anymore for its contemporary iteration. In the 1990s, ornament, manifesting as flat, image-driven patterns on façades of contemporary buildings began to appear. This contemporary ornamentation seemed to share a scale-less composition, a flatness, a neutral motif, and a digitally-generated look. In combination, these properties of contemporary ornament give the effect of curious neutrality and a certain aloofness, without the irony of post-modern historicism. This look and its underlying principles spread through the architectural landscape as the return of ornament, spurring publications of its curious appearance.

The three strategies laid out in this chapter as the properties of contemporary ornament are a variation of those noted by several architecture theorists. This shortlist is based on essays by Vittoria di Palma and Antoine Picon, both published in 2016<sup>26</sup>. What follows is a

25. Picon, *Ornament: The Politics of Architecture and Subjectivity*, 9-55.

26. Picon, "Ornament and Its Users: From the Vitruvian Tradition to the Digital Age" and di Palma, "A Natural History of Ornament," both in *Histories of Ornament: From Global to Local*, Gurlu Necipoglu and Alina Payne, eds.

discussion on a set of principles that constitute “acceptable” ornament in contemporary architecture: *wallpaper*, *fusion*, and *interface*, and how they interact with the meaning of this kind of contemporary ornament. These principles are often found in combination in a single project. For example, *wallpaper* strategy is often combined with the *fusion* principle. Some projects follow one of the principles but not any other. The principles are not universal truths, but their prevalence in ornamented projects makes them useful tools to analyze the phenomenon of contemporary ornament. These principles are observed tendencies understood as strategies by contemporary architects to mediate their relationship to ornament.

## WALLPAPER

Traditional architectural ornament is often the elaboration of joints between building materials. The idea seems to be both a variation on Gottfried Semper's theory of ornament originating in material manipulation,<sup>27</sup> and Vitruvius's explanation of the meaning of the ornament of architectural orders in Greek temples.<sup>28</sup> (Where Semper presented tapestries as the origin of ornament, their woven patterns organized around borders, Vitruvius explains ornament of the orders to hold the memory of previous methods of construction, most apparent at their intersections.) Even where an ornament is spread over a surface, even the most repetitive pattern will transform itself at the edge. Border, or frame, or limit, seems to be an important component in traditional ornamentation. Take, for example, Jonathan Hay's attempt to define ornament in the strictest sense – “the rhythmic affirmation of motifs across a surface in tension with a limit;”<sup>29</sup> it grapples with the fact that pattern, while often repeatable indefinitely, plays with its limit. In a composition of a building façade, ornament operates in tension with the limits of the building elements – frames around doors, windows, delineation of storeys, roofs. It borders, surrounds, separates, producing or highlighting a hierarchy within a façade. Even a repeatable pattern, infinite in theory, is capped or finished by a transformation at a border.

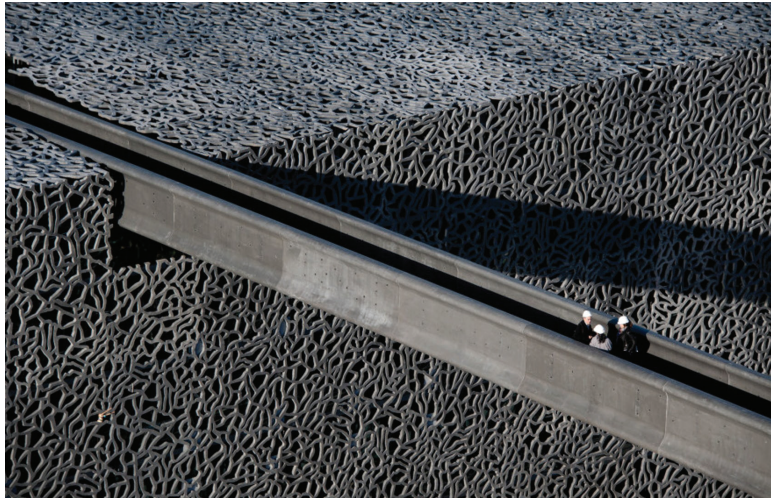
27. Semper's theory on the origin of ornament is discussed further in Chapter 5.

28. Vitruvius, *The Ten Books on Architecture*, 107-109.

29. Hay, “The Passage of the Other: Elements for a Redefinition of Ornament” in *Histories of Ornament: From Global to Local*, 62.



**FIG 2.2** MUCEM BY RUDY RICCIOTTI, 2002.



**FIG 2.1** (RIGHT) POLYGREEN HOUSE BY BELLEMO AND CAT ARCHITECTS, 2007.



**FIG 2.3** (LEFT) SAN TELMO MUSEUM EXTENSION BY NIETO SOBEJANO ARCHITECTS, 2016.





The pattern is aware of the edge: it plays with the limit, touches it and bends around it.

In contemporary ornament, that is rarely the case. The concrete skin of MuCEM (Musée des Civilisations d'Europe et de Méditerranée) by Rudy Ricciotti extends over the entire volume of the building, its patterning repeating without reference to its scale. The Polygreen House by Bellema and Cat Architects features a printed graphic pasted over the surface of the cladding, ignoring not only the edge of the building but also the change in plane. The image simply continues. On the San Telmo Museum extension by Nieto Sobejano Architects, the pattern of small openings in the cladding is clustered, yet the clusters have no relationship to the volume or openings of the building. The image cut into the steel trellis on Les Mureaux Police Station by Ameller Dubois Architects is repeated several times but is simply cropped at the edge. The curled



**FIG 2.4** (LEFT) LES MUREUX POLICE STATION BY AMELLER DUBOIS ARCHITECTS, 2016.

**FIG 2.5** (RIGHT) JOHN LEWIS DEPARTMENT STORE BY FOREIGN OFFICE ARCHITECTS, 2007.

pattern on the John Lewis Department Store by Foreign Office Architects creates a texture on the façade and does not transform itself at the edge.

In contemporary ornament, the tension between the content and the edge is broken by simply ignoring the edge. The surface of the building is treated as a field to stretch ornament over, scale and position it freely. The limit of the building is not the limit of the pattern, since it has the appearance of a cropped texture over a box. It dissolves the tension

**FIG 2.6** EXTERIOR OF RICOLA-EUROPE STORAGE AND PRODUCTION BUILDING BY HERZOG & DE MEURON ARCHITECTS, 1993.



**FIG 2.7** WATER-MARKED EXTERIOR OF RICOLA-EUROPE STORAGE AND PRODUCTION BUILDING BY HERZOG & DE MEURON ARCHITECTS, 1993.



of the border. It operates as wallpaper – a limitless pattern abruptly ending at an edge as if by accident. There is a curious suspicion that the effect is easier to produce in a digital drawing or 3D visualization.

Let us take for example one of the first instances of ornament in contemporary buildings. The *Ricola Europe Mulhouse-Brunstatt* building by Herzog & de Meuron built in 1993 in France, is a storage and production facility for a Swiss herbal drops company. The building is box-shaped, as though on its side, with a flap open, forming the front façade as the opening, and an overhang as the flap. Its ornament is a photograph of a leaf by Karl Blossfeldt,<sup>30</sup> reproduced on printed translucent polycarbonate façade panels, filtering the light. Using silkscreen, these panels are printed with a repetitive plant motif. The repeating panels constitute a rudimentary pattern, understood in ornamental terms. Through repetition, the effect of the motif (leaf) is diminished, and the multitude of images transform into texture. The repetition also ignores the edges; it does not transform or mold to the openings. The panels are even cropped at the top where they reach the underside of the cantilevered awning and continue on to cover the underside of the overhang – clearly they ignore the limit. The all-over pattern is reprised on the side walls. Here, a striped pattern appears by letting rainwater run down the entirety of the concrete wall surface, marking the material with water and algae.

Unlike a mural on a wall, where the composition and scale are determined by the tension of the limit, contemporary ornament

30. Perhaps the choice of image is a clue – Blossfeldt was a photographer whose work, while produced in the 1920s and 30s, is appreciated by the conceptual art movement.

acts as *wallpaper*, and, in the process, like a literal wallpaper with an anonymous author whose design fits on any wall, loses its specificity. The repetition and scalability of *wallpaper* ornament makes it a mechanism to distance the author from the ornament. Using this scale-less strategy of application, ornament is not bound to the surface it sits on. It allows the pattern to appear to have been created not for that particular building, to be un-customized, to have a certain aloofness about the application. This mechanism makes the viewer recognize the ornament as existing in abstraction, outside the application. Ornament is treated as applied texture, disengaged from the form of the façade. It allows the authors of the ornament to be disconnected from the very thing they are ornamenting; it distances the author from the responsibility of justifying the ornament being there. *Wallpaper* ornament can just as easily be taken off as applied; the building and the ornament exist on separate terms; it is fused to the surface physically, but separated in abstraction.

This strategy is not limited to 2-dimensional applications. Non-repeating, Voronoi-type patterns do this in 3 dimensions as well. Architectural critic Robert Levit, in “Contemporary “Ornament”: The Return of the Symbolic Repressed,” discusses this tendency of non-hierarchical ornament and the scale of it regarding the building as a whole:

*The ... patterns produce a teeming accumulation ... rather than a definite figure; they reside within arbitrary bounding figures that do not relate in any*



**FIG 2.8** WATERCUBE BY PTW ARCHITECTS, 2008.

*necessary way back to the parts (but within which the parts are fine enough in grain to fit together without resistance to the overall building shape).<sup>31</sup>*

The *Watercube* by PTW Architects is an example of such accumulation. The scalability and endless extent of the pattern makes the shape of the building irrelevant – the 3-dimensional pattern of the water bubbles is simply cut down to the volume of the building, be it a cube or a pyramid, regardless of the scale.

It also transforms the surface that it is on. *Wallpaper* ornament makes that surface or volume into an abstraction in itself. With this ornament on it, any and all features of the façade belong to the ornament, leaving the building skin behind it merely the idea of a surface

31. Levit, “Contemporary “Ornament”: The Return of the Symbolic Repressed”, 81.

– an abstract, infinitely-thin, immaterial membrane – something a real wall can never live up to. The way *wallpaper* ornament is perceived to be able to be freely scaled over the surface of the building because it is free of the limit, lets that physical wall be understood as an abstract surface. Paradoxically, it is the ornament that allows the wall and building volume to become a pure abstraction.

## FUSION

Herzog & de Meuron continued the *wallpaper* strategy in at least one direction in the *Eberswalde Technical School Library*, completed in 1999. Its façade is completely enveloped in image, dispensing with the hierarchies of front and back of building, storeys and entrances. However, the building employs another strategy of contemporary ornament in the way it exhibits its ornamented skin. The willful flattening of ornament into the skin of the building is the second principle of contemporary



**FIG 2.9** EBERSWALDE  
TECHNICAL SCHOOL  
LIBRARY BY HERZOG & DE  
MEURON, 1999.



**FIG 2.10** FACADE  
DETAIL OF EBERSWALDE  
TECHNICAL SCHOOL  
LIBRARY BY HERZOG  
& DE MEURON IN  
SWITZERLAND, 1999.



ornament – the *fusion* strategy.

Alien in its surroundings of 19<sup>th</sup> century buildings, the *Eberswalde Library* is a concrete and glass box volume. It is perceived as completely solid, its windows camouflaged into the rest of the concrete surface. Its simple plan is reflected in the simple volume. The building's skin is populated with fourteen images (some across two panels), repeated across sixty-six times, on precast concrete and glass. The images are newspaper photographs and paintings collected and curated for the *Eberswalde Library* by artist Thomas Ruff. Even though here the individual photos contain information, their potential meaning is neutralized by their horizontal repetition, and the overall effect becomes that of a texture that could continue in either direction, unbothered by the limit of the





**FIG 2.11** VIEW FROM NORTHWEST, EBERSWALDE TECHNICAL SCHOOL LIBRARY BY HERZOG & DE MEURON IN SWITZERLAND, 1999.

building. However, the most striking feature of the façade is that the photos “printed” on the concrete are formed by the concrete itself. The concrete images, changing their appearance with humidity, are intrinsic to the surface.

While the windows were silk-screened (a relatively simple and widely-used technique), the rest of the body of the building is covered in images by a peculiar process more reminiscent of etching plates than printing.

The images are silkscreened onto a plastic film using concrete cure retardant instead of ink. This film is then placed into the formwork and concrete is poured over it. In the areas where the cure-retardant is in contact with the concrete, a superficial layer of the concrete remains liquid. Once the concrete panel is removed from the formwork, its face is rinsed with water, washing away the liquid concrete and leaving behind darker areas of exposed larger aggregate. These dark and light areas form the images. The photos are developed in the material itself, transferring image into the texture variation of the concrete surface. The process is fundamentally different from printing in that, instead of adding pigment to the surface, it develops the images by a disturbance of the surface.

