

ARCHITECTURE AND FEMINISM: DISCUSSIONS TOWARDS INCLUSIVE  
IDEOLOGIES, PEDAGOGIES, AND PRACTICES

By

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To Forrest and my wonderful family

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Abstract of Thesis Presented to the Graduate School  
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ARCHITECTURE AND FEMINISM: DISCUSSIONS TOWARDS INCLUSIVE  
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By

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This research focuses on the intersection between spatial relationships, collaboration, and materiality through the lens of architecture and Feminism. For the last twenty years, Feminism has been dormant in the discourse of architecture. While similar topics, such as “women in architecture” or “gender-bias in architecture,” have been discussed on and off, these topics shy away from the word Feminism and continue to segregate women into their own group rather than identifying them as equal collaborators and contributing members of the profession. This research argues, as bell hooks has said, that Feminism is for everybody. By recognizing and celebrating the differences amongst individuals, a more diverse and comprehensive understanding of architecture can be achieved.

This research explores collaboration as a method of inclusion, which provides the opportunity to discover richer histories, develop more diverse curriculums, and engage with new mediums. It uncovers more inclusive and diverse narratives as contexts able to present alternative readings of architecture (both its progressive and regressive qualities) and develops a field capable of highlighting women whose narratives are often silent or forgotten. Of particular relevance to this work is the influence of Anni Albers. Here, her narrative is given new life as she is examined as artist, collaborator, and architectural educator. These writings hope to reignite

Feminism in the discourse of architecture and begin conversations capable of positively restructuring the ideologies and practices that shape our societies.

## CHAPTER 1 INTRODUCTION: ARCHITECTURE AND FEMINISM

In the “Introduction” to *Architecture and Feminism*, circa 1996, Debra Coleman identifies ‘feminism’ as a word rarely used in architecture. ‘Feminism’ has negative connotations and associations, Coleman notes, like “the spinster boomer, the burned-out super mom, the childless career woman, and, of course, the man-hater,” and points out how architectural writers generally opt for phrases like “gender-gap, gender-discrimination, gender-bias, and gender-equity.”<sup>1</sup> Although the book was published over twenty years ago, this still seems to hold true.

Eight years later in an article for *Harvard Design Magazine*, architectural feminist Mary McLeod points out that:

In the United States today, feminist architecture history—like feminism in general—has nearly disappeared. The flood of publications during the early 1990s (*Sexuality and Space*, *The Sex of Architecture*, *Architecture and Feminism*) has by now ground to a halt; few schools continue to offer classes on ‘gender and architecture’; and scholars in their twenties and thirties tend to find other subjects—sustainability, digitalization, and globalization—more compelling.<sup>2</sup>

Today, outside the architecture discipline, while basic reactions to the word ‘feminism’ might still exist, conversations about gender and discrimination awareness seem to be on the rise. Merriam-Webster’s Word of the Year for 2017 was “Feminism,” showing a 70% increase in the interest of the word since 2016.<sup>3</sup> The Women’s March on Washington brought together women around the world through a cry for a new wave of Feminism (Figure 1-1) and the #MeToo Movement created a safe space for silenced women to find strength, support, and accountability.

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<sup>1</sup> Debra Coleman, “Introduction” to *Architecture and Feminism: Yale Publications on Architecture*, ed. Debra Coleman, Elizabeth Danze, and Carol Henderson (New York: Princeton Architectural Press, 1996), x.

<sup>2</sup> Mary McLeod, “Perriand: Reflections on Feminism and Modern Architecture,” *Harvard Design Magazine*, no. 20(2004): [www.harvarddesignmagazine.org/issues/20/perriand-reflections-on-feminism-and-modern-architecture](http://www.harvarddesignmagazine.org/issues/20/perriand-reflections-on-feminism-and-modern-architecture).

<sup>3</sup> “Word of the Year 2017,” Merriam-Webster, accessed February 25, 2018. <https://www.merriam-webster.com/words-at-play/woty2017-top-looked-up-words-feminism?src=defrecirc-explorem-w>,

Sheryl Sandberg's book *Lean-In: Women, Work, and the Will to Lead* topped the NY Times Best Sellers List and Amazon's Top 100 Books, and the dystopian novel *The Handmaid's Tale*—a novel rooted in female reproductive rights—found a belated rise in popularity, both in print and a television adaptation. As a result, ideas about this new feminist culture have begun to leak into popular culture through social media, movies, books, and television (Netflix, HBO, Hulu, etc.). Although these shifts are only whispers, they may give some indication of a desire for a conversation long overdue, of an ideological structure that may be shifting. Yet, Feminism is relatively absent in the current architectural discourse, and its “silence is getting louder.”<sup>4</sup> As of 2017 only three women have been recipients of the Pritzker Prize and only two the AIA Gold Medal. *The Missing 32% Project* is asking, “Where are the women architects?”<sup>5</sup> Is it time to reintroduce feminism into architecture (Figure 1-2)?

This research looks to Feminism as a method of inclusion for all, regardless of gender. It uses this lens of Feminism to question existing narratives of architecture and propose new narratives of inclusion and progress, narratives that look towards fields of collaboration, materials, and making. It builds on the foundations of *Vorkurs: Making* (the publication for the University of Florida's Graduate School of Architecture, Volume 01) and has been structured in much the same way: different written pieces (research paper, interview, exhibit review, and essays) each explore a particular topic in relation to "Architecture and Feminism."

Chapter Two, “Evolving Ideologies: Feminist Rereadings of Modern Domestic Space,” begins by retroactively considering the field of architecture history. It reexamines Modern domestic architecture in terms of its effects on feminine emancipation and looks to narratives

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<sup>4</sup> Mark Wigley, “Untitled: The Housing of Gender,” in *Sexuality & Space*, ed. Beatriz Colomina and Jennifer Bloomer (New York: Princeton Architectural Press, 1992), 329.

<sup>5</sup> “Why Equity Matters for Everyone,” Equity by Design, accessed February 25, 2018. <http://eqxdesign.com/origins/>

beyond those of the male designer. More inclusive historical narratives like women's dress and entrance into the work force are considered and the architecture, materials, and assemblies of these homes are reread to attain a more complete picture of an evolving ideological arc; an arc situated in a more inclusive historical context than is currently written. Shifting from practice to academia, it is important to recognize that the University of Florida's School of Architecture also sits in a deeply rooted historical context with diverse narratives of influence. Chapter Three, "A Conversation with Nina Hofer," delves into this history. This interview acts as a joint between the larger discourse of architecture and the University of Florida School of Architecture, and not only highlights the pedagogical contributions of an amazing woman to the UF curriculum, but inquires of other women whose contributions may have been silent, unidentified, or forgotten. The last chapters (two short essays) examine collaboration as a method of inclusion, whether retroactively—to write key players back into the histories they helped make—or looking forward—to engage in more inclusive design practices, both in academia and the profession.

Like the Eames's "Powers of Ten," this research begins broadly and continues to narrow—from Modernism and ideology to the University of Florida architecture curriculum to Anni Albers's body of work and finally to a single design/build project at Seahorse Key, FL.<sup>6</sup> Through shifting scales of subject matter, these four pieces offer diverse paths of investigation for future research. In this, the hope is that each begins to ask more questions than it provides answers, in order to mine the possibilities for a more inclusive practice and "arrive at a fuller, more complex vision" of architecture.<sup>7</sup>

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<sup>6</sup> Charles Eames and Ray Eames, Eames Office, "Powers of Ten," Youtube, 26 August, 2010, <https://www.youtube.com/watch?v=0fKBhvDjuy0>.

<sup>7</sup> Mary McLeod, "Perriand: Reflections on Feminism and Modern Architecture," *Harvard Design Magazine*, no. 20(2004): [www.harvarddesignmagazine.org/issues/20/perriand-reflections-on-feminism-and-modern-architecture](http://www.harvarddesignmagazine.org/issues/20/perriand-reflections-on-feminism-and-modern-architecture).



Figure 1-1. Women's March on Washington. Image credit: Elizabeth Cronin, 2017.



Figure 1-2. Gallery exhibit, *Architecture and Feminism*, Elizabeth Cronin. Image credit: Elizabeth Cronin, 2018.