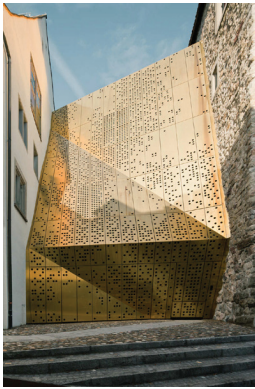
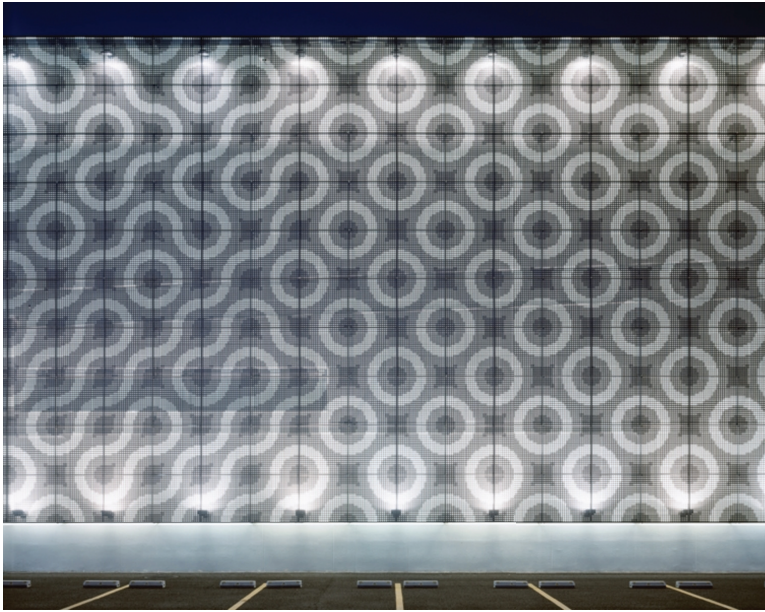


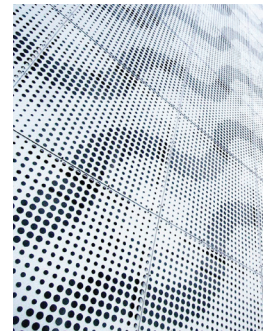
FIG 2.12 JANUS  
MUSEUM EXTENSION BY  
:MLZD ARCHITECTS, 2011.

It seems that Herzog & de Meuron went to great lengths to not *add* anything to the façade. The ornament is not *added* to the surface; the surface contains the ornament.

In the Janus Museum extension by :mlzd architects, the



**FIG 2.14** PACHINKO TIGER KAGITORI BY ATELIER HITOSHI ABE, 2005. PATTERN BY ASAO TOKOLO



**FIG 2.15** FACADE DETAIL OF PACHINKO TIGER KAGITORI BY ATELIER HITOSHI ABE, 2005.

perforated metal skin stretches over the form, letting light into the window openings behind and camouflages their position within the volume. The random, clustered position of the cuts is ornamental, subtracting the image from the skin. The perforated tiles at the Pachinko Tiger Kagitori by Atelier Hitoshi Abe that unify the façade of the building form the image by subtractive means as well, and rotate the tiles for continuity. The ornamental colour combination of the Yardhouse façade shingles by Assemble Architects is skin-deep – the properties of the cladding form the ornament. At the de Young Museum, Herzog & de Meuron dimpled and cut the copper cladding in the pattern of a digitized image



**FIG 2.13** FACADE DETAIL OF SFERA BUILDING BY CLAESSION KOIVISTO RUNE IN KYOTO, JAPAN, 2003.



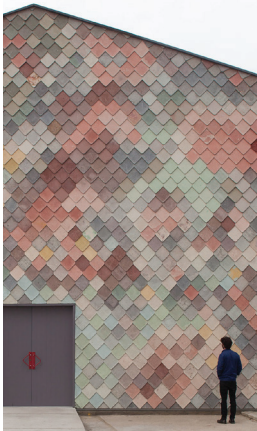


FIG 2.16 YARDHOUSE  
BY ASSEMBLE  
ARCHITECTS, 2014.

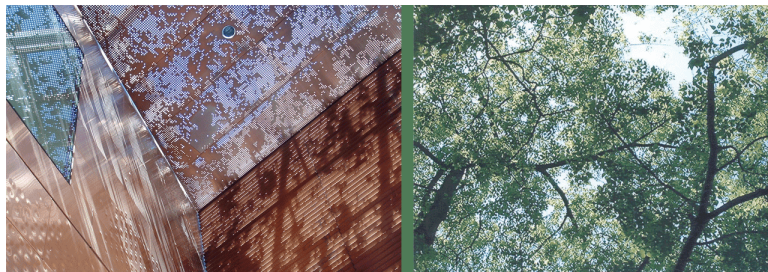
without adding any more material than the sheet of copper. The Sfera Building by Claesson Koivisto Rune Architects features a cladding cut in the image of leaves.

The proliferation of cut, etched, patterned-within-the-skin, perforated building façades point to a striking flatness, a common feature of contemporary ornament. The ornament is no longer a sculptural, three dimensional, or carved addition to the façade. This presents a profound departure from historical modes of ornament production. The concept of *attachment* seems to trouble contemporary architects.

While modernist rhetoric argued for overall abstinence from ornament, it was mostly against a particular kind of ornament. Adolf Loos's own use of visual adornment – richly veined marble – in both the front façade of *Looshaus* and the interiors of *Villa Muller*, is evidence that Loos's assertion that the “evolution of culture is synonymous with the removal of ornament”<sup>32</sup> was aimed at a particular kind of ornament; Loos was primarily against *attached* ornament. A natural variation of texture in materials, even if used decoratively, was acceptable. Vittoria

32. Loos, *Ornament and Crime*,  
21.

FIG 2.17 SOURCE  
IMAGERY AND CUT  
PANEL AT THE DE YOUNG  
MUSEUM BY HERZOG &  
DE MEURON, 2005.





**FIG 2.18** 619  
QUEEN STREET WEST  
BY QUADRANGLE  
ARCHITECTS, 2015.

di Palma puts forward the idea that it was Loos's rhetoric of the removal of ornament, as if "an element that could simply be scraped off, like an overly rich frosting on a cake,"<sup>33</sup> that sets up this conditional acceptance.

The proposed condition of possible, theoretical removal makes the ornament an excess, by default. If *attached* ornament is not acceptable, one must *fuse* the ornament with the surface to circumvent the condition. It seems that the "removal" rhetoric drives the contemporary flatness as well. Integration of ornament into the building surface, what

33. Di Palma, "A Natural History of Ornament," 22.

I will call *fusion*, sidesteps the attachment problem. If contemporary architects refuse to attach three-dimensional ornament to façade, the “acceptable” ornament is incorporated into the building surface, formed by manipulating the surface material – cutting, scraping, removing.

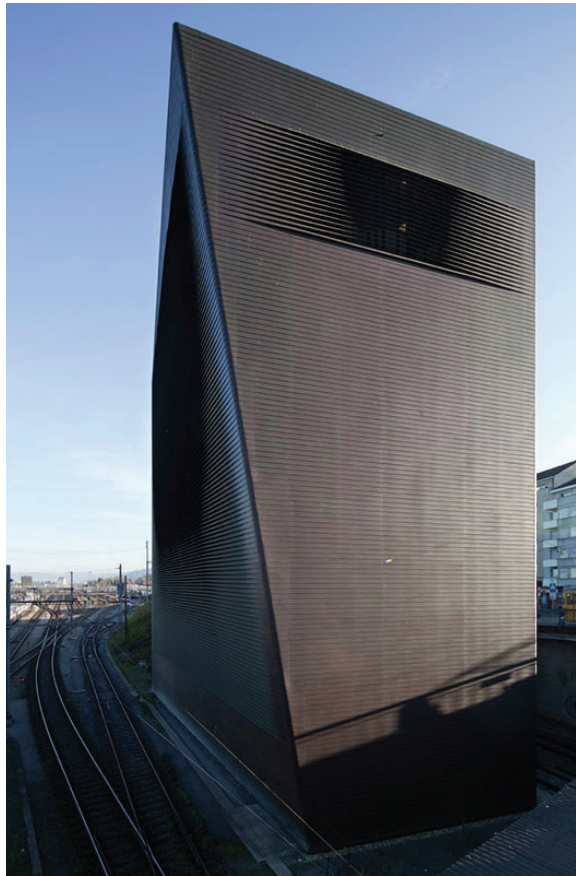
This flattening, what I call here the *fusion* strategy, is often used in conjunction with the *wallpaper* strategy, a limit-less, all-over pattern or image, but the motivations between the two are different. The *wallpaper* strategy is used to create distance between author and ornament, while the *fusion* strategy is used to hold onto ornament, for fear of it being “scraped off.”<sup>34</sup> However, two-dimensional ornament implies less commitment, less mental investment into the ornament, more abstraction. The *fusion* strategy seeks to keep ornament integral to the surface, but has the side effect of contributing to the abstraction of wall surface as the infinitely-thin and immaterial membrane. It also contributes to the lack of original three-dimensional forms in contemporary ornament.

34. Di Palma, “A Natural History of Ornament,” 22.

This narrative – the *fusion* of ornament into the surface – is illustrated in the façade of 619 Queen St. West by Quadrangle Architects, completed in 2015. After a fire destroyed a historic building at this site, a new steel and glass structure rose in its place. This new building features a series of steel sheets covering the top two thirds of the front façade, hiding the curtainwall behind. Differently sized holes cut into the sheets form a photograph of the old building elevation. Its most recognizable details are the ornamentation – the dentil cornice, window keystones and corner quoins. Yet here these details are reduced to a flat image of them:

three dimensional ornament abstracted into two dimensions on a sheet of steel.

In 1997, *El Croquis* published an issue featuring work by Herzog & de Meuron. In one of the essays included, “The Cunning of Cosmetics,”



**FIG 2.19** SIGNAL BOX BY HERZOG & DE MEURON, 1994.

architectural critic Jeffrey Kipnis notes that there is something quite different about the production of contemporary architectural ornament. To Kipnis, this flatness, or *fusion*, is peculiar and different from traditional conception of ornament, so much so that, instead of calling it ornament, he calls it cosmetics. (I will not adopt the terminology of cosmetics – what he separates as a distinct concept, I see as the effect of the *fusion* strategy. As well, the term carries misogynist undertones.) Kipnis nevertheless uses the kind of language to describe the cosmetic that was historically applied to the “dangers” of ornament itself, like “cunning,” “hypnotic web of visual seductions,” “sirens,” and “temptresses that lure the unsuspecting into dangerous territory,” perpetuating the fear of ornament as artificial, deceiving, feminine (note the derogatory tone). He admits that even the more subtle of Herzog & de Meuron’s ornamental works, such as the *Signal Box* (1994), “also fit any non-trivial definition of architectural ornament”<sup>35</sup> but he carefully peels away at his distinction between the cosmetic and the ornamental:

35. Kipnis, “The Cunning of Cosmetics,” 24.

36. Ibid, 27. He continues: “...Virtuosity at ornamentation requires balance, proportion, precision; virtuosity at cosmetics requires something else, something menacing: paranoid control, control gone out of control, schizo-control.” Although he does not elaborate on the issue of the “paranoid control,” one can see parallels with anxiety the creation of contemporary ornament carries.

*Ornaments attach as discreet entities to the body like jewelry, reinforcing the structure and integrity of the body as such. Cosmetics are indiscreet, with no relation to the body other than take it for granted. ... cosmetics ... they trans-substantiate skin into image ... Thinness, adherence and diffuse extent are crucial to the cosmetic effect.*<sup>36</sup>

To Kipnis, other, traditional ornament is *attached*, but Herzog & de Meuron’s cosmetics have a different, stronger relationship to the body, one that treats the images on the skin and skin as one. The images are no



longer excess; they are intrinsic to the body.<sup>37</sup>

The *fusion* of ornament into the surface seems to mediate the architects' relationship with the idea of ornament as excess as produced by the modernist ideas on ornament. The threat of removal makes contemporary architects fear the process of attachment. As if to save their ornament from being excessive, they flatten it and make it intrinsic to the building enclosure. This produces a type of contemporary ornament that is conscious of its modernist ban and is in tension with it. The blurring of the line between building surface and ornament participates in the abstraction of the wall – if ornament has no thickness, it, together with the wall, is an abstract plane.

37. The word "body" and "jewelry" ring similar to *ergon* and *parergon*. *Parergon* – a Greek term meaning accessory or embellishment to the main work – is described by 18<sup>th</sup> century philosopher Immanuel Kant in *Critique of Aesthetic Judgement*. To Kant, the *parergon* is the frame, the ornament. The concept speaks to the supportive role of the accessory – secondary, yet non-detachable. However, Jacques Derrida's reinterpretation of the *parergon* in *The Truth in Painting* speaks to a different side of it: the dependent nature of the relationship between *ergon* and *parergon*. To Derrida, the *parergon* is not an accessory surplus, but a vital supplement which points to a lack. It should be examined not through their separation but through their relationship to each other. Kipnis does just that – he never considers this kind of ornament (the cosmetic) in terms of its attachment, but, rather in terms of what the ornament does to the body. *Fusion* of ornament to the building brings their relationship closer to that of the *ergon* and the *parergon*. It seems that the *fusion* of ornament to the surface allows designers to highlight and strengthen the bond between ornament and the body, the *ergon* and the *parergon*.



## INTERFACE

The third strategy of contemporary ornament is to introduce a distance between the author and the ornament. The author of this kind of ornament creates this distance by inserting an *interface* between themselves and the design of ornament. As a conceptual tool, instead of connecting one language to another, the *interface* stands in the direct line of communication. The *interface* muddies intent, meaning and the authorship of form. This distance can manifest itself in a few different ways. We will discuss how the use of algorithmically-derived forms, randomization, photography and narrative can operate as an *interface* in architectural ornament.

In a darkened gallery setting, an intricately articulated installation occupies a side room. The intensely ornamented structure is nothing but ornament, yet it closes in on the viewer like a cave. Three-dimensional growths of intricate forms enclose a space large enough to stand in. Only the straight seams in the physical material betray its dense growing form – this grotto is produced by 3D-printing. Designed by Michael Hansmeyer in partnership with Benjamin Dillenburger, *Digital Grottesque* is an installation exploring computational tools in architectural settings. These intricate forms were designed through a computational algorithm,

**FIG 2.20** MICHAEL HANSMEYER WITH BENJAMIN DILLENBURGER, "DIGITAL GROTESQUE" INSTALLATION AT CENTRE POMPIDOU, 2017.



subdividing surfaces and extruding volumes in three dimensions with an intensity that rivals high rococo. The result is a highly ornamental form that works on a multitude of scales, like a three-dimensional fractal.

An example of such *interface* is the utilization of algorithmically-designed forms. Instead of designing the ornament, the designer creates the process by which the form is designed. Perhaps the timeline the group boasts about (presumably intended to impress the small amount of time it took to assemble the grotto) is telling – “Design development – 1 year, Fabrication – 1 month, Assembly – 1 day” – most of the work lies in *making the algorithm do what one wants it to do*. Despite minimizing the input, Hansmeyer and his team had spent a year writing and experimenting with the algorithm to produce the final design. Even though their individual decisions, by the nature of generational computing, had much

larger impacts on the model than sculpting it physically would have, the amount of human labour in the design is still staggering.

Although the ornament is featured in the installation front and centre, not flattened or wallpapered all over, and certainly with new and original forms, the algorithmically-derived ornament still introduces distance from its human author. Its extrusions are computational, not sculpted; the designer of the ornament works through an *interface*. Even though the work is expressive, the language it speaks is a synthetic one – since none of the “words” are recognizable. The fractalization of the forms means that the composition lacks any discernible motif.

Even though there are algorithmic operations used to produce this kind of ornament, they are set up, extrapolated, edited, and curated



**FIG 2.21** MICHAEL HANSMeyer WITH BENJAMIN DILLENBURGER, “DIGITAL GROTESQUE” INSTALLATION AT CENTRE POMPIDOU, 2017.

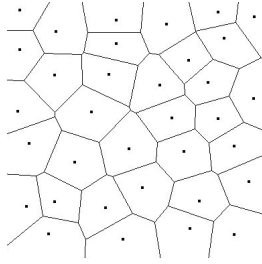


FIG 2.22 VORONOI  
DIAGRAM

by a human designer. The complex calculations are executed by a computer, but they do not happen without the designer's input. Arguably, the entire operation is set up to achieve a certain look – one that obviously features evidence of being generated by a computer. Data (by the designer) undergoes enough transformations to appear algorithmically-derived and, therefore, “acceptable” as ornament. Even though this type of ornament is in three dimensions, of an original form, and even in tension with the limits of the building façade, the appearance of having been made by a process that is not perceived as human legitimizes the form as contemporary.

This strategy works in less complex projects as well. The bubble-like appearance of the *Watercube* by PTW architects is a 3 dimensional Voronoi diagram. The soap bubble structure, represented by the Voronoi pattern, originates in a random set of points in predefined space. The concept of randomization is an important part of this strategy. Computational operations often require a “seed” – a set of data to put through the operations. Designers of contemporary ornament often delegate this input to random number generators within ranges, as if the less input from the human designer, the more “acceptable” the ornamentation.

However, such mastery over the medium is rare; most of the ornament produced computationally does not reach the heights of Hansmeyer's “rococo” installations or the *Watercube*. Simply looking like the forms have been produced by a computer is often enough. This



**FIG 2.23** OFFICE BUILDING IN KARLÍN BY DAM ARCHITECTS, 2012.



**FIG 2.24** OFFICE BUILDING IN SAINT-ÉTIENNE BY MANUELLE GAUTRAND ARCHITECTURE, 2011.



FIG 2.25 BEIJING  
NATIONAL STADIUM BY  
HERZOG & DE MEURON.



is evident in something as banal as a “random” pattern of spandrel panels or coloured elements of building (see examples of such artificial randomization in office buildings in Karlin by DaM Architects and Saint-Etienne by Manuelle Gautrand Architecture). Here, the architect manually “randomizes” the position, just enough to make sure there is no pattern – or just create an artificial random-seeming pattern. The coloured spandrel is ornamental, but the “digital” transformation puts an *interface* between the author and any possible meaning derived from it. Herzog & de Meuron’s Beijing National Stadium (colloquially known as the Bird’s Nest) offers a telling example of the importance of the visual of “randomness” even in complex high-profile buildings. By the architects’ own admittance<sup>38</sup>, the lacy, criss-crossing diagonals are disguising a

38. Pasternack and Pearson, “National Stadium,” 92-99.



regular pattern of parallel beams resulting in a complex, ornamental



**FIG 2.26** CLOSEUP OF PANELS. EBERSWALDE TECHNICAL SCHOOL LIBRARY BY HERZOG & DE MEURON IN SWITZERLAND, 1999. PHOTOGRAPH BY MARGHERITTA SPILUTTINI. SOURCE: GERHARD MACK, *HERZOG & DE MEURON 1992-1996*, BASEL: BIRKHAUSER, 2000.

**FIG 2.27** HYLOZOIC GROUND BY PHILIP BEESLEY AT THE VENICE BIENNALE, 2010.



appearance. The synthetically achieved “randomness” neutralizes the ornament.

Photography used as ornament operates similarly – the *interface* of the physical camera creates a gap between designer and the produced ornament. Many contemporary ornamented buildings use photographs as a basis for their ornament. The Ricola Production and

Storage Building's leaf motif is actually a photograph by Karl Blossfeldt, Eberswalde Library is covered in newspaper photographs curated by Thomas Ruff, the De Young Museum's screen cutting pattern is developed by transforming photographs of the tree canopy in the park the building sits in. A photograph produces a graphic element, often flat, that can be multiplied or stretched over the plane of the wall to disguise its edges. Although a photograph is a specific image from a specific point of view, greatly manipulated and processed, the stylization of the image is not as readily apparent. A photographic image, often by another author, is a distancing from the design process. Because a photograph is understood to be an entity in and of itself, made in a camera and separate from its



**FIG 2.28** HYLOZOIC GROUND BY PHILIP BEESLEY AT THE VENICE BIENNALE, 2010.



**FIG 2.29** HAUTE COUTURE SPRING SUMMER 2013 BY IRIS VAN HERPEN IN COLLABORATION WITH PHILIP BEESLEY.

particular iteration as a graphic ornament, its independence absolves the designer from the responsibility and particularities of its contents.

This strategy is not exclusive to computer programs or cameras – anything that distances the designer from the creation of the form of ornament can be understood as an *interface*.

Philip Beesley’s projects *Hylozoic Soil* and *Hylozoic Ground* (and the evolutions of projects that precede and follow them) straddle the disciplines of art, architecture and, albeit in a more metaphorical way, biology. The “breathing,” “caressing,” “swallowing” motions of the field of synthetic parts react to the viewers through motion sensors and motors and filter or “metabolize” particles in the air. Beesley’s “living architecture” projects are intricately designed installations largely made of transparent acrylic and mylar plastic by systems of small, repeating parts. Although not ornamental in stated intent, the installations’ ornamental value is recognized by many, including haute couture designer, Iris van Herpen. The fashion designer has collaborated with the architect on many seasons of her collections, using motifs of the installations as both decorative and structural pieces of garments.

Some of the project parts are designed utilizing some algorithmic tools, and some are designed to fit together manually, repeated thousands of times to mask their mechanic nature. However, the ever-present rhetoric that Beesley’s firm uses surrounding the installations builds a narrative of independent organism or system of organisms – “breathing,” “self-repairing,” “responsive,” “quivering,” “pulsing” – Beesley’s installations

are posed as self-reliant, breathing organisms with a metabolism, reacting to people that come in contact with the systems. In these projects, this narrative itself poses as an *interface*. These installations pose as mechanical living organisms, like plants or bacterium, without a designer or intent, distancing the ornamental installation from its author.

The *interface* employed in the production of contemporary ornament has many forms; its effect is introduced distance and interference in the line of communication between the viewer and the maker of the ornament. *Interface* is a block in the interpretation of ornament.



## CHAPTER 3: OPAQUENESS IN MEANING

The three properties of contemporary ornament discussed in the previous chapter, *wallpaper*, *fusion*, and *interface*, act as strategies in making the meaning of contemporary ornament inexpressive, superficial or opaque, that is, impenetrable or hard to understand. Modernism's complex relationship to originality and universality, and post-modernism's aim to assign new meaning to convention provides the context for the production of contemporary ornament. Contemporary ornament censors itself, reducing opportunities for meaning and form expression. Meaning is abandoned in two ways: one, contemporary ornament shies away from symbolism, and two, it does not create original forms (it does not imbue form with meaning through the process of sculpting or forming new images). The forms of contemporary ornament are derived, not created.

As art historian James Trilling points out in *Ornament: A Modern Perspective*, a romanticized idea of meanings of ornament had been a part of the architectural imagination for centuries. It not only drove the 19<sup>th</sup> century search for true and authentic style and associated ornamentation (because it was perceived that the time had none of its own), but also the contemporary worry of being incapable of symbolism.<sup>39</sup> According to

39. Trilling, *Ornament: A Modern Perspective*, 75.

Trilling, perhaps historically ornament did not carry as much meaning as we today, as a society, believe it did. He writes:

To believe that the “lost” function of ornament was to convey a host of specific meanings is a particularly modern kind of romanticism. We are simultaneously uncomfortable with symbolism and fascinated by it. Because we believe ourselves to be incapable of symbolism, we are eager to find them in other cultures.<sup>40</sup>

40. Ibid, 75.

While the idea of reading traditional ornament on buildings as stories accessible to passersby may be inaccurate, traditional ornament did have meaning. The meaning was often symbolic, read from syntax (relative to elements next to it or in popular consciousness), and it certainly had value in form and decorum.<sup>41</sup> The motifs were often conventions passed down through imitation and iteration, reimagined through the stylization of the individual craftsman. The incredible amount of resources that went into the production of ornament on virtually every building façade is an indication that the symbolism and form of the ornament meant something to someone – either the person making it or the person paying for it. Even if the symbolic parts of the ornament were not as accessible to passers-by, certainly the form of traditional ornament was expressive. Both two-dimensional design and three-dimensional sculptural ornament hold meaning in form, that is, the pure value of design and sculpted form that communicates outside the realm of symbolism and syntax. It flourished by interpretation of conventional motifs – smallest recognizable repeating form assigned cultural meaning

41. According to Antoine Picon, traditional ornament was part of the system of social distinction; the word *decorum* here is used as a recognition of ornament’s role in expressing hierarchies and values with its overall effect. For a take on ornament’s modernist ban as a sumptuary law, see: Massey, “New Necessities.”



through a mechanism similar to language – used as a starting point, or building blocks for new iterations.