CHAPTER 2  
EVOLVING IDEOLOGIES: FEMINIST REREADINGS OF MODERN DOMESTIC SPACE

**Mobility and Transparency**

This research focuses on ideas of feminism in the domestic space of the house as it pertains to modern architecture. While existing explorations into the subject, like Beatriz Colomina's "The Split Wall: Domestic Voyeurism," examine women as objects of spectacle in modern architectural theory, film, and photography, this research looks to examine domestic space not through the gaze of the male spectator but through the architecture, its constructed elements and the social context in which it intervenes (Figure 2-1).<sup>1</sup> It revises these feminist readings of the home by looking at the architecture of the house itself. Here house is the actual architectural construction. "Complication[s] of the 'home' can be seen in some current revisions of identity politics, but still the question is not yet architectural — home, not house. The house remains unrevised."<sup>2</sup> By examining the house as its own object of materials, structure, etc., domestic space can be reevaluated "to arrive at a fuller, more complex vision of Modernism—one that includes both its regressive and progressive dimensions."<sup>3</sup> This will be done by looking at specific works by three architects: Adolf Loos's Villa Moller (1929), Le Corbusier's Villa Savoye (1931), and Mies van der Rohe's Farnsworth House (1951). These examples present a gradient of modernism through the lens of transparency and mobility: from beginning attempts to utilize more fluid space to entirely blurred boundaries between interior and exterior. They

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<sup>1</sup> Beatriz Colomina, "The Split Wall: Domestic Voyeurism," in *Sexuality & Space*, ed. Beatriz Colomina and Jennifer Bloomer (New York: Princeton Architectural Press, 1992), 73-128.

<sup>2</sup> Mark Wigley, "Untitled: The Housing of Gender," in *Sexuality & Space*, ed. Beatriz Colomina and Jennifer Bloomer (New York: Princeton Architectural Press, 1992), 331.

<sup>3</sup> Mary McLeod, "Perriand: Reflections on Feminism and Modern Architecture," *Harvard Design Magazine*, no. 20(2004): [www.harvarddesignmagazine.org/issues/20/perriand-reflections-on-feminism-and-modern-architecture](http://www.harvarddesignmagazine.org/issues/20/perriand-reflections-on-feminism-and-modern-architecture).

question the boundaries of public to private—masculine and feminine—and examine the changing role of ‘mask’ in feminist domestic space as being capable of “contributing to emancipatory ideas of domestic life.”<sup>4</sup>

### **Villa Moller: Breaking Through the Mask**

Although Adolf Loos (1870-1933) was not a discrete figure of the modernism movement “his influence on the succeeding generation of architects, particularly Le Corbusier, was enormous,” and his writings would “eventually turn him into the unwitting father figure of the 1920s Modern Movement.”<sup>5</sup> As a predecessor of modernism, his later work gives early hints to forthcoming changes in domestic space, and this research will use his Villa Moller as a datum from which to measure these shifts.

Villa Moller is located in Vienna and was completed in 1928 for the textile businessman Hans Moller and his wife. It was the penultimate house Loos designed, and, as this analysis will show, it deals with ideas of interior and exterior—mobility and transparency—using extremely particular methods. First, on the interior: the floors and interior walls were used to create what Loos called, “a great revolutionary moment” in architecture, “the transformation of the floor plan into volume.”<sup>6</sup> In doing this, Loos made use of what he deemed the ‘Raumplan’. The ‘Raumplan’ makes the ground spatial and works through a variability of changing levels which are “negotiated by “a complex arrangement of short stair flights.”<sup>7</sup> This renders the house’s occupants as “highly controlled” in their movement and makes it difficult for those within to

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<sup>4</sup> Ibid.

<sup>5</sup> Alan Colquhoun, *Modern Architecture* (Oxford: Oxford University Press, 2002), 73-74.

<sup>6</sup> Ibid., 81.

<sup>7</sup> Ibid., 80.

move in a non-linear fashion and “form a mental picture of the whole.”<sup>8</sup> In order to accommodate the inconsistency of the voluminous floor plan, the interior walls become key “both phenomenally and structurally.”<sup>9</sup> They act as thick barriers between rooms and become the continuous vertical structure through the floors of the house. As the main structural elements, the opaque walls enclose each individual room from the others, but, interestingly, some transparency is still achieved in cut out openings made in a few select walls (Figure 2-1). This allows for limited visual links to be made.<sup>10</sup>

Second, on the exterior: the heavy outer walls mask the interior space from the public sphere (Figure 2-2). As feminist architectural writer and historian Beatriz Colomina points out, “modernity is bound up with the question of mask.”<sup>11</sup> Even Loos, not quite a modernist architect himself, wrote of the ‘mask’ often, calling Vienna “a city of masks.”<sup>12</sup> In his essay “Underclothes” (1898), he writes about the ‘mask’ as the exterior skin which protects an intimate interior, using fashion and dress to call out clothing as the mask and façade that allows the modern man to integrate into society.<sup>13</sup> He points out that the fashionable man dresses “in such a way that stands out the least” but that all classes of men wear the same underclothes, exclaiming: “But woe to us if the top layers of our clothing fell off piece by piece and we stood there in our underclothes! Then everyone would realize that we simply put on our European clothes like a

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<sup>8</sup> Ibid., 81.

<sup>9</sup> Ibid.

<sup>10</sup> Ibid., 81-82.

<sup>11</sup> Beatriz Colomina, *Privacy and Publicity: Modern Architecture as Mass Media* (Cambridge, Mass.: MIT Press, 1994), 23.

<sup>12</sup> Ibid., 26.

<sup>13</sup> Adolf Loos, “Underclothes,” in *Spoken into the Void: Collected Essays 1897-1900*, trans. Jane O. Newman and John H. Smith (New York: MIT Press, 1982), 72.

mask, and that underneath we still wear the national costume.”<sup>14,15</sup> Fundamentally this becomes a discussion of interior and exterior—hidden and concealed.

From this perspective, the interior of Villa Moller acts as the intimate underclothing. Hidden behind an exterior mask is concealed the “modern urban man...[to] protect him from the stress of the modern metropolis.”<sup>16</sup> It is not until he “penetrate[s] the external wall” of his house that he can remove his masculine mask to become “enmeshed in [the] ‘feminine’ and sensuous complexity” of the domestic space.<sup>17</sup> It is important to note that, once exposed, the masculine undergarment offered a loose-fit, as it was mainly structured by the garments over top. If the tailored and fitted overclothes—here, the ‘mask’—were removed, the man was freed and able to move unrestrained within his domain.

On the other hand, H. Kristina Haugland (associate curator of Costume and Textiles at the Philadelphia Museum of Art) points out that at the time of Loos’s essay (1898) corsets were the primary female underclothes.<sup>18</sup> Here, the “emphasis [is] on a very curvaceous feminine figure,” and consequently the opposite was true of the feminine and the ‘mask’.<sup>19</sup> For a woman, the fit and tailoring of her body in space did not come from the masking exterior but rather from the interior underclothes themselves. In fact, the corsets and feminine undergarments that curved and so specifically shaped the female body put her form on display—shaping breasts, waist, and

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<sup>14</sup> Ibid., 11.

<sup>15</sup> Ibid., 72.

<sup>16</sup> Alan Colquhoun, *Modern Architecture* (Oxford: Oxford University Press, 2002), 83.

<sup>17</sup> Ibid.

<sup>18</sup> H. Kristina Haugland, “Revealing Garments: A Brief History of Women’s Underwear” (presentation, Philadelphia Museum of Art, Youtube, 48:03-48:47, November 15, 2012), <https://www.youtube.com/watch?v=AJ6eqMgn5u0>.

<sup>19</sup> Ibid., 48:03-48:47.

hips—and helped to create a structure of exposure, where nothing is hidden. Here, “the mask produces what it hides.”<sup>20</sup> It is not the exterior that controls the feminine (like the masculine) but rather the interior (Figure 2-3).

In Villa Moller, the exterior mask consists of a thick façade “pierced by relatively small openings which [do] not allow any sustained visual contact with the outside world.”<sup>21</sup> This turns the occupation of this house towards the interior. While this lack of contact with the outside acts as a reprieve for the masculine from the chaotic exterior he mostly occupies, it serves to confine the feminine within the ‘mask’ that controls her. With its shifting floor plan, thick walls, and heavy exterior mask, the experience of Loos’s Villa Moller is almost labyrinthine. Its linear circulatory paths accommodate movement from one room to the next but preference the still as the primary mode of occupation. In many ways, this house exposes the “opposing male mobility in the exterior [as compared] to female stasis in the interior.”<sup>22</sup>

In order to understand the value of the Loos house in this discussion, we need to look further back in history to achieve a broader understanding of architecture’s role in the domesticity of the home. In Mark Wigley’s “Untitled: The Housing of Gender,” he looks as far back as Leon Battista Alberti’s *On the Art of Building in Ten Books*, the first printed book on architecture (1485). Upon examining it, he says:

Its fifth book, when discussing the design of ‘private’ houses, contains an overt reference to architecture’s complicity in the exercise of patriarchal authority by defining a particular intersection between a spatial order and a system of surveillance which turns on the question of gender. Women are to be confined deep

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<sup>20</sup> Beatriz Colomina, *Privacy and Publicity: Modern Architecture as Mass Media* (Cambridge, Mass.: MIT Press, 1994), 23.

<sup>21</sup> Alan Colquhoun, *Modern Architecture* (Oxford: Oxford University Press, 2002), 82.

<sup>22</sup> Mark Wigley, “Untitled: The Housing of Gender,” in *Sexuality & Space*, ed. Beatriz Colomina and Jennifer Bloomer (New York: Princeton Architectural Press, 1992), 335.

within a sequence of spaces at the greatest distance from the outside world while men are to be exposed to that outside.<sup>23</sup>

Here, Wigley describes a level of insulation, through the layering of heavy, opaque walls, as playing a huge role in the confinement of women within the house. The use of stone and other heavy, opaque materials to develop the walls as the primary load bearing structure was common at this time period. These thick, heavy walls offered very little mobility in the interior. Each room, structured by its perimeter walls, would act in isolation to create a linear circulatory path throughout the house. With little to no transparency between rooms, “boundaries are only established by the intersection between a walled space and a system of surveillance which monitors all the openings in the walls.”<sup>24</sup> These houses thus become “no more than a nested system of enclosed spaces” containing the women, through complete surveillance, “to the thresholds of the house, the doors and windows.”<sup>25</sup>

Also of great importance is the complete privatization and separation of women from the exterior. Being confined only to the interior and surveyed on all movements within, women had little transparency to the outside. Windows were small and few, housed in the thick external protective shell of the house. Interestingly, this “relationship of the house to the public sphere is reproduced on its interior.”<sup>26</sup> While the mask acts to conceal the private interior of the house from the public exterior, the intimacy within the interior is masked as well, further privatizing the women within.

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<sup>23</sup> Mark Wigley, “Untitled: The Housing of Gender,” in *Sexuality & Space*, ed. Beatriz Colomina and Jennifer Bloomer (New York: Princeton Architectural Press, 1992), 332.

<sup>24</sup> *Ibid.*, 338.

<sup>25</sup> *Ibid.*

<sup>26</sup> *Ibid.*, 336.

The thickness and insularity of Villa Moller may seem not too dissimilar from the houses described by Wigley — in the controlled movement of the inhabitants, opaque layering, and impenetrable mask between the interior and exterior. Beatriz Colomina, certainly describes this house in such a way in her article “The Split Wall: Domestic Voyeurism.” She points out that “not only are the windows either opaque or covered with sheer curtains, but the organization of the spaces and disposition of the built-in furniture seems to hinder access to them.”<sup>27</sup> This, she says, turns “the eye...towards the interior” and reinforces the confinement of the mask in its stark separation between interior and exterior. She also exposes the “precise, static positions” occupants would have held, “usually indicated by the unoccupied furniture”<sup>28</sup> and the ease this gives in “monitor[ing] any movement in the interior.”<sup>29</sup>

Colomina reads the “spatial-psychological” aspects of the space as the occupant might experience through “regimes of control inside the house.”<sup>30</sup> Colomina offers an effective reading of the Villa Moller and the narrative of domestic patriarchal authority asserted at the time of its construction. However, looking to larger historical arcs and reading the architecture of the house itself might provide a different, more flexible outcome; an outcome that might suggest the beginnings of an evolution in domestic space. On this, Mary McLeod says:

Colomina’s reading played an important polemical role during a particular time period, but I think...we must begin to examine historically what was progressive and what was regressive in their attitudes and practices. I just feel we’re at a stage of feminist scholarship where we can go beyond earlier reductive readings, and try

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<sup>27</sup> Beatriz Colomina, “The Split Wall: Domestic Voyeurism,” in *Sexuality & Space*, ed. Beatriz Colomina and Jennifer Bloomer (New York: Princeton Architectural Press, 1992), 74.

<sup>28</sup> Beatriz Colomina, *Privacy and Publicity: Modern Architecture as Mass Media* (Cambridge, Mass.: MIT Press, 1994), 234.

<sup>29</sup> Beatriz Colomina, “The Split Wall: Domestic Voyeurism,” in *Sexuality & Space*, ed. Beatriz Colomina and Jennifer Bloomer (New York: Princeton Architectural Press, 1992), 78.

<sup>30</sup> *Ibid.*, 76.

to figure out to what extent modern architecture both embodied and challenged traditional gender constructions. Besides considering its oppressive dimensions, we need to ask how modern architecture contributed to emancipatory ideas of domestic life and of the design profession itself.<sup>31</sup>

Although Loos retained many of the architectural devices used to exercise patriarchal control in his design of Villa Moller, the house itself did begin to make some small changes in the way domestic space was constructed. These can be seen (1) in the introduction of some implication of transparency to the interior of the house and (2) in the treatment of the ‘zimmer de dame,’ the feminine space of “command and inner sanctum.”<sup>32</sup> First, contrasting the ‘private’ homes described by Wigley, Adolf Loos begins to inject small moments of transparency into the house by cutting out openings in the walls to visually link certain spaces together. While Colomina would argue this only further supports masculine surveillance (and thus control within the house), the openings in the walls can also be viewed as a first step in an evolutionary process.<sup>33</sup> Although these openings do little to improve the woman’s physical mobility in the house, breaking down some portions of the walls to expose the intimate spaces within (even if only through visual means) is progress from the completely masked interiors described by Wigley. This is most evident in the ‘zimmer de dame.’

Beatriz Colomina describes the ‘zimmer de dame’ as the “most intimate sequence of living spaces in the house.”<sup>34</sup> As the raised ladies sitting area, it would be expected that this space would be buried in the center of the house, secured by opaque layers of both interior and

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<sup>31</sup> Karina Van Herck, “First Interlude: On the Nuances of Historical Emancipation,” *The Journal of Architecture* 7, no. 3 (2002): 245.

<sup>32</sup> Alan Colquhoun, *Modern Architecture* (Oxford: Oxford University Press, 2002), 81.

<sup>33</sup> Beatriz Colomina, “The Split Wall: Domestic Voyeurism,” in *Sexuality & Space*, ed. Beatriz Colomina and Jennifer Bloomer (New York: Princeton Architectural Press, 1992), 78.

<sup>34</sup> Beatriz Colomina, *Privacy and Publicity: Modern Architecture as Mass Media* (Cambridge, Mass.: MIT Press, 1994), 238.

exterior masking as it is in another villa by Loos: Villa Müller. In fact, not only is the ‘zimmer de dame’ in Villa Moller surrounded by punctuated walls on the interior (Figure 2-4), it is pushed to the periphery and the only space in the entire house to break through the exterior façade’s two-dimensional elevation (Figure 2-5). Here, if only in section, the most feminine space of the house is pushed over the street and out into the public sphere, providing “the occupant with a vantage point” to view both the interior and exterior.<sup>35</sup>

These little details may seem insignificant, but at the time of Villa Moller’s construction in 1928—when women were beginning to shed their corsets for more mobile undergarments and enter the work force—the subtlety of these shifts may be early reflections of other movements in society.<sup>36</sup> If “she is ‘domesticated’ by internalizing the very spatial order that confines her,” what happens when that spatial order begins to change?<sup>37</sup>

### **Villa Savoye: Delaminating the Mask**

Built at a similar time to Villa Moller (1928), Villa Savoye was completed in Poissy, France in 1931. However, while Villa Moller constituted the end of Adolf Loos’s career, Villa Savoye came halfway through Le Corbusier’s. As Colomina points out, Villa Savoye acts as the “reverse condition of Loos’s interiors” by using framed views of the exterior to push the occupants to the periphery of the house.<sup>38</sup> Le Corbusier always stressed “that his architecture was built around a series of unfolding views, encompassing and celebrating the movement of the

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<sup>35</sup> Ibid., 244.

<sup>36</sup> H. Kristina Haugland, “Revealing Garments: A Brief History of Women’s Underwear” (presentation, Philadelphia Museum of Art, Youtube, 1:04:56, November 15, 2012), <https://www.youtube.com/watch?v=AJ6eqMgn5u0>.

<sup>37</sup> Mark Wigley, “Untitled: The Housing of Gender,” in *Sexuality & Space*, ed. Beatriz Colomina and Jennifer Bloomer (New York: Princeton Architectural Press, 1992), 340.