Trilling describes modernism in terms of artistic expression in *Ornament: A Modern Perspective*: “Insofar as modernism had a unifying goal, it was a new directness and authenticity of expression, free from both the familiarity and the artificially imposed restraints of old convention.”<sup>42</sup> This new directness aimed to discover more universal communication through abandonment of all tradition. One can see this new quest for most true expression take place in art: modern artists shed perfected technique to discover new, more direct ways to impact the viewer; expressionism, abstract expressionism, minimalism, conceptual art question the preconceived notions of what art should and should not look like. Ornament and its motifs, its canon developed through imitation and iteration, fell into the category of convention that was abstained from.

42. Trilling, *Ornament: A Modern Perspective*, 119.

Most importantly, through abstention from convention, modernism lost the use of conventional motif – that smallest recognizable repeating form that was often reinterpreted in traditional ornament. Any and all use of a motif was now subject to willful originality and universal reading. Ornamental use of precious materials (like butterflyed marble at the Barcelona Pavilion) that escaped the “ban” perhaps did so because of its lack of motif and natural (that is, non-human) forms. Un-designed



FIG 3.1 VANNA VENTURI HOUSE BY ROBERT VENTURI, 1964.



FIG 3.2 PARC DE LA VILLETTE BY BERNARD TSCHUMI, DESIGNED 1983.

ornament was acceptable, while traditional designed ornament with conventional motifs and pictorial elements was not.

Post-modernist architecture attempted to recover the forms of traditional ornament, in its critique to modernist ideals. Heavily influenced by semiotic theory, the study of the relation between signs and meaning, architects were eager to produce work that worked as a grammar, relating only to its parts (like the self-referential Parc de la Villette by Bernard Tschumi, designed 1983) or to the larger architectural context (like the Vanna Venturi House, 1964, by Robert Venturi with its grand façade pointing to something not its own). Their play with signifiers, twisting them away from original point of association, and manufacture of new ironic and whimsical connections, however, became passé through development of their own associations. In other words, it fell out of fashion.

Contemporary ornament wants nothing to do with the problem of meaning. Contemporary architecture self-censors its ornament through *interfaces*, *fusion* to the surface and *wallpaper*-like scaling. In the 1990s, this freedom from convention and familiarity presented a problem of arbitrariness. Without convention, the choice of motif for expression is both arbitrary and more significant. In an absence of predefined canonical imagery available for ornament, contemporary ornament

avoids the meaning of its motifs through the strategies outlined in the previous chapter.

Through the *wallpaper* strategy, contemporary ornament loses invention of new form by the interaction with the limit. The way contemporary ornament is scaled and repeated freely on the surface, unbound by its edge, denies itself new iterations through customization. This may be an intentional limitation of contemporary ornament – its authors avoid the responsibility of decisions regarding how it interacts with the building it is on. It does not commit to the building, retaining its independence of the whole and remaining in abstraction. Contemporary ornament distances itself from the site it sits on, weakening any possible meanings or connections.

Through *fusion*, it loses the third dimension. Since ornament more often belongs to the realm of craft rather than art, the loss of depth reduces its form expression. Contemporary ornament abandons the form value of three-dimensional ornament, reducing its expressive range. Its timid, two-dimensional appearance reduces itself to a texture on the surface.

The *interface* frees even original ornament from the responsibility of meaning. The representational elements or motifs, previously giving form value to ornament, disappear. They give way to randomly-generated forms, curated to be of decorative value. Then, contemporary ornament is not designed, drawn or sculpted, but presented as a naturally-occurring phenomenon, a found phenomenon, or a random phenomenon. A



**FIG 3.3** HYGROSKIN BY ICD, 2013.



**FIG 3.4** ICD/ITKE RESEARCH PAVILION, 2013-14.



**FIG 3.6** ICD AGGREGATE PAVILION 2018.



**FIG 3.5** ICD/ITKE RESEARCH PAVILION 2011.

43. Grabar, "A Theory of Intermediaries in Art," 12.

tangible motif disappears from this kind of ornament – it must look entirely synthetic to achieve the freedom from meaning. Contemporary ornament works to avoid that “ambiguity between what we see and the meanings we usually give or can give to that which we see”<sup>43</sup>; that is, it seeks to not resemble anything at all, pushing any possible connections to the territory of accident.

University of Stuttgart’s Institute for Computational Design and Construction (ICD), often in collaboration with Institute of Building Structures and Structural Design (ITKE), produces physical installations of high-tech algorithmic design every year. Although they are incredible feats of engineering and computational design, their popularity can be at least partially credited to their appearance. These installations are incredibly ornamental, yet their motif is synthetic – an accidental repeating part seemingly generated out of necessity.



**FIG 3.7** PRINTED PANELS ARICOLA-EUROPE STORAGE AND PRODUCTION BUILDING BY HERZOG & DE MEURON ARCHITECTS, 1993.

The use of photography is also an example of this opaqueness. Photography, by its nature, is an image of a specific moment in time from a specific perspective. This specificity of the photograph impairs the perception of the subject as a motif. The subject is not stylized, as it would necessarily be through representation of either 2- or 3-dimensional design, but presented as a “found” object applied as ornament.

Let us look again at the Ricola Storage facility with its leaf motif as an example: the plant motif makes a reference to Ricola’s product (the herbal drops), and perhaps to Karl Blossfeldt’s popularity in conceptual



**FIG 3.8** EBERSWALDE TECHNICAL SCHOOL LIBRARY BY HERZOG & DE MEURON, 1999.

art movement,<sup>44</sup> but it is a passing reference rather than a symbol with meaning to communicate.

The Eberswalde library, although features many images, many individual motifs, that have both individual and collective meaning, architects' use of them on the building façade purposefully diminishes it. The images imbedded in the concrete are a collection of photographs from a German newspaper, curated for the project by artist Thomas Ruff. The images are incredibly specific, as photographs are by their nature, capturing a specific moment from a specific point of view.

44. The conceptual art movement takes the lack of convention and canon to new levels where art does not necessarily have to conform to preconceived notions of what art should look like; the process and the concept behind the work was more important than the work itself.



**FIG 3.9** DETAIL OF FACADE OF ADDITION TO THE FRENCH MINISTRY OF CULTURE AND COMMUNICATIONS, BY FRANCIS SOLER, 2005.



**FIG 3.10** FRENCH MINISTRY OF CULTURE AND COMMUNICATIONS, BY FRANCIS SOLER, 2005.



45. Mack, *Eberswalde Library*: Herzog & de Meuron, 11-39.

Although a publication about the building describes some larger themes of the photographs<sup>45</sup>, such as mortality, skepticism, science and politics, there is reasonable doubt if all of that is communicated to the passer-by or if it was intended to. Through the sheer number of them, fourteen photographs over seventeen panels, each repeated sixty-six times, the meaning of the images becomes less important than the overall effect. The technique of transfer of the images to the concrete produces low contrast images, further reduced by humidity in the air. It seems that

the images are reduced to graphic elements to aid the decoration of the surface; a texture over an image.

The French Ministry of Culture and Communications, received a new façade in 2005, by French architect Francis Soler. This façade is a lasercut steel trellis, visually unifying two buildings of different periods belonging to the same institution. The lines of the silver net (“résile argentée”) are based on a Renaissance painting by Giulio Romano<sup>46</sup>, however the image is completely unrecognizable after a digital deformation – the lines read more like unintelligible graffiti than an image. The pictorial motif that started out as an image becomes a texture through repetition. It is a conscious attempt to distort the image – the original motif, the painting, is no longer relevant to the meaning of the ornament. What remains are undecipherable lines translated to steel. Even though the distorted image started out with a concrete external referent, its final form sheds any semblance to it. The transformation even sheds the subject matter of the original painting. The silver net could have been designed without the starting point of the painting, since it is lost in the end product. The external starting point seems to act as a legitimizing tool that, in the end, is important to the author, not to the viewer.

The Quantum Nano Centre (2012) by KPMB features a honeycomb pattern of structural elements on the outside of the building

46. Picon, *Ornament: The Politics of Architecture and Subjectivity*, 29.

**FIG 3.11** THE  
QUANTUM NANO CENTRE  
BY KPMB ARCHITECTS,  
2012.



skin. This seems like a simple, general reference to science and a carbon molecule, that goes no deeper.

Contemporary ornament, upon inspection, aims to deliver no meaning to the viewer at all. The ornament is *mute*. Meaning is a risky affair – if ornament has failed to work as a language in the post-modern era, how can it communicate meaning to the public? Symbols are abandoned in favour of simple references. Contemporary ornament motif either moves further into abstraction (“synthetic” motifs generated by the computer) or into such specificity that a general meaning becomes improbable. Though some of the contemporary ornament is incredibly specific in its motif (like a particular species of plant being depicted), and



even though it is only logical to assume that specific image must lead to specific meaning, in contemporary ornament that is not necessarily the case. Contemporary ornament self-censors its possible meanings.

Architectural critic Robert Levit in his 2008 essay “Contemporary “Ornament”: The Return of the Symbolic Repressed” refers to ornament as “axiomatically symbolic.” In his view, ornament is always carries symbolism, simply by the nature of it being a purposeful addition to the façade – if it is there, it must mean something.

Levit lays out an argument of the new ornament as social commentary – variation over uniformity.<sup>47</sup> He uses Voronoi-type patterns, where the individual cells are diverse in shape and size with a certain amount of randomness but fit together neatly (see *Watercube*), to construct a social metaphor of society that values individuality over uniformity. He contrasts it with Mies van der Rohe’s *Seagram Building* where uniform bronze members (previously described as ornamental or, at least, without a function in the modernist sense, even “rhetorical” according to Robert Venturi<sup>48</sup>), he argues, highlighted the values of conformity, commerce, and mass production of the 50s in a symbolic manner. Levit argues that these new types of non-repeating patterns are symbolic in themselves; contemporary individuals are attracted to that type of pattern because they associate it with their own ideological leanings. However, the metaphor falls flat when presented with a repeated pattern in Herzog & de Meuron’s projects – *Eberswalde Library* or the *Ricola Storage Building*. A great number of contemporary ornamented buildings

47. Levit, “Contemporary Ornament,” 81.

48. Venturi, *Complexity and Contradiction in Architecture*, 40.

rely on a repeating pattern for ease of construction and cost. But how are earlier algorithmically-derived patterns different? For example, gothic ornament relies heavily on variation with constraint. Does the fact that most gothic ornament is symmetrical make the difference? Michael Hansmeyer's projects exhibit a variedness that Levit would describe as ideologically charged; the symmetry present in Hansmeyer's projects does not diminish their "randomness" but, rather, highlights it.

Let us take another project from the same era as the *Seagram Building* – SOM's *Beinecke Rare Book and Manuscript Library*. Its marble panels are arranged in a uniform grid pattern but the real ornament is the marble itself; the varying translucency of the veining creates light effects that are highly decorative. The material exhibits randomness that is comparable to the effect of Voronoi cell, but on a smaller scale.

The second of Levit's symbolic strategies is a naturalizing strategy. He argues that, with the rise of the sustainability movement, "greening" of buildings is not limited to innovations to reduce energy consumption; "greening" extends to representational regimes<sup>49</sup> that through symbolic means, aligns architecture with the natural. He proposes an environmental strategy for ornament's symbolism that works through a representational device:

*The preoccupation with sustainability has bred representational regimes in architecture (beside actual technical innovations that reduce energy consumption), regimes that in effect align architecture with nature, as if*

49. Levit, "Contemporary Ornament", 82.

*to make, through representation, a built world compatible with the natural one.*<sup>50</sup>

50. Ibid, 81.

The idea is that any natural images, including ones *invoking* natural patterning (like the before-discussed Voronoi), belong to a larger theme of anxiety over sustainability. Formal juxtapositions of natural objects forced into artificial shapes, “nature absorbed into the taxonomic artifice.”<sup>51</sup> Or perhaps, in the vacuum of symbolic imagery, the natural stands in for the neutral. When cultural references are avoided to achieve social neutrality, the natural is a deflection from examining the social and historical symbolism.

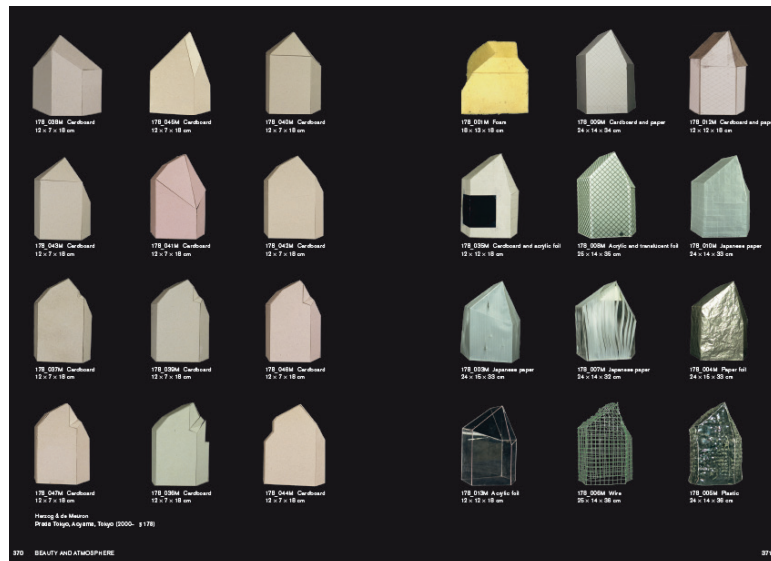
51. Ibid, 83.

Some examples of contemporary ornamented buildings (for example, Herzog & de Meuron’s) do carry a notion of reconciliation between the built world and the natural. Herzog & de Meuron’s own publications and exhibitions of the work, “Natural History” and “Archaeology of the Mind,” seem to allude to a conscious dialogue between their projects and connections to the earth. Although this can be seen through the lens of the *interface* – the narrative of presenting ornamented architecture as un-designed, natural phenomenon – the continued proliferation of ornament leaves that behind. As earliest and most published examples of contemporary ornament, their appearance had a stronger impact than the narrative constructed around it. The look of the ornament spread (the flatness of the ornament, the scale-less-ness, the removal from authorship, the symbolism-less motif), while the associations with the natural withered to a popularity of a plant

photograph used as pictorial content. Digital media participates in the creation of this ornamented architecture, but it also implicates itself in the consumption of it. The ornamented surface is an immediately recognizable architecture consumed via a photographic image, reiterated and imitated without the physical experience.

Opaque meaning turns ornament into a simple texture, stretched over the building, fused to the surface. It begins to resemble that butterflyed marble wall in the Barcelona Pavilion, either devoid of designed motif or a limitless texture of the surface.

FIG 3.12 PAGES FROM NATURAL HISTORY BY HERZOG & DE MEURON, 2005, SHOWING A BUILDING AS FOUND OBJECT IN SPACE.







## CHAPTER 4: THE ANTI-THESIS



**FIG 4.1** OWN ORNAMENT. 1:10 SCALE MODEL IN PLASTER.

The strategies employed by contemporary ornament ease the anxiety stemming from modernism's firm grip on the production of ornament. But what is lost in that comfort and self-censorship? This chapter will present the outliers – the contemporary architectural projects that use ornament in ways unlike the ones outlined previously – and sets up the methodology for my own personal attempts at ornamentation.

While this contemplation of contemporary ornament has led to a personal skeptical view of contemporary ornament, due to perceived inconsistencies in intent and execution, there are some examples of

contemporary architecture that defy the previously described tendencies. As the anti-thesis to the the narrative of the previous chapters, let us look at contemporary ornamented projects that do not fit the parameters laid out. I would argue that this type of contemporary ornament is even more rare and often the work by a new type of craftspeople.

*A House for Essex* (2014) by Grayson Perry in collaboration with FAT Architecture sheds both the irony of post-modern ornament and the self-consciousness of contemporary ornament. This fearless little house is not so much architecture as a contemporary piece of art, and is also conceived of as such.

The production of the building is documented in a series for television channel in the UK called *Grayson Perry's Dream House*. Here, scenes of constructing the house and making the ornament are woven together with a tour artist Grayson Perry, in full drag, takes several local women on. They travel through places of personal inspiration, arriving at the built work. Over the documentary, Perry reveals the story of Julie May Cope, a fictional every-woman from Essex, whose life is embodied in the house through the ornament. The house celebrates human banality – a regular woman's life – the two marriages, the kids, a fatal moped accident. The mood keeps flipping from comedic to genuinely touching as the participants of the tour start seeing a part of themselves in Julie.





**FIG 4.2** A HOUSE FOR ESSEX - A COLLABORATION BETWEEN ARTIST GRAYSON PERRY AND FAT ARCHITECTURE, 2014. VIEW OF THE SOUTH ENTRANCE.

Upon arrival to the house, they recognize the building as a shrine to the ordinary women of Essex.

Perry makes the icons adorning the building un-self-consciously, focusing on one at a time, as if it is a one-off vase. He makes a tile featuring the protagonist as a fertility goddess to clad the exterior. He knows that this is going to be the main cladding tile of the building, as he is working with precise dimensions to cover the building, but the boldness of putting all that on the building, multiplied in the hundreds, seemingly does not cross his mind; he is only struggling with a time deadline. The other tile ornament does not require any translation – a cassette tape

**FIG 4.3** JULIE MAY COPE DEPICTED AS A PAGAN GODDESS.



**FIG 4.4** ORNAMENT CONTAINS MOTIFS FROM JULIE'S LIFE.



both symbolizes her love of music and marks the time she was a young adult in. A heart, a safety pin, a coat of arms of the area serve as banal, symbolically uncomplicated reminders of a simple, well-lived life. There is little irony in the whole thing and yet it features pictographic three-dimensional decoration, and original, non-traditional symbols in its ornament. While Perry does not work in digital media, his ornament feels current and unexpected through fearless use of personal themes in motifs translated into three-dimensional sculpted shapes.

*Bar Raval* (2015) in Toronto by Partisan Architects features an intricately sculpted ornamental wooden interior. The CNC-milled mahogany selectively wraps the windows and morphs into the bar, enveloping the space in wood. Here, the ornament not only is aware of the limit of the building but finds its shape through interaction with building elements. The amorphous wood form is sculpted to fit this particular space, and developed *through* fitting the space, in direct opposition to the *wallpaper* strategy.

As an additive ornament in an existing space, the wooden interior defies the *fusion* strategy; the mahogany pieces are layered over other building elements and materials. The wood is a distinct element in the space, so large it subsumes the bar. The surface of the mahogany pieces is especially interesting - their tooling lines<sup>52</sup> flow with the shape. The technologically-complex millwork was produced by MCM Inc. who also developed the methodology to derive the tooling paths to

52. Although if the “flatness” of contemporary ornament is understood not in terms geometrical flattening but, rather, as a fusion of ornament *into* a surface, then this type of three dimensional ornamentation fits the *fusion* strategy as well. Architect and critic Greg Lynn, in an interview in 2004 (Lynn, “The Structure of Ornament”), proposes an “acceptable” type of ornament – digital tooling marks that follow the logic of the form. These are the leftovers of CNC router milling paths used to approximate a digital, abstract 3-dimensional shape. This approximation produces “steps” or ridges that, to Lynn, have an ornamental appearance and reveal the geometry of the shape. Lynn talks about the tooling artifacts on surfaces and their decorative appeal as a dependency between ornament and structure.

approximate the abstract forms, leaving the directional ridges to enrich the ornamental shapes.

Overall, the sculpted wooden forms are reminiscent of Art Nouveau ornamentation, but not as a passing reference but a true formal inspiration. But the main way this project defies the *interface* strategy is that the forms are entirely sculpted, that is, it is a real translation from artistic intent to ornament, even if there is no pictographic, recognizable motif. The form value of the piece has meaning, even if it is in abstract,

**FIG 4.5** BAR DETAIL AT BAR RAVAL BY PARTISANS, 2015.







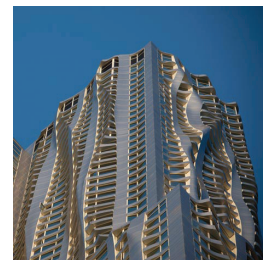
**FIG 4.6** BAR RAVAL BY PARTISANS, 2015.

undefinable terms. There is no block in the communication between author and viewer; the abstract thoughts present as abstract shapes.

The gentle undulation of the façade of Frank Gehry's Beekman Tower (2010) performs similarly, although to a smaller degree. The three-dimensional ornamental forms are obviously made by a computer, but, unlike algorithmic projects, they are more deliberate. The ornamental shape of the surface is developed by accommodating different areas on every floor, pulling and pushing the shape of the perimeter. The façade is sculpted; the algorithmic tools are used here to aid and smooth the



**FIG 4.8** NEW YORK BY GEHRY BY FRANK GEHRY.



**FIG 4.7** NEW YORK BY GEHRY BY FRANK GEHRY, 2010.

sculpture, as opposed to drive the shape. Digital tools are used to aid the process of almost manual sculpting.

Both authentic symbolism and process of sculpting seem to figure prominently in projects that I consider outliers from the principles of contemporary ornament. The process is direct – physically shaping both abstract ornament and figural references, either by hand or digitally – and this directness of expression between desired form and the end product is key. These projects are the result of unashamed want to ornament, and direct will to form what it would look like.

I have always known that in the end, I would have to produce some ornament myself. The trepidation about doing so I have described in the introduction of this thesis. The anxiousness and the continual process of questioning my own motivations have continued to plague the process. I did have some guidance, however. Through the examination of the strategies employed in popular contemporary ornament production, it became apparent that I personally considered them timid and disingenuous, or at least too nonchalant to fully address the task at hand. The outliers outlined here show the way.

The methodology for the production of ornament will be the antithesis to the three strategies presented in Chapter 2. This ornament learns from the projects discussed in this chapter – it will be three dimensional, aware of its limits, and not shy away from the personal. First, to counteract the *wallpaper* tendency of contemporary ornament,

the limit and scale of the object or façade will be considered. Ornament will introduce or accentuate hierarchy within the composition. Any repetition will occupy a defined space within the configuration, and will consider the object/façade as complete, with a defined edge. Second, the ornament will not be confined to the surface. It will be proud, additive or subtractive, removable in concept, three-dimensional, and occupy space. Third, the ornament will not be *mute*. The ornament will not hide behind an interface. It will present itself in an intentional manner; the information contained in the ornament will not be, or pretend to be random. It will present a stance, through symbolic, representational, or sculptural means.

Early on, I had discovered that the process of ornamentation by hand left too much room for self-doubt and anxiety over the appropriateness of ornament. Seeing a laser cutter or a CNC router follow the imaginary lines that previously only existed in digital space and own imagination is a confirming experience. Their precision and blind determination has no anxiety and leaves no room for minimizing and censoring at the time of production. It is the new machine ornament.





## THE MILK SAUCER

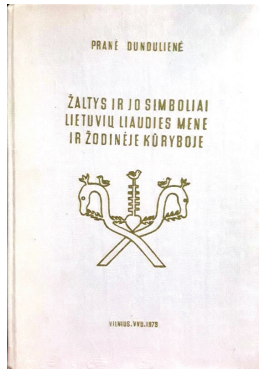


The piece of soapstone featured in the introduction to this thesis eventually found its form in a tiny bowl. A relief of a serpent sits at the bottom of it. This is a personal symbolic ornament, meant as a good luck charm in the Baltic pagan folklore.

As a kid, my grandmother would sometimes tell me that it is good luck to leave some milk out for the garter snake. In much of Eastern Europe and more specifically in the Baltics, the garter snake (or “garden” – the terms are used interchangeably) is a common theme in the folk tradition.<sup>53</sup> The non-venomous snake native to the region was featured

**FIG 4.9** SAUCER WITH MILK.

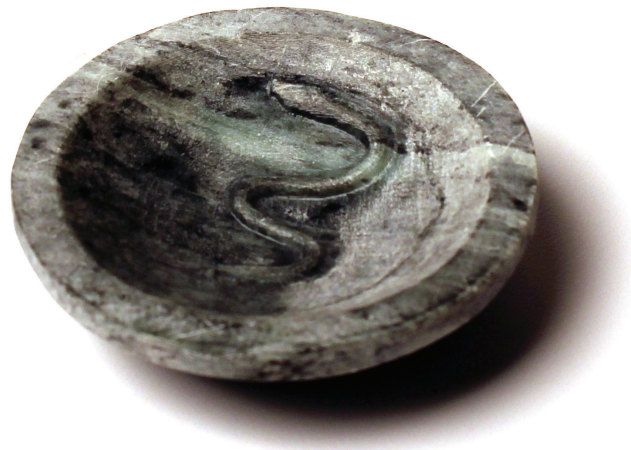
53. Even though I am not sure how much of the milk tradition is true, the importance of garter snakes in Lithuanian folklore is not an exaggeration, see Pranė Dundulienė, *The Serpent and Its Symbols in Lithuanian Folk Art and Creative Work*, 2<sup>nd</sup> ed, Mokslo ir Enciklopedijų Leidimo Institutas: Vilnius, 2005.