<sup>38</sup> Beatriz Colomina, “The Split Wall: Domestic Voyeurism,” in *Sexuality & Space*, ed. Beatriz Colomina and Jennifer Bloomer (New York: Princeton Architectural Press, 1992), 98.

human body,”<sup>39</sup> and Colomina acknowledges this, saying, “unlike Adolf Loos’s houses, perception here [at Villa Savoye] occurs in motion.”<sup>40</sup> In her feminist reading of the house, Colomina examines photographs of Le Corbusier’s work and notes that we follow this motion, seemingly only of women, from “the point of view...of a voyeur.”<sup>41</sup> She observes that the women in the photographs often have their backs to the camera and are usually “contained by the house [the interior], bounded.”<sup>42</sup> She also points out that “this spatial structure is repeated very often, not only in the photographs but also in the drawings of Le Corbusier’s projects” turning the woman into “an object of another’s gaze.”<sup>43</sup>

While this is an apt analysis of the photographs and drawings, it relies on the narrative of occupation constructed by Le Corbusier through the media he used to represent his work at the time it was built. Despite the implications of Le Corbusier’s representation methods, the architecture of Villa Savoye itself is still worth examining. In this analysis of Villa Savoye, the architecture will be considered through what Le Corbusier called his five points of architecture—the free plan, pilotis, the free façade, the horizontal window, and the roof terrace.<sup>44</sup> All five of these architectural devices are essential to the ways Villa Savoye reshapes the domestic order of the intimate interior of the house, and in looking at the architectural detailing and construction methods used, there are several important things to point out: the fluidity of the interior space,

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<sup>39</sup> Flora Samuel, *Le Corbusier in Detail* (Oxford: Architectural, 2002), 128.

<sup>40</sup> Beatriz Colomina, “The Split Wall: Domestic Voyeurism,” in *Sexuality & Space*, ed. Beatriz Colomina and Jennifer Bloomer (New York: Princeton Architectural Press, 1992), 98.

<sup>41</sup> *Ibid.*, 104.

<sup>42</sup> *Ibid.*, 102.

<sup>43</sup> *Ibid.*, 104,128.

<sup>44</sup> William J.R. Curtis, *Le Corbusier: Ideas and Forms* (New York: Rizzoli, 1986), 43.

the framing of exterior views (and perhaps most importantly) the delamination of the exterior ‘mask’.

At this point, it is also important to note shifts in women’s clothes and underclothes at the time of and in the time leading up to the construction of Villa Savoye. In the 1920s skirt lines were shortened and, “for the first time in western history, you could see how women moved around...you could see them walking.”<sup>45</sup> By the 1930s, with the introduction of the brassiere, women’s undergarments shifted completely. While some women continued to wear a girdle to slim their bodies—a small improvement from the harsh shaping authority of the corset—others began to wear only brassieres which offered little support.<sup>46</sup> This provided a looser fit between the female body and its outermost layer (Figure 2-6). Relieved of its structuring responsibilities, women’s clothing began to move from being a corseted structure—a shell which preferences the static—to a loosely fitted perimeter—a delaminated skin that establishes space for movement. Here, the shift in the structuring (or lack thereof) of the interior mask leads to greater mobility for the body encased within. This delamination of the overclothes from the underclothes lends itself to a more liberated relationship with the exterior and actually—in its pulling apart—creates a less exposed structure. With this in mind, similar connections can be drawn to Villa Savoye.

Whereas Villa Moller introduced visual mobility into the house through cutouts in the thick, opaque walls, Le Corbusier used a different method. Beginning with the ‘pilotis’ and the ‘free plan’ (the first two of his five points of architecture) William J.R. Curtis describes the advantages of this structural system “whereby interior walls could be arranged at will to fit

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<sup>45</sup> H. Kristina Haugland, “Revealing Garments: A Brief History of Women’s Underwear” (presentation, Philadelphia Museum of Art, Youtube, 51:42-52:10, November 15, 2012), <https://www.youtube.com/watch?v=AJ6eqMgn5u0>.

<sup>46</sup> Ibid., 52:10-53:15

functional demands, channel movement or create spatial effects.”<sup>47</sup> This building construction method, an advent of modernism, liberates the wall from the floor and allows each carefully placed wall within the house to act as a partition that divides space rather than enclosing it. “Here a floor slab, the first floor slab and a roof garden slab are linked...and supported on slim columns [pilotis] to which the façade and the walls have relinquished their former structural role.”<sup>48</sup> The relinquishing of the walls’ structural responsibility—like the women’s underclothes of the time—becomes a crucial aspect in the restructuring of domestic space, in that it allows for the ideas of visual mobility seen in Villa Moller to evolve into that of physical mobility. By cutting out portions of the walls, Loos was able to achieve some visual transparency in Villa Moller while retaining the structural integrity of the house. In Villa Savoye, no longer reliant on the wall as structural components, Le Corbusier was able to remove entire barriers to encourage movement to pass fluidly through the space of the house. As a result of this construction method the role of transparency should also be reconsidered. As physical transparency is important for the mobility of the feminine on the interior, visual transparency continues to be significant as a method for feminine access to the exterior. Since the walls are no longer required to be structural, transparency can be achieved by replacing enclosing and opaque spans with transparent materials like glass, opening up entire stretches of the façade to the exterior while still providing insulating properties (Figure 2-7).

Although Villa Savoye appears to be masked by a thick, uniform exterior wall—like Villa Moller a “hermetic cube, difficult to penetrate”—Alan Colquhoun describes “the wall

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<sup>47</sup> William J.R. Curtis, *Le Corbusier: Ideas and Forms* (New York: Rizzoli, 1986), 69.

<sup>48</sup> Flora Samuel, *Le Corbusier in Detail* (Oxford: Architectural, 2002), 21.

separating the two worlds of inside and outside” at Villa Savoye as “only a thin membrane.”<sup>49</sup> Initiated by the introduction of the pilotis, Le Corbusier’s third point (the ‘free façade’) permitted for the building’s exterior cladding to be “liberated from the traditional weight bearing constraints [to allow] for openings to be arranged at will for light, view, climate or compositional needs” (Figure 2-8).<sup>50</sup> As the thinning and opening up of the barriers on the interior was beneficial so too is it important on the exterior. Flora Samuel, quoting Richard Weston, describes the exterior walls of Le Corbusier’s villas as “‘stretched planes’ and not gravity bound supporting walls.”<sup>51</sup> In Villa Savoye, Le Corbusier’s thinning of the non-load bearing exterior shell and insertion of horizontal strip windows worked to create a new connection to the exterior, particularly when compared to Loos. Unlike Loos, whose main intent was to turn Villa Moller’s occupants towards the interior, Le Corbusier used the architecture of Villa Savoye to frame the exterior.

Le Corbusier’s fourth point, the ‘horizontal window’, is “really a subset of the third, since the horizontal glass band was but one version of the free façade.”<sup>52</sup> Samuel notes “one of the most straightforward uses of the architectural frame is to pull the exterior environment into the confines of the building.”<sup>53</sup> For Le Corbusier, she postulates “the horizontal window is perhaps the most successful in bringing the environment into the interior...as it gives access to the horizon in a long unbroken panorama.”<sup>54</sup>

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<sup>49</sup> Alan Colquhoun, *Modern Architecture* (Oxford: Oxford University Press, 2002), 82, 149.

<sup>50</sup> William J.R. Curtis, *Le Corbusier: Ideas and Forms* (New York: Rizzoli, 1986), 69.

<sup>51</sup> Flora Samuel, *Le Corbusier in Detail* (Oxford: Architectural, 2002), 77.

<sup>52</sup> William J.R. Curtis, *Le Corbusier: Ideas and Forms* (New York: Rizzoli, 1986), 69.

<sup>53</sup> Flora Samuel, *Le Corbusier in Detail* (Oxford: Architectural, 2002), 102.

<sup>54</sup> *Ibid.*

Le Corbusier used the horizontal window in many of his buildings, often to frame and draw connections to the exterior. However, it is important to note the specific and unique way it is constructed in Villa Savoye:

Observing that most of Le Corbusier's contemporaries chose to use steel frames as these were better suited for the creation of simple, seemingly flat, curtains of glass, Ford suggests that Le Corbusier favoured the use of timber at the Villa Savoye as the 'recessed notch at the head, the projecting sill, and the two planes of the sliding window make it possible to see the wall as a series of parallel planes.'<sup>55</sup>

This implies, despite the illusion of the solid, more stereotomic mask (not too dissimilar from Villa Moller) the exterior mask of Villa Savoye is actually a tectonic construction. It is made of an assembly of thin, light pieces, and Le Corbusier's intentional exposure of the parallel planes that comprise the exterior wall present an opportunity—a glimpse—for the occupant to understand the subtlety of the construction and the delicacy of the layers used to construct the barrier between interior and exterior.

With this in mind, the exterior façade of Villa Savoye is actually comprised of two different types of conditions. The first is the exterior to the interior, as described above. This portion of the masking façade acts as the peripheral boundary between the house's interior and the public sphere and encompasses the home in a thin skin "cut by a continuous horizontal window."<sup>56</sup> The second, manifested in one of the 'rooftop terraces' (Le Corbusier's fifth point), is produced as a hybrid space that is both simultaneously interior and exterior.

In Villa Savoye, there are two rooftop terraces. The first, a space on the uppermost roof, is constructed in much the same way as the terrace at Villa Moller. In his terrace space, Loos designed an exterior patio directly off of the dining room to sit and view the garden. It is

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<sup>55</sup> Ibid., 77.

<sup>56</sup> Alan Colquhoun, *Modern Architecture* (Oxford: Oxford University Press, 2002), 82, 149.

constructed as a ground plane with no level of enclosure and thus is presented as an exclusively exterior space. Like Villa Moller, the upper rooftop terrace at Villa Savoye is separated from the interior of the home and not quite as useful in this discussion. The second terrace, however, offers a much more interesting spatial configuration. Embedded at the heart of the house, this lower terrace questions the relationship between interior and exterior and in so doing creates an occupiable opening in the exterior 'mask'.

The way Le Corbusier chooses to construct this embedded terrace integrates it as part of the interior. His blurring of its interior/exterior qualities begins with his continuation of the mask around the external perimeter of the space. This permits the embedded terrace to become a room in the house that is vertically enclosed from the public sphere in much the same way as the rest of the interior. However, as a space without a roof, it can be preserved as distinctly exterior in its non-conditioned quality. Le Corbusier continues to reinforce the bleed between interior and exterior, and vice versa, by connecting the embedded terrace space to the internal living room through the thinnest, most transparent membrane in the house; a wall of floor to ceiling glass. As the layers of the exterior mask are cracked open to reveal the space in between, it is as if the exterior plane of the living room space has been stretched and pulled away to a new boundary, leaving behind a transparent layer, an abstracted edge: the mark and remnant of where that external plane used to be. While the roof stops at the interior, the vertical layers of the house pull apart and delaminate from one another to create a new space, one open to the sky. In this embedded terrace, the architecture of Villa Savoye questions the solidity of the 'mask' (Figure 2-9).

Le Corbusier was able to pull the outside to the inside through framed views, tectonic assemblies, and the creation of a space that begins to delaminate the discrete edge between

interior and exterior (seen in earlier houses like Villa Moller). In doing so he was able to rethink the relationships between open and closed, structured and loose, insulated and exposed. In Villa Savoye “the solid volume is opened up whenever possible by cubes of air, strip windows, immediate transitions to the sky...Corbusier’s houses are neither spatial nor plastic...air flows through them.”<sup>57</sup>

### **Farnsworth House: Removing and Abstracting the Mask**

Up to this point, the discussion of the houses selected has been focused around ideas of interior and exterior through mobility, transparency, and the exterior ‘mask’. “For Loos..., the mask is a masculine accoutrement that hides a feminine side,” so it stands to reason the “possibility that women should be modernized and join men in the public sphere is predicated on the masculinization of women’s clothing, [the] attainment of a mask.”<sup>58</sup> However, by examining a woman’s underclothing (her most intimate architecture) in the context of domestic space, it becomes clear that for the feminine “the mask produces what it hides.”<sup>59</sup> What then would happen if, instead of attaining a ‘mask’ as Loos suggests—to find liberation in the masculine public—the mask is removed, and the feminine interior becomes no longer hidden but fully exposed? This brings the conversation to the Farnsworth House designed by Mies van der Rohe twenty years after the construction of the Villas Moller and Savoye.

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<sup>57</sup> Alan Colquhoun, *Modern Architecture* (Oxford: Oxford University Press, 2002), 82, 149.

<sup>58</sup> Charles Rice, “Photography’s Veil: Reading Gender and Loos’s Interiors,” in *Negotiating Domesticity: Spatial Productions of Gender in Modern Architecture*, ed. Hilde Heynen and Gulsum Baydar (London; New York: Routledge, 2005), 287.

<sup>59</sup> Beatriz Colomina, *Privacy and Publicity: Modern Architecture as Mass Media* (Cambridge, Mass.: MIT Press, 1994), 23.

Farnsworth house was completed in 1951 for Edith Farnsworth, “an unmarried doctor who lived and worked in Chicago.”<sup>60</sup> At this moment in history, it was expected that women would return to the domestic positions they held before the war. The more straight-lined, boyish, and free figures seen in 1930s women’s fashion were replaced with a “return to a very curvaceous feminine ideal”<sup>61</sup> and “women were encouraged to embrace motherhood and homemaking in newly built single-family houses.”<sup>62</sup> Edith Farnsworth, a successful nephrologist, was a nonconformist to these social pressures of 1950s America. Finding herself trapped in the “contradiction between family life and singleness...lonely, bored, and overworked” she decided to build a weekend house to escape the drudgery of the city and commissioned Mies van der Rohe for the job.<sup>63</sup> The product, a floating glass box in the landscape, is as far from the hidden and insulated feminine interior space (seen in the previous examples) as can be conceived and does little to return to traditional domestic space as it was occupied before the war. Described as the “perfect embodiment of Mies’s dictum ‘Less is more,’” the Farnsworth house is:

Eight slender columns of white-painted steel support a transparent glass box; two horizontal planes — crisp, parallel bands of steel hovering above the ground — represent the floor and the roof. Though barely making physical contact with its site, the house seems securely anchored in the green sea that surrounds it; there is a toughness and immutability to the structure, which contrast with the thinness and apparent insubstantiality of the forms.<sup>64</sup>

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<sup>60</sup> Alice T. Friedman, *Women and the Making of the Modern House: A Social and Architectural History* (New York: Harry N. Abrams, 1998), 128.

<sup>61</sup> H. Kristina Haugland, “Revealing Garments: A Brief History of Women’s Underwear” (presentation, Philadelphia Museum of Art, Youtube, 55:51-55:06, November 15, 2012), <https://www.youtube.com/watch?v=AJ6eqMgn5u0>.

<sup>62</sup> Alice T. Friedman, *Women and the Making of the Modern House: A Social and Architectural History* (New York: Harry N. Abrams, 1998), 132.

<sup>63</sup> *Ibid.*, 131,133.

<sup>64</sup> *Ibid.*, 127.

This house (Figure 2-10) is different from Villa Moller and Villa Savoye in many ways, but one stands out in particular: the client. Whereas Loos and Le Corbusier built for a family (husband and wife), usually with the husband as the primary client, Mies van der Rohe's client was a single woman. As such, Edith Farnsworth was "given the opportunity to act as client in [her] own right [and sought] out new architectural solutions to accommodate unconventional ways of living."<sup>65</sup> This not only changed the structure of the client-architect relationship but called into question the structuring of domestic space altogether — as it would require "unconventional and atypical programming challenges because of the dominance of patriarchal models in design typologies" and "new forms of design."<sup>66</sup>

To start, it is important to acknowledge the many issues with the architecture of the house. There were technical issues—when Farnsworth moved into the house in December 1950, "the roof leaked badly and the heating produced a film that collected on the inside of the windows"; legal issues—Farnsworth's deteriorating relationship with van der Rohe, pressures from family and friends, and "disagreements over money" eventually led to long drawn out court cases; occupational issues; privacy issues—"concerns about privacy, or about sexuality and social life were repressed"; and feminist issues, among others.<sup>67</sup> Needless to say, in many ways, the house seems to be an architectural and feminist disaster, but it is also "widely recognized as one of the masterpieces of modern architecture, not only in the United States but in the world"

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<sup>65</sup> Alice T. Friedman, *Women and the Making of the Modern House: A Social and Architectural History* (New York: Harry N. Abrams, 1998), 16.

<sup>66</sup> *Ibid.*, 86.

<sup>67</sup> *Ibid.*, 139-140.

and warrants some attention as a feminine space in both its regressive and progressive qualities.<sup>68</sup>

Although its regressive qualities may almost be too many to name—specifically pertaining to issues of feminine occupation and privacy—some progressive qualities do also exist. As a completely transparent box, Farnsworth House takes the idea of loose-fit to the extreme. It becomes “a building almost completely devoid of program,” and, as such, has few interior walls besides the opaque core containing the bathroom at the center of the house.<sup>69</sup> With the only other walls of the house occupying the transparent exterior perimeter, there are few restrictions on interior movement in the house; hence, the more fluid mobility apparent in Villa Savoye evolves into completely open circulation in Farnsworth House.