**FIG 4.11** COVER OF THE SERPENT AND ITS SYMBOLS IN LITHUANIAN FOLK ART AND CREATIVE WORK BY PRANĖ DUNDULIENĖ, 2ND ED, MOKSLO IR ENCIKLOPEDIJŲ LEIDIMO INSTITUTAS: VILNIUS, 2005.

prominently in folktales and had religious significance. The silvery creature was considered to belong to the “other world,” a representation of a deity – protector of the home, bringing prosperity and luck to the household. As such, in real life, it was said that garter snakes are not to be hurt or disturbed, as the serpent picking one’s house to visit brings well-being to the family home. Therefore, they were not only tolerated but invited onto people’s land. My grandmother used to tell me that people would leave out a saucer of milk to attract one, in hopes of bringing good fortune onto the household.

Admittedly, exactly which parts of these were tradition, religious belief, folktale or just something made up by my grandmother, are a little unclear to me, and the lines between the concepts are fuzzy. I am not



**FIG 4.10** SOAPSTONE BOWL WITH SERPENT MOTIF.

entirely certain garter snakes have the ability to drink cow's milk. Yet, something about the image of the saucer of milk left for a serpent (as if it was a barn cat) holds some power over my mind.

The little stone bowl expresses its purpose through the serpent ornament at the bottom. It peeks through the opaque milk signalling its intention as a talisman, to trick happiness to come to my household. It is nothing more than a trinket but the ornament at the bottom of the bowl both announces its intent and source of power.

The bowl was produced out of soapstone, CNC-milled to a digital model.



**FIG 4.12** LITHUANIAN FOLK ART FEATURING A SERPENT WITH CROWN. STONE CARVING.



**FIG 4.13** LITHUANIAN FOLK ART FEATURING A SERPENT WITH CROWN. STONE CARVING.



## THE SHELF

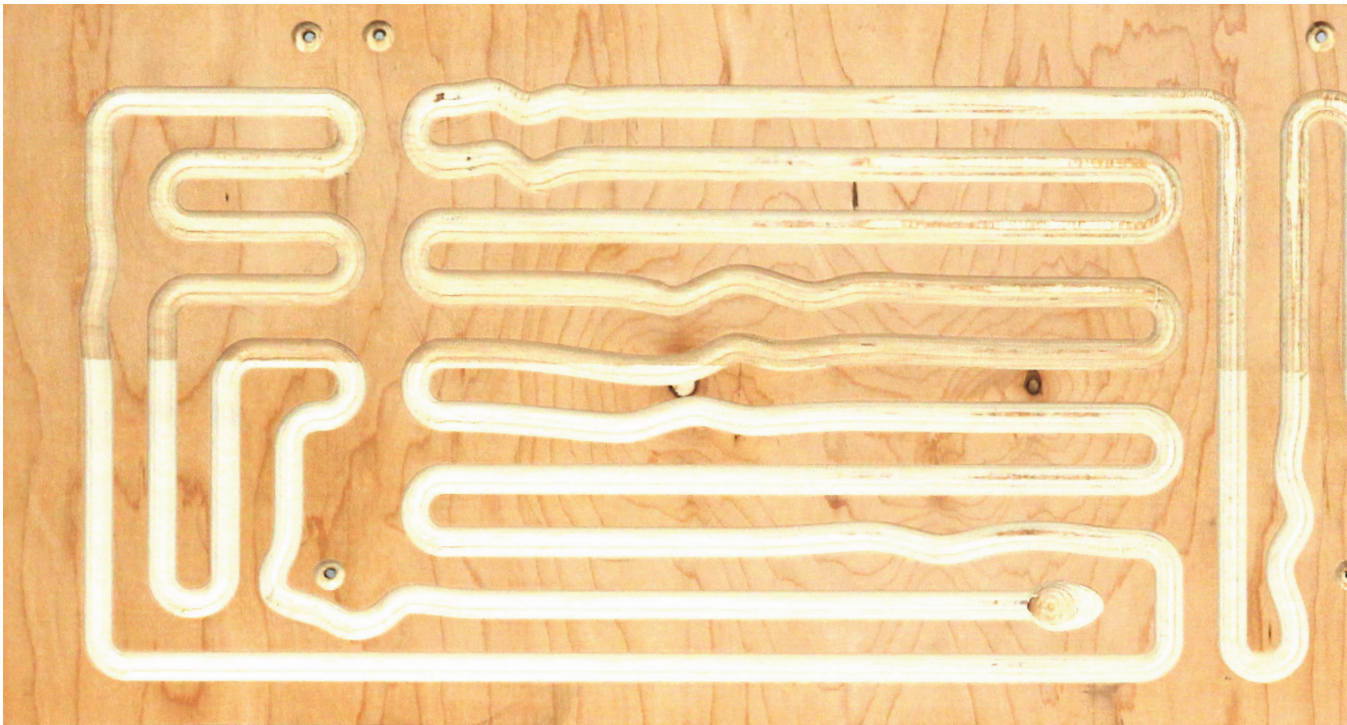
The shelf project features another serpent ornament. As in the previous project, here it is also symbolically intended as a good luck charm. With the brackets mounted on the top surface of the shelf, the freed up bottom provides exposed surface to be ornamented. The snake slithers its way around filling the area of the board and around the bolts holding the shelf up in place.

The snake on the bottom of this plank is an ornament specific to its object (shelf) and viewing angle. The shelf is installed above a bed; the bottom of it can be seen quite clearly on sleepless moonlit nights. Milled into the bottom surface of the shelf is a negative of a serpent, folded over the surface in a rectilinear, repetitive pattern. Its intended to act as a meditation aid, a rhythmic, calming motion of the eyes tracing the body of the snake. In this sense, it makes it a very simplistic interlace pattern, although so easy it might act against intent. The tracing of a line through a series of intricate patterns and knots is a traditional pattern called interlace. Interlace is meant to be difficult, as unknitting an incantation, meant to trap the evil eye<sup>54</sup> and therefore protect the

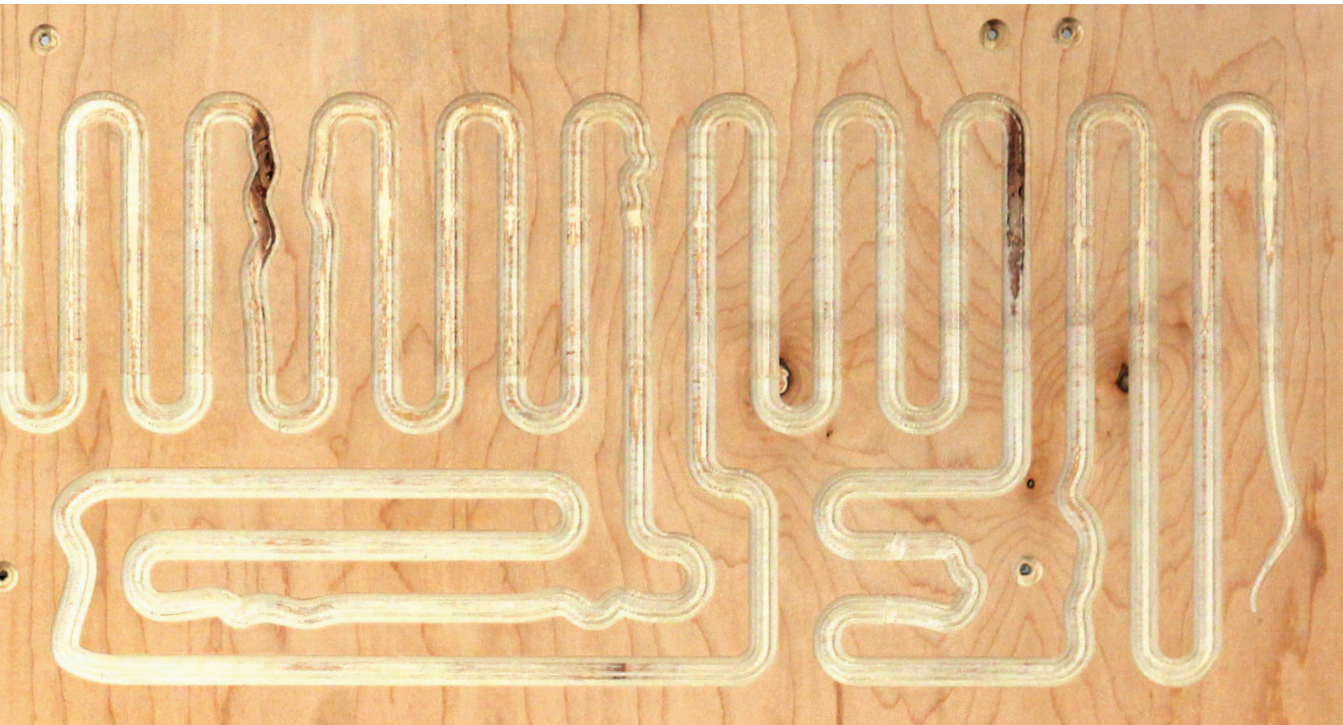


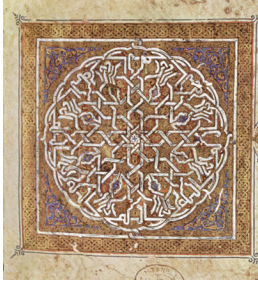
**FIG 4.14** THE SHELF ORNAMENT.

**FIG 4.15** SHELF  
BOTTOM WITH  
INTERLACE SNAKE  
ORNAMENT.







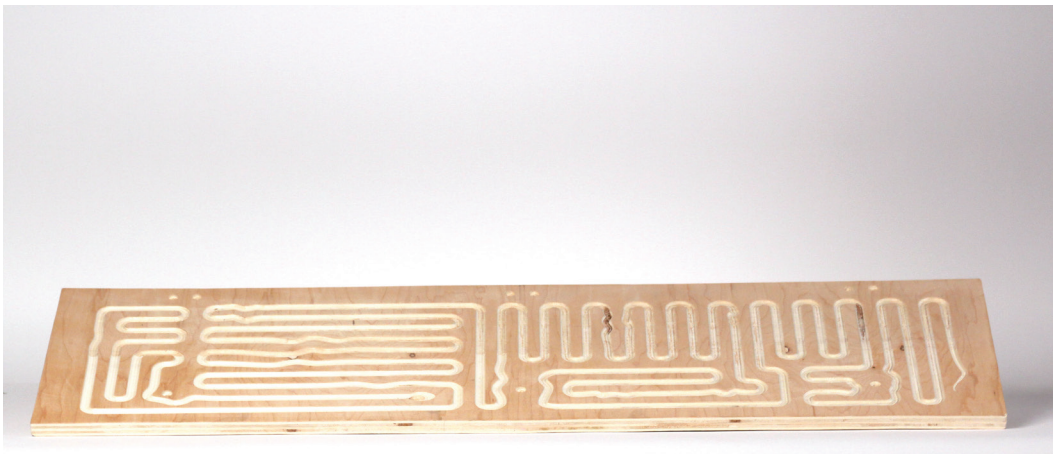


**FIG 4.16** INTERLACE PATTERN ON THE CARPET PAGE IN 12TH CENTURY KORAN.

owner. Here, together with the Baltic pagan symbolism of the serpent, it calms, protects, and brings good fortune.

The ornament is aware of its position within the plane. The snake weaves its way around the shelf, interacting with its limit, approaching it but never touching it. The form incorporates the limitations of the shelf – the holes for mounting hardware become part of the pattern in the way the serpent avoids and turns away from them. The three-dimensional CNC-milled ornament finds its shape in the limits of the object it is ornamenting.

**FIG 4.17** SHELF AT ANGLE.





## THE BAY WINDOW



**FIG 4.18** LINE RENDERING OF ROW HOUSES SHOWING ALL THREE PIECES OF ORNAMENT.

As time passes, the anxiety of producing ornament comes to be partially relieved by the process of sculpting. Sculpting feels different. The placement of the construction lines is more of a playful process,

**FIG 4.19** 1:2.5 SCALE  
MODEL OF TOP PIECE.



imagining this growth of a bay window slithering up the façade. It is a larger scale process, not an obsession over a detail.

The bay window project is a prototype of an additive ornament on an imaginary typical row house. The ornament contrasts contemporary ornament's tendency to flatten itself to the surface; instead it takes up space and structure. This addition stands proudly against the rest of the flat façade. The scale of it is large and unapologetic, growing through the entire height of the building. Its full impact is observed through repetition of the housing type.

The project is a play on a traditional building element that is traditionally ornamented. Here, through the scale of the ornament, the entire bay window reads as a decorative additive building element, reaching over the façade; it becomes a growth that the bay inhabits.

The conception of this ornament is in designing construction lines "manually," that is, sculpting it in three dimensions in digital space but placing and adjusting the lines by eye, instead of equations. The lines are not random; they are directional and convey movement. The composition is mapped out and then elaborated. The construction lines form the basis for the lofted surface. Between each line, the harsh angles are softened by intermediary interpolated lines, patched over to form an undulating curved surface.