Of the relationship between interior and exterior, Farnsworth house progresses beyond Villa Savoye as well. Whereas in Villa Savoye, views to the exterior were framed and a fully glass wall was used to connect only the embedded terrace space to the interior, Farnsworth House implements “a thin but seemingly impermeable membrane of glass [to] form the boundary between inside and outside on all four sides of the box.”<sup>70</sup> “Views from the house are framed by the rectilinear structure” and “one’s awareness of the material world is heightened.”<sup>71</sup> In this way, the boundary between interior and exterior becomes abstracted, “the surface of the wall...a picture plane and the objects behind it...imaginary.”<sup>72</sup> Since the walls are constructed completely of glass, the ‘mask’ of the house is entirely removed, and, although Farnsworth

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<sup>68</sup> Ibid., 147.

<sup>69</sup> Ibid., 130.

<sup>70</sup> Ibid., 128.

<sup>71</sup> Ibid.

<sup>72</sup> Ibid.

would later add large curtains to deal with some of the house's privacy issues, these textiles become a 'mask' she can control and put on/remove at will (Figure 2-11).

If the "mask is [the] masculine accoutrement" that constructs the exterior form of the building as object, then removal of that 'mask' might serve to de-objectify the building.<sup>73</sup> In Farnsworth House, the removal of the exterior 'mask' completely exposes the structure of the house and its feminine occupant, and so the house must integrate into the privacy of its suburban setting. The bare object must fade into the context that houses it (Figure 2-12). In this, Farnsworth House becomes largely predicated on the field condition of its site and relies heavily on its natural surroundings to bring a material condition to the unmasked façade; the abstracted reflections become the 'mask' of the field.

### **Architecture and Ideology**

In his article "Narrative and Ideology," Jerry Palmer discusses and questions the "relationship between narrative and social structure," pointing to links between the consumption of certain art forms and "the structure of the society in which they are produced and consumed."<sup>74</sup> This research presents a new feminist reading of modern architecture through the reading of the architecture of three houses and the societal structures set in place at the time of their constructions. It moves away from the static context of the narrative presented by the lone male architect and examines other narratives (in this case those of women's fashion) to place the architecture in a larger feminine context. It is important to note, however, that these narratives are still restricted and do not consider all of the systems that survey and control domestic spaces.

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<sup>73</sup> Charles Rice, "Photography's Veil: Reading Gender and Loos's Interiors," in *Negotiating Domesticity: Spatial Productions of Gender in Modern Architecture*, ed. Hilde Heynen and Gulsum Baydar (London; New York: Routledge, 2005), 287.

<sup>74</sup> Jerry Palmer, *Potboilers: Methods, Concepts, and Case Studies in Popular Fiction* (London; New York: Routledge, 1991), 89.

This paper focuses on the homes of a set of people with similar socio-economic privileges—individuals whose houses became prominent examples of architecture which embodied the qualities of the modern movement. (Future studies hope to examine modernism’s effect on housing for a more diverse and complex population.)

The capacity of the house to resist the displacing effects of sexuality is embedded within a number of systems of control—mythological, juridical codes, forms of address, dress codes, writing styles, superstitions, manners, etc.—each which takes the form of surveillance over a particular space, whether it be the dinner table, the threshold, the church, the fingertips, the bath, the face, the street. These apparently physical spaces requiring supplementary control in turn participate in a broader ideological field.<sup>75</sup>

Much like the undergarments of women shifted from a style of structured fit to that of a more loose-fit, so too did modern domestic space shift. It evolved from the controlled and static domestic occupation of Villa Moller to the more flexible and mobile occupation of Villa Savoye and Farnsworth House. These examples and their feminist rereadings present a gradient of modernism—from its beginning attempts to utilize more fluid space and question the edges of public and private to completely blurred boundaries between interior and exterior and loose-fit mobility. They look to the disintegrating ‘mask’ as a possible means for domestic liberation and move “beyond reductive charges of sexism and victimization and simplistic value judgements of good and bad, in order to arrive at a fuller, more complex vision of Modernism.”<sup>76</sup>

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<sup>75</sup> Mark Wigley, “Untitled: The Housing of Gender,” in *Sexuality & Space*, ed. Beatriz Colomina and Jennifer Bloomer (New York: Princeton Architectural Press, 1992), 338.

<sup>76</sup> Mary McLeod, “Perriand: Reflections on Feminism and Modern Architecture,” *Harvard Design Magazine*, no. 20(2004): [www.harvarddesignmagazine.org/issues/20/perriand-reflections-on-feminism-and-modern-architecture](http://www.harvarddesignmagazine.org/issues/20/perriand-reflections-on-feminism-and-modern-architecture).



Figure 2-1. Villa Moller, cut openings in the walls. Source: Ralf Bock and Adolf Loos, *Adolf Loos: Works and Projects* (Milano; Skira; New York: Rizzoli International Publications, 2007), 242. Edited by: Elizabeth Cronin.



Figure 2-2. Villa Moller, heavy exterior mask. Source: Ralf Bock and Adolf Loos, *Adolf Loos: Works and Projects* (Milano; Skira; New York: Rizzoli International Publications, 2007), 237. Edited by: Elizabeth Cronin.



Figure 2-3. *Structured Dress*, interior exposure on the exterior. Image credit: Elizabeth Cronin, 2017.



Figure 2-4. Villa Moller, 'zimmer de dame.' Source: Ralf Bock and Adolf Loos, *Adolf Loos: Works and Projects* (Milano; Skira; New York: Rizzoli International Publications, 2007), 243.

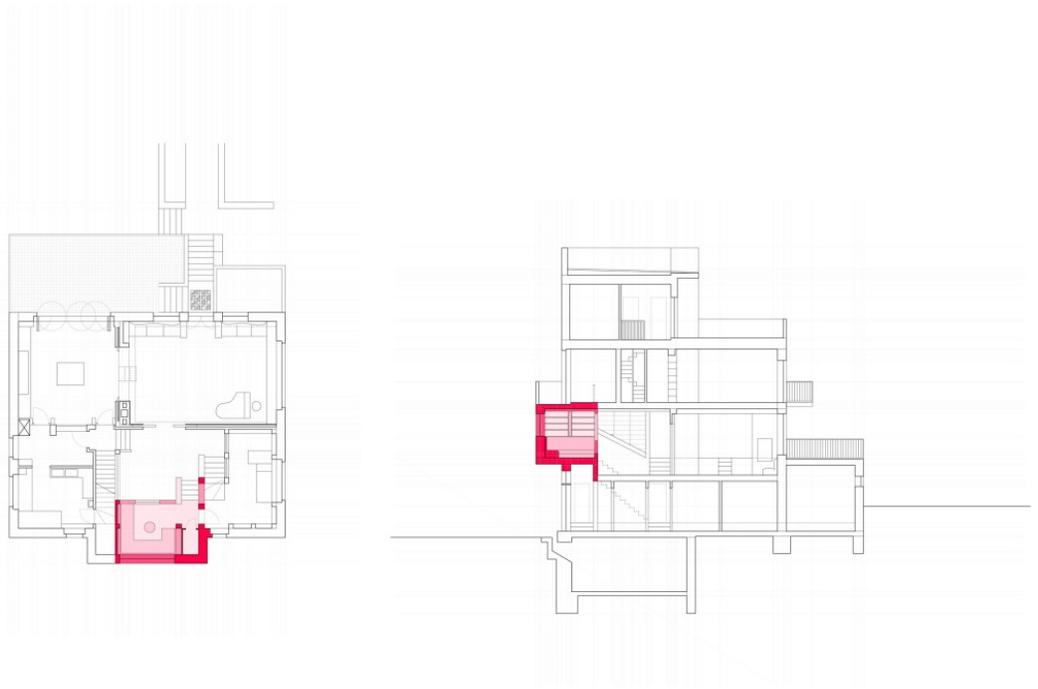


Figure 2-5. Villa Moller, plan and section drawings. Image credit: Elizabeth Cronin, 2018.



Figure 2-6. *Loose-fit Dresses*, delaminated exterior layer. Image credit: Elizabeth Cronin, 2017.