Three-dimensional ornament on building structure poses another question of how it should be attached. Is it a solid or an

accumulation of surfaces? Is it cast, sculpted by removal of material, or by addition or accumulation?

A simplified 1:10 polystyrene foam model orients me to the scale and shows a need for more detail. 1:15 scale model of thin millboard demonstrates how sheet material can translate a solid form. The assembly, upon reflection, is done on the wrong axis and would not let water to run off. Keeping the assemblage in place became part of the project, as it inevitably does as the ornament crosses over from existing in digital space to real materials. A 1:5 plaster cast, made by a foam negative, promises better. A couple of materials were tested – a simple-lined CNC-milled foam, a few different sizes of plaster cast from a CNC-milled foam negative, an assembly of laser-cut cardstock and a larger plywood model.

A 1:2.5 scale prototype, made out of sheets of aspen plywood, milled to invoke the surface of the undulating construction lines was made to observe the impact of the decorative piece. The prototype, as they always do, reveals a host of practical problems to solve. Sheet goods, while saving a lot of material and time on the CNC router, proved to not be able to grasp the granularity of the curves as well; it lost a significant amount of detail. 1:1 model would have to be denser to convey the undulating form.

The following are photographs of scale models and prototype.

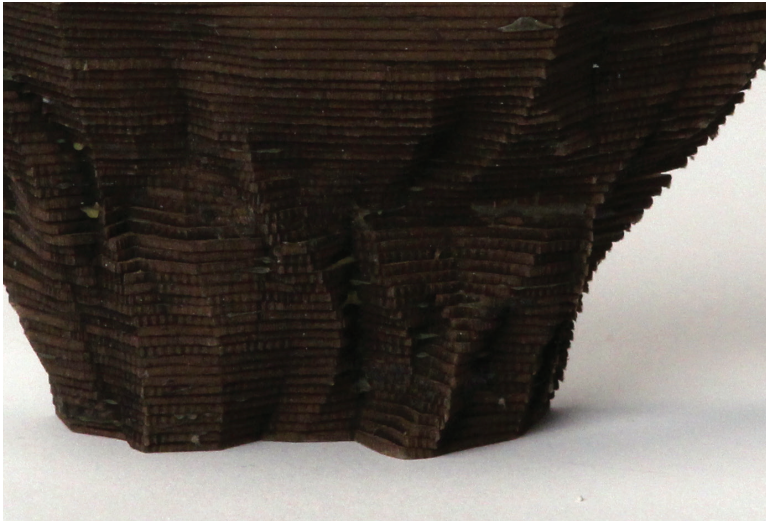


**FIG 4.20** 1:15  
MILLBOARD MODELS.



**FIG 4.21** 1:10  
SIMPLIFIED FOAM MODEL.





**FIG 4.22** 1:15  
MILLBOARD MODEL OF  
LOWER PIECE OF THE BAY  
WINDOW ORNAMENT.



**FIG 4.23** 1:15  
MILLBOARD MODEL OF  
MIDDLE PIECE OF THE BAY  
WINDOW ORNAMENT.

**FIG 4.24** TOP PIECE  
1:10 MODEL IN PLASTER.



**FIG 4.25** CENTRE PIECE  
1:10 MODEL IN PLASTER.

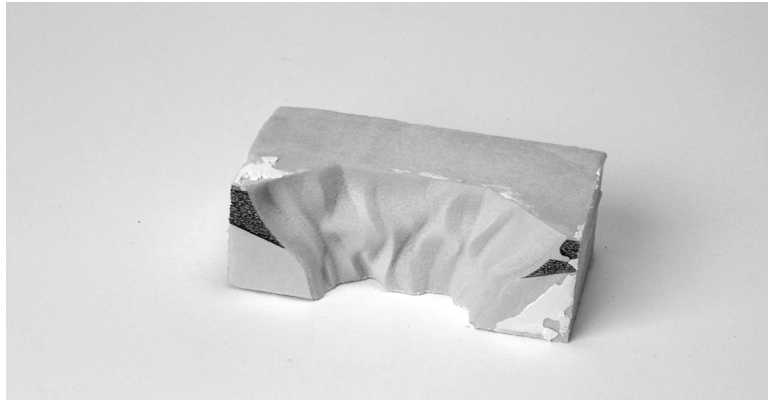






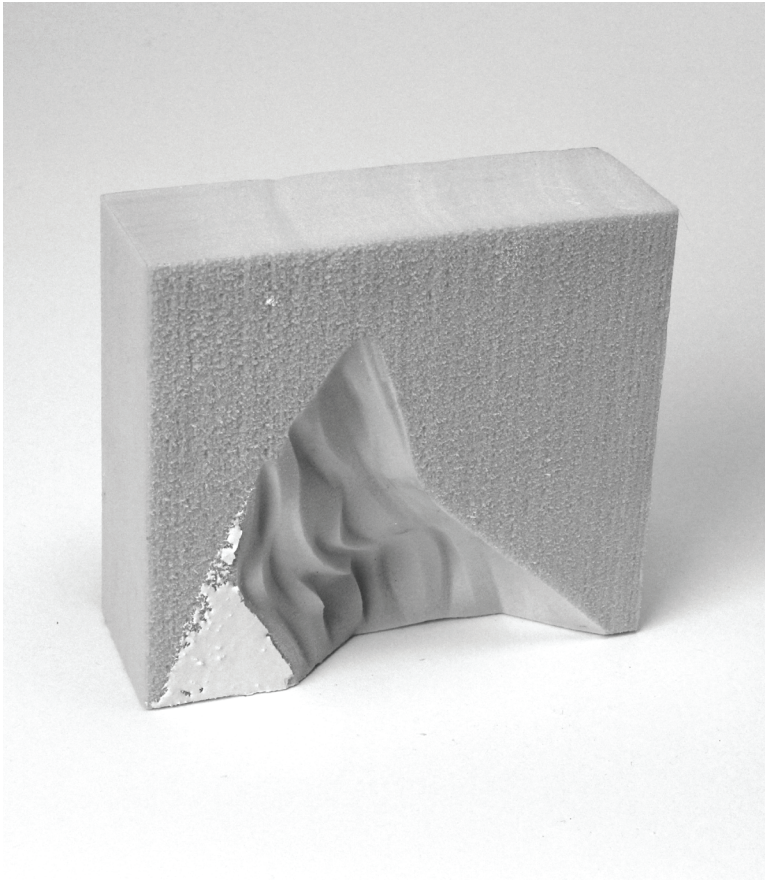
**FIG 4.26** 1:15  
MILLBOARD MODEL OF  
TOP PIECE OF THE BAY  
WINDOW ORNAMENT.

**FIG 4.27** FOAM  
NEGATIVE OF BOTTOM  
PIECE OF 1:10 PLASTER  
MODEL.



**FIG 4.28** BOTTOM  
PIECE OF 1:10 PLASTER  
MODEL.





**FIG 4.29** FOAM  
NEGATIVE OF TOP PIECE  
OF 1:10 PLASTER MODEL.





**FIG 4.30** DETAIL OF  
CENTRE PIECE OF 1:10  
PLASTER CAST.



**FIG 4.31** 1:2.5 SCALE  
MODEL IN PLYWOOD.

**FIG 4.32** 1:2.5 SCALE  
MODEL OF TOP PIECE IN  
PLYWOOD.







**FIG 4.33** DETAIL OF  
1:2.5 SCALE MODEL OF  
TOP PIECE IN PLYWOOD.

**FIG 4.34** DETAIL OF  
1:2.5 SCALE MODEL OF  
TOP PIECE IN PLYWOOD.





These ornaments are both tests for the anti-methodology and attempts to understand contemporary ornament further. I have tried to do the opposite of what I perceived most contemporary ornament does to grasp why it employed those strategies in the first place. Why do the designers of such ornament feel the need for this distance through the various strategies? To be clear, I feel it too. Although the anti-methodology has helped to produce some ornament that does not conform to contemporary ornament strategies, it does not explain this need for distancing oneself from ornament.

Why is directness of the process so important to achieve expressive ornament (the outliers)? Perhaps framing ornament as a communication device will provide some clarity.

Let us return to the more mainstream contemporary ornament; the one that performs a polite kind of modernism.<sup>55</sup>

55. "By the mid 1990s, polite modernism had replaced postmodernism as the dominant architectural style."  
– Sean Griffiths (formerly of FAT Architecture), "Now Is Not the Time to Be Indulging in Postmodern Revivalism."



## CHAPTER 5: THE SUBMISSION

Contemporary ornament is aware of its modernist ban. The strategies presented in Chapter 2 aid contemporary ornament's muteness and participate in its submission to modernist ideas of ornament, in direct contrast to ornament's theoretical role. How do these strategies fit into the larger framework of theory on ornament and its modernist demise? Post-modernist ornament had largely been a critique of its modernist ban, but contemporary ornament does not seem to have that opposition. Contemporary ornament submits to modernist ideas of architecture.

What is the role of ornament? Gottfried Semper, the German architect and critic, in his 1851 book *The Four Elements of Architecture*, argued that the origin of architecture is in weaving.<sup>56</sup> He argued that architecture and dwelling, the making of space, had beginnings in textiles hung as walls, the first and most rudimentary dividers (and therefore, creators) of space. In Semper's view, it was not the primitive hut<sup>57</sup> and its wooden frame that was translated into columns and beams of architecture, but, rather, it was the woven wall that was the beginning of creating space. To Semper, the desire to shelter and dress the body extended to sheltering and dressing the space around the body emanating outward. Textile enclosures were the archetypal walls. Going against the grain (that goes back to Vitruvius) of privileging the structure and treating the

56. Semper, *The Four Elements of Architecture and Other Writings*, 74-129.

57. Marc-Antoine Laugier in *An Essay on Architecture* (1753) describes the primitive hut as the true underlying basis for architecture, privileging structural clarity and simplicity over enclosure.



FIG 5.1 FRONTISPIECE OF MARC-ANTOINE LAUGIER, *AN ESSAY ON ARCHITECTURE*, 2ND ED., 1755. ALLEGORICAL ENGRAVING OF THE VITRUVIAN PRIMITIVE HUT BY CHARLES EISEN.

58. Riegl, *Problems of Style: Foundations for a History of Ornament*, 3-13.

59. Riegl, *Problems of Style*, Preface by Henri Zerner, xxii.

wall as infill, Semper turned the archetypal primitive wooden hut into a tent, insisting that the original building was an enclosed room, not a colonnade. According to him, it was the structure that was subordinate to the textiles that define the space, provide permanency and support to the primary element of the wall. Semper then insisted that the need to dress space had survived through the ages and manifests in decorative treatment of the wall. Patterning and formal motifs then have origins in knotting and plaiting of textile, that is, technological manipulations of material; architectural ornament therefore had evolved materialistically and retains its meaning within the form. Not only that, but Semperian logic would follow that the essence of architecture is embodied in ornament that carries with it the idea of the woven wall, the textile of domesticity, and structure merely builds out from it.

Alois Riegl, the Austrian art historian, disagreed<sup>58</sup> with Semper. In *Problems of Style* (1893), he refuted this theory of the origin of ornament chronologically, stating that, while weaving may have been a contributor to the evolution of it, the will to ornament had existed long before textile, and in cultures that did not invent textile. To Riegl, the origin of ornament was not in external factors, like materials and technique, but internal abstractions. It was artistic impulse, *Kunstwollen*, termed by Riegl and roughly translated from German as ‘artistic will’ or ‘will to form,’<sup>59</sup>

that is the innate need for ornamentation. Riegl poses abstraction for the purpose of aesthetic pleasure as the origin of ornament.

Another one of ornament origin theories includes embodied memory. Historian August Schmarsow had stated that the origin of ornament is empathy. Ornament represents what is done to the object; that ornament does not function as symbol but rather as a device that points to qualities of not its own. (For example, an ornamental ring of depressions on an object holds the memory of the force to make those depressions.)

Even though the theories on ornament's origin do not align and even contradict each other, they have a core idea in common. All of these origin stories point to ornament's ability to transfer meaning, conscious or unconscious, from a past human activity. Ornament is an index of humanity, a remnant of human attention – it communicates a personhood simply by existing. Art historian Oleg Grabar referred to this power of ornament as its *intermediary* function. Rather than regarding ornament as “a category of forms or of techniques applied to some media,” Grabar proposes ornament as “an unenunciated but almost necessary manner of compelling a relationship between objects and works of art and viewers and users.”<sup>60</sup> It is a link between the original creator and the viewer, and therefore necessarily *relational* as it compels a relationship between them

60. Grabar, *Mediation of Ornament*, 230. It is also quoted in Rafael Schacter's book on graffiti, *Ornament and Order*.

that is personal and private. Here lies its power – to delight, to deceive, to transform, to seduce, all in a personal relationship.