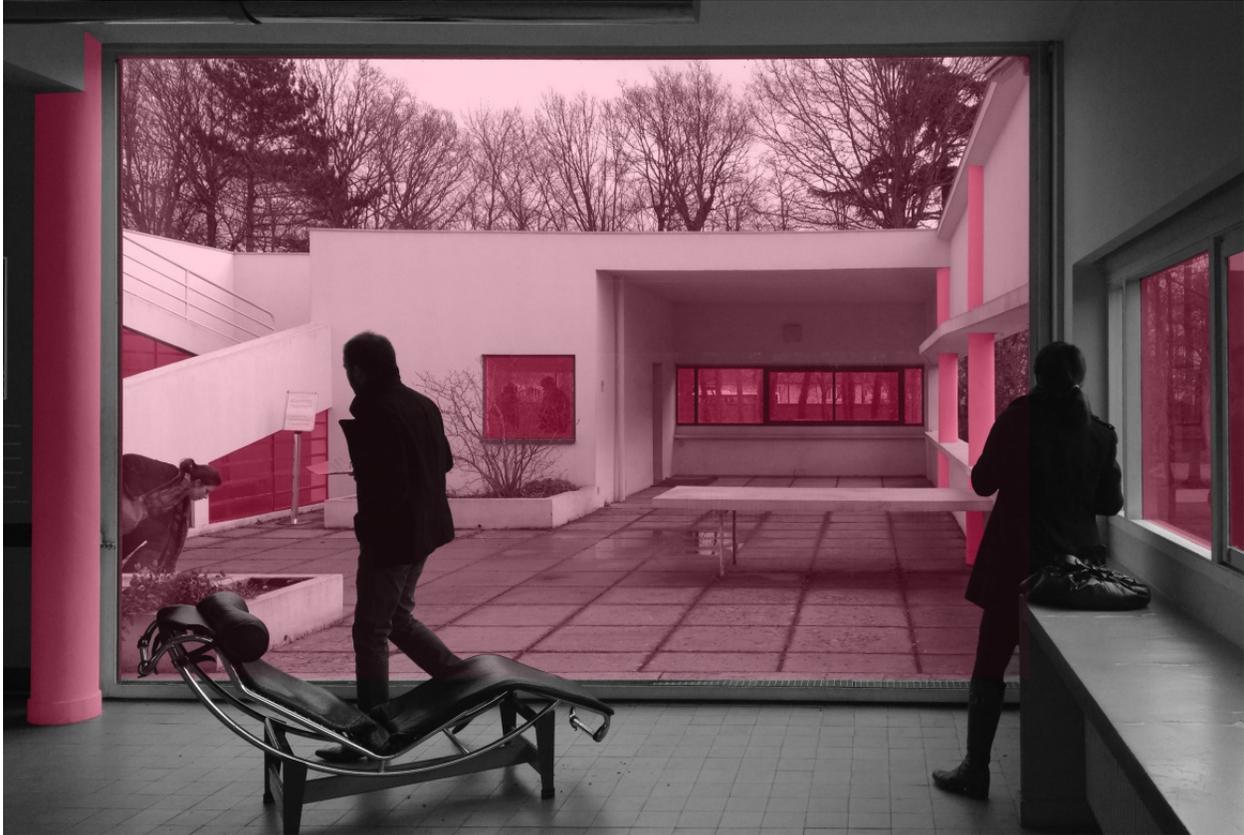


Figure 2-7. Villa Savoye, floor to ceiling glass wall to courtyard. Image credit: Elizabeth Cronin, 2018.



Figure 2-8. Villa Savoye, exterior. Image credit: Elizabeth Cronin, 2018.



Figure 2-9. Villa Savoye, unfolded panorama of delaminated courtyard space. Image credit: Elizabeth Cronin, 2018.



Figure 2-10. Farnsworth House. Source: “History of the Farnsworth House,” Farnsworth, accessed 16 March 2018. <https://farnsworthhouse.org/history-farnsworth-house/>. Edited by: Elizabeth Cronin.

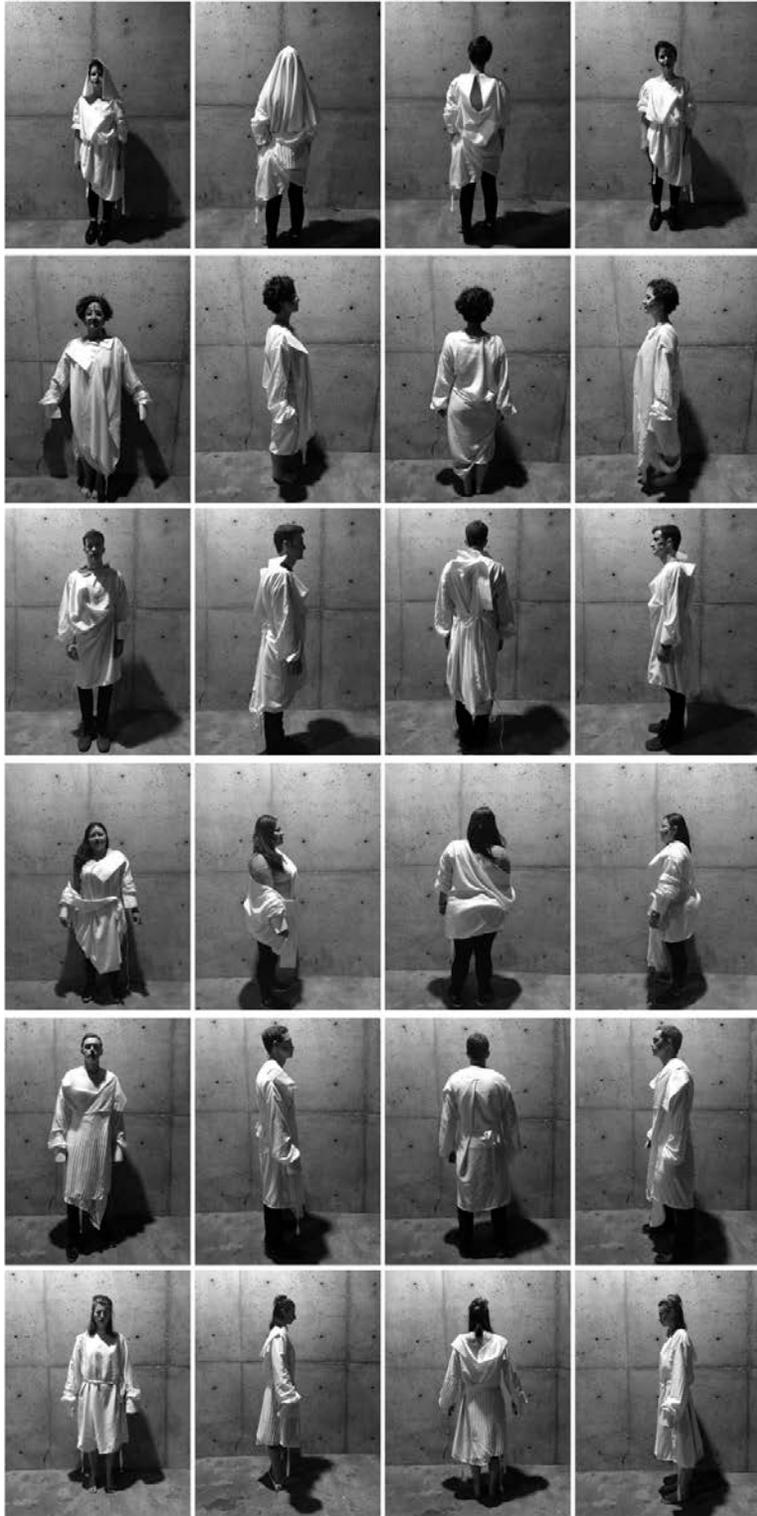


Figure 2-11. *Subjectivity Dress*, mask constructed by occupant. Image credit: Elizabeth Cronin, 2017.



Figure 2-12. Farnsworth House, abstracted reflections. Source: “Farnsworth House PLUS,” Chicago Architecture Foundation, accessed 16 March 2018. <https://www.architecture.org/experience-caf/tours/detail/farnsworth-house-plus/>. Edited by: Elizabeth Cronin.

CHAPTER 3  
A CONVERSATION WITH NINA HOFER: ON THE UNIVERSITY OF FLORIDA  
ARCHITECTURE CURRICULUM

Nina Hofer (NH) is an Associate Professor at the University of Florida School of Architecture and Director of UF's MSAS Pedagogy program. She was interviewed by Elizabeth Cronin (EC) on March 1, 2018. This interview began with thoughts from Mary McLeod from "Perriand: Reflections on Feminism and Modern Architecture":

I believe that a deeper knowledge of how gender was constructed, maintained, and challenged would help us address present-day inequities in the profession. This means going beyond reductive charges of sexism and victimization and simplistic value judgments of good and bad in order to arrive at a fuller, more complex vision of Modernism—one that includes both its regressive and progressive dimensions.<sup>1</sup>

EC: So here, Mary McLeod is discussing the importance of identifying the progressive aspects of Modernism along with the regressive. That was the starting point for my paper on Modern domestic space, to find "a fuller, more complex vision of Modernism."<sup>2</sup> I think, however, we should begin to adopt this attitude of a more complex and complete picture not just when examining Modernism but when looking at architecture in general. This means looking at architecture education and practice, but it also means looking at a more inclusive narrative, one that might begin to recognize individuals who are often written out of the picture. So I've been looking at Josef and Anni Albers. We know Josef was a huge influence here at UF. We can track it and talk about it. But, I also want to talk about the impact of Anni, whether directly or indirectly; that she was another possible vector of influence.