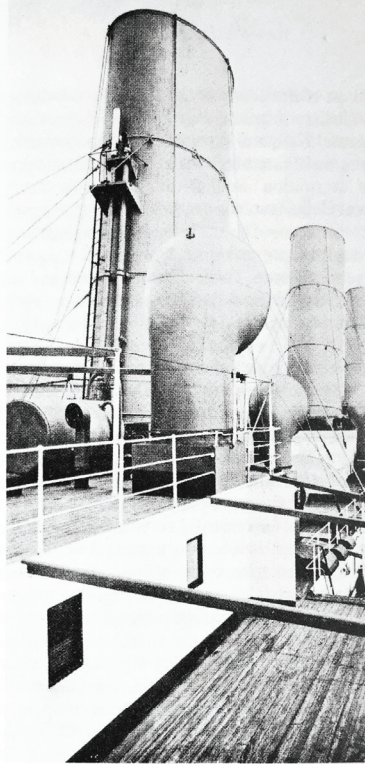
Perhaps Semper did not literally mean that ornament was solely developed from weaving and greatly overstated the importance of technique in its development. However, his idea of domestic space embodied in the very surface of the walls perseveres. After all, is structure really the primary element of architecture? Modern building techniques, more often than not, push structure to a lightweight, most minimal frame, and cover it entirely behind smooth surfaces that pretend to be solid walls. They push the very surface of that wall to represent the idea of a solid, perfectly smooth wall.

In *White Walls, Designer Dresses*, Mark Wigley uses Semper's theory of ornament symbolically and formally representing the archetypal textile wall and shelter, especially in its polychromy,<sup>61</sup> as a lens to reconsider the ubiquitous modern white wall. In Wigley's view, modernist architecture reduced Semper's symbolic charge of textile into a layer of white paint or stucco. As a thin covering element that is inessential to the wall itself, it condenses Semper's idea of shelter into this layer. To Wigley, this reduction in itself is highly symbolically charged. Framed as "cleansing", in modernist rhetoric this thin layer stands in for morality and hygiene (a very pertinent topic at the time).

61. Semper was partly inspired by the then new discovery of polychromy of ancient Greek architecture; that the pristine white marble of the temples (that had come to represent ideal architecture) was entirely painted in garish colours.

62. Wigley, *White Walls, Designer Dresses*, 23.

"Purist rather than pure,"<sup>62</sup> the layer of white paint was presented as a moralist utopia in Le Corbusier's *Decorative Art of Today*



Canadian Pacific.

## A COAT OF WHITEWASH THE LAW OF RIPOLIN

If the question of decorative art seems in this year, amid the acclamation of the crowd, the firework displays and the palaces of gilt plaster, to take an important place in our concerns, it is because 1925 is exceptionally the inter-

**FIG 5.2** PAGE FROM  
*THE DECORATIVE ART OF  
TODAY* BY LE CORBUSIER.  
IMAGE DEPICTS A WHITE  
WALL ONBOARD A  
CANADIAN PACIFIC SHIP.



where he dedicates a chapter to Ripolin (a type of whitewash or white paint):

*Imagine the results of the Law of Ripolin. Every citizen is required to replace his hangings, his damasks, his wall-papers, his stencils, with a plain coat of white ripolin. His home is made clean. ... Then comes the inner cleanliness, for the course adopted leads to refusal to allow anything at all which is not correct, authorized ... Once you put ripolin on your walls you will be master of yourself.<sup>63</sup>*

63. Le Corbusier, *Decorative Art of Today*, 188.

Inspired by the modern look of ships and their white-painted machine aesthetic, Le Corbusier calls for erasure of traces of human endeavours in architecture by the application of whitewash. This thin layer of white both silences the human memory of architecture and signifies the moral superiority of abstention from ornament. This moralistic rhetoric rings familiar to Adolf Loos in “Ornament and Crime”:

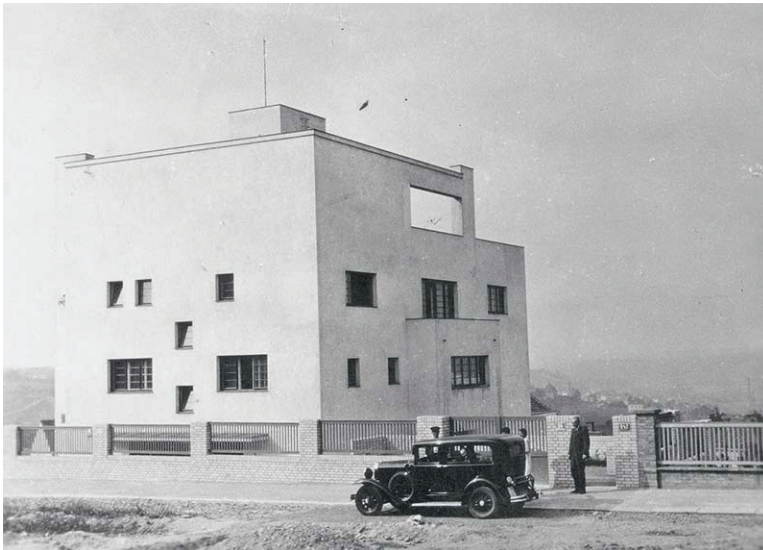
*We have outgrown ornament; we have fought our way through to freedom from ornament. See the time is nigh, fulfilment awaits us. Soon the streets of the city will glisten like white walls.<sup>64</sup>*

64. Loos, “Ornament and Crime,” 8.

They both put a white, blank wall in step with a moral high ground, pushing an ideology as taste (or, perhaps, ideology *over* taste – they promise a new fulfilment for subscribing to an aesthetic choice). Although Loos’s words should not be taken at face value, as they were meant to provoke rather than preach, the “purist” sentiment persists deeply in architecture. “Purity” and “simplicity” could not shake the not-

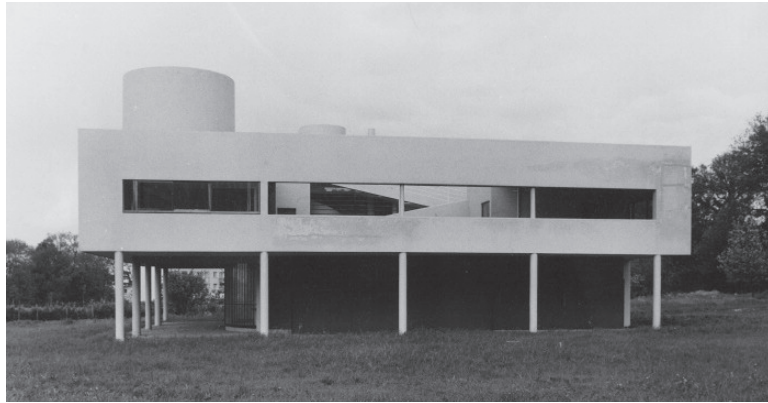
so-subtle connotations with moral superiority. White-walled machine aesthetic washes away any physical index of humanity.

Wigley argues that the abstraction of the white wall is central to modernism. He singles out the stereotypical modernist white stucco villa (and its precursors, like Villa Savoye by Le Corbusier and Villa Müller by Loos) as an example of “purity” entangled with a particular look. The popularity of white stucco façade was not so much a love for the material of stucco but rather an aspiration to abstraction of building volume and wall plane. It aims to remove all human-made imperfections of the wall, and is void of any decoration. The white stucco walls aspire



**FIG 5.3** VILLA MÜLLER  
BY ADOLF LOOS, 1930.

**FIG 5.4** VILLA SAVOYE  
BY LE CORBUSIER, 1928.



to be a perfect plane, and a perfect, abstract volume, reminiscent of a purely functional machine.

All of that charge, the idea of a wall as shelter and the supposed moral purity, inhabits the veneer of a blank wall; this thin layer signals a perfect plane.

Contemporary ornament treats the wall as a perfect plane. Contemporary ornament, in its *wallpaper* strategy, freely scales the wall, unencumbered by its limit, as if the wall is an abstract plane and building is just a volume. Contemporary ornament performs the same role as that white paint or stucco – it packs the idea of a “pure” surface into a physical wall. Contemporary ornament participates in that story of cleanliness and freedom from traditional ornament.

In its *interface* strategy, contemporary ornament blocks the line of

human communication that Grabar referred to as ornament's relational power. By inserting a distancing device into that line of communication between the maker and the viewer, the ornament appears to be mute or opaque in meaning. Since modernist rhetoric refuses the human memory in architecture and any of its indices, especially ornament, contemporary ornament mutes itself to block that connection.

Contemporary ornament still plays by modernist rules, despite its primary function as a communication device. It censors itself to participate in modernist framework of making architecture.

Modernist insistence on leaving the human out of the production of architecture influences the contemporary ornament. After the post-modernist flamboyancy of ornament, modernist ideals come back to silence contemporary ornament in very particular ways. They flatten it, reduce it to the surface, silence its potential meaning, introduce distance. Contemporary ornament is ornament created adhering to modernist principles. It is not a critique of its modernist ban but, rather, a submission to it. Modernism has such a strong hold over contemporary architects that it has major consequences even in an act that is meant to defy it. Even if the very act of willful ornamentation is a direct rebellion to modernism, contemporary architects submit to the framework that modernism set up. Is that what makes this kind of ornament contemporary? Is this contradiction the source of anxiety in ornament?



# CONCLUSION

The intent of this thesis was to document, criticise and analyse the shifting status of ornamentation in architecture from the 1990s to the late 2010s. It uncovered biases and internal turmoil over the creation of ornament that, through analysis, revealed properties of contemporary ornament that aligned with modernist views on ornament and its production.

The thesis pushed me to explore a particular curiosity of mine, the phenomenon of contemporary ornament. I had the distinct feeling that contemporary ornament looked and felt different from its earlier iterations, and that it operated in conflicting ways. However, the anxiety about writing on and making ornament was always at the forefront of the experience. It stalled the project at times and stunted its growth. Yet it provided the fundamental argument for doing this project in the first place: the curious internal conflict between the urge to ornament and the self-censorship. Ornament and specifically the particular ways it has been presented during that time proved to be a rich ground for research and exploration, even if it resulted in an often unfashionable and frustrating thesis topic.

The physical projects for this thesis have been tests for the methodology developed by observation of strategies most contemporary

65. CAM (computer aided manufacturing) is a term most often used in industrial applications but it applies to architecture as well. It encompasses a variety of techniques that use software to operate physical machine tools, like jet-cutting, laser-cutting and CNC-milling in 2 or 2.5 axes, industrial robots for full 3-dimensional milling, and 3D printers.

ornamented architecture takes. Even though I attempted to ornament both manually and through CAD (computer aided design) software, the more successful attempts proved to be the ones relying on digital fabrication techniques. While I am not an expert in CAM (computer aided manufacturing<sup>65</sup>), the digital strategy taken lessened the anxiety surrounding the making (perhaps due to its associations with traditional ornamentation). Perhaps I am not alone in that – digital fabrication is how the vast majority of contemporary ornament is made and it points to an avenue in contemporary architecture that is experiencing substantial growth in the recent years. Digital fabrication has been an increasingly larger option in architectural education. Because it is no less a skill than traditional craft, it requires intense specialization. To use the newly-available tools and learn their limitations takes some time, practice and availability. Some design and architecture firms start looking more like digital fabrication craftspeople. MCM Inc., Denegri Bessai Studio, Stacklab, Studio O-S-A, Philip Beesley Architects, to name a few local examples, are architecture firms making digital fabrication their primary focus. There is also an explosion of research and design labs affiliated with universities (like University of Stuttgart’s ICD mentioned earlier) where funding is available for acquisition and use of larger scale machines. A large part of the work they do are installations, mixing digital fabrication



with art (although often their goal is to show proficiency), and often producing highly ornamental work.

These type of labs and digital fabrication firms are also the ones shaking the word “ornament” the most, perhaps in the hopes to not limit their work to the small-scale. However, recognizing the bias against ornament and analyzing its origins (in my case, education steeped in modernist thought), opens up more possibilities, and gives courage to, in the end, do what it is you want to do, without worry of needing to disguise ornamental work as something else.

In the meantime, perhaps the strategies of contemporary ornament provide a continuity of the larger story of ornament, letting a new breed of contemporary ornament develop in the protective shadows of *wallpapered* ornament. These strategies act as coping mechanisms that provide the breeding ground for thought of what new contemporary ornament might look like. Perhaps more genuine contemporary ornament needs space to crystallize, and the context of ornament of 1990s and 2000s provides that space.



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