NH: Right.

EC: And it can be a retroactive thing. Looking at what we're doing now in the Grad program (to me) is very much Anni Albers in the way that it works with materials and deals with site and field, particularly in the first semester and design/build. So, I wanted to talk to you today about Josef Albers, and then some of the particular qualities of our curriculum.

To begin: Can we talk a little bit about the first semester curriculum (Design One) specifically the *Cube* and the *Matrix* projects? I think those are the foundations

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<sup>1</sup> Mary McLeod, "Perriand: Reflections on Feminism and Modern Architecture," *Harvard Design Magazine*, no. 20(2004): [www.harvarddesignmagazine.org/issues/20/perriand-reflections-on-feminism-and-modern-architecture](http://www.harvarddesignmagazine.org/issues/20/perriand-reflections-on-feminism-and-modern-architecture).

<sup>2</sup> Ibid.

for most of the projects we do here (at UF), either by building on or in combination. It seems like those deal with the field and the object.

NH: Yes. The guiding questions for Design One emerged about twenty years ago through developing work. Prior to that I think Design One worked with the *Kit of Parts* idea. This came out of Hejduk and some other people who developed it in Texas, namely Colin Rowe and John Hejduk, and was an idea (to some extent) about figured space; in other words looking at space as a volume and the construction of space as a volume.

Here, where Voichysonk came from [Josef] Albers and Yale, there was a huge, huge emphasis on drawing and on the craft of drawing because it was literally a much more highly crafted thing (then we had Rapidograph pens, Mylar, etc). But also on the ability of the axonometric to begin to both represent space and make space ambiguous, thereby opening up possibilities. And so the ability to use the two dimensional drawing as a way to construct the object itself and play off of the relationships that can happen within the page was something that Voichysonk used a lot. He would look between the elements and the ambiguity of that as being something that spurs your imagination, and I think that came straight from Albers and some of his drawing exercises. Especially the ones in his work with lines that begin to create space and then shift back and forth. It wasn't an Escher thing, but Bernie [Voichysonk] loved the drawings where you couldn't quite resolve what was in front and what was behind. And it's not that they didn't have line weight. They had line weight but that line weight could be read more than one way. So Voichysonk encouraged drawings that could be read in multiple ways and would then go back to the model making from those. So, I would say drawing was the medium of translation. And that in and of itself was very [Josef] Albers—putting the emphasis on the drawing and its ability to manipulate two dimensional space to make a different three dimensional construct.

Then, if you look at [Josef] Albers's color theory (the people I talk to about it seem to think) it has to do merely with color combinations, with looking at color combinations. But when Bernie [Voichysonk] talked about Albers's color theory, it was all about the edge between different colors. So when certain colors are put next to one another, yes there's color change, but that color change is something that creates an edge where one pushes forward and the other pushes back (or vice versa). And the fact that you can change the color by putting different things next to it means that—across the surface of a construction—relationships can be different on one side of the construction than the other side. Where something might seem to step forward here, that same element might seem to push back there. So the ambiguity of that (the relationships and edges between colors) and the ambiguity of the axonometric drawings, relative to both their relationships and line weight, have a very close correspondence. But all of that is based on the premise that the drawing is itself a construct, rather than being something that refers to something else. Well and you know Bernie and Albers's looked at the two dimensional plane as something that was full of depth. What they were interested in was not the formal relationships across the page in the x-/y-

dimension but the ability for it to project itself in the z-dimension as a three dimensional thing. And that's what Albers's color constructions are completely about.

So at a certain point [Bob] MacLeod, [Martin] Gundersen, and I sat down and decided that there were several kinds of space and that the Design One curriculum would introduce what we consider to be all three kinds of space. Have I talked to you about this before?

EC: Great! No...

NH: So, the *Cube* project was about volumetric space (Figure 3-1). We still used a kind of “kit of parts”—although we eventually stopped assigning nine of this and seven of that—and essentially the *Cube* was something where you began to understand how you could imply spatial volume without completely containing it. So that's what the *Cube* project is simply about: how can a few elements make space? How do you understand volumetric space? How do you begin to imply it? How do you begin to enclose it? How do you begin to create spatial relationships that hinge around volumetric space?

Second was the *Matrix* project, which was more about spatial relationships (Figure 3-2). So the *Matrix* project very rarely has volume in it. It's not about holding volumes per se, it's about systems of relationships. And that project usually started with drawing and then became the model. And it came directly out of the *Cube* project because the *Cube* project would start in model and create drawings and the drawings had a certain ambivalence to them. Often we would begin by cutting plans and sections of the *Cube* model and then we would layer those over each other to begin to get a very complex construction (Figure 3-3). Then we could begin to read systems out of that. That's something you (Elizabeth) do all the time, right? You create an enormous state of complexity that has internal events, incidents, and systems in it, and by layering those systems together you begin to create a more complex field. So then it's up to the student to edit that more complex field and begin to see how systems can layer within it. So that's the second kind of space. It's not volumetric, it's relational.

Then the third—which we now call *Room and Garden*—was really called *Itinerary* (Figure 3-4). *Room and Garden* sort of came later. But *Itinerary* was about the occupation of space because neither *Cube* nor *Matrix* deals with this issue. You can imagine occupying implied volume. You can imagine occupying volume fairly easily, but we carefully made it non-occupiable by not having stairs, full enclosure, or any of the things that key you into occupying space. Both were scaleless, and neither (at that time) were discussed in terms of occupation at all. *Cube* was talked about as a construct that created volume, and *Matrix* was not occupiable at all; although sometimes people make the analogy between *Matrix* and city plans, underlying systems of buildings, etc. (which makes sense). And that's a way of leaping forward and saying *Matrix* is something that prepares you for aspects of architecture; the *Cube*—volume, actual implied volume—is

something that prepares you for aspect of architecture. But they weren't intended to be occupiable in that way. *Itinerary* on the other hand was very much about occupation. *Itinerary*, I would say, used to start with campus. It used to start by walking through campus and creating a series of locations or moments from this walk. I think it was mostly like that, and then those were explored diagrammatically rather than explicitly spatially.

We would make things that came from the diagrammatic language but sat within the campus and spaces that were observed.

EC: So you would make a diagram and then intervene into it?

NH: The interventions were generated by the diagrammatic language and sat within the original place of the campus. They were a way of taking a place and interpreting it through an intervening construction that would then be set back into the context. So that was how that started.

You have different models in different studios depending on the person teaching, but *Itinerary* was very much about occupation. It is also important to point out that this third project is very much about time. Neither of the other two projects (*Cube* and *Matrix*) are about time. They're both simultaneous in terms of their time. In the *Cube* everything exists at once, and you have space that is simultaneously one thing and another; simultaneously large scale and small scale; simultaneously making relationships in this direction and relationships in the other direction. It can be rotated, it can be upside down. There's no orientation and no sequence in a cube at all. It's one simultaneous array of arrangements. *Matrix* is flatter, but it's all still simultaneous; all relationships exist at once and qualify each other. In *Itinerary*, sequence becomes really important, and so time is the third: implied volume, spatial relationships, and the third would be sequence of space and time. So those were the three aspects, the three kinds of space, and it was my contention that those are the only three concepts of space; that everything falls into one of those or some combination of those. That every way of thinking about architectures is either *Cube*, *Matrix*, or *Itinerary*. It's one of those three or eventually combines those three in some way. So that's where the first year curriculum came from.

EC: Great! Could you talk a little bit about object (or point) conditions versus field conditions in our curriculum?

NH: So what's a point condition?

EC: I'm thinking that you have the field and then you are intervening in some way. The intervention would be the point or object in the field.

NH: Well, *Matrix* can subsume the other two (*Cube* and *Itinerary*), and neither of those two can subsume and the other. In other words, *Matrix* can be found in everything. You can't say that object includes *Matrix* or *Itinerary*, or *Itinerary* includes *Matrix* or object, but you can say *Matrix* includes object and *Itinerary*.

- EC: It's like the Eames's "Powers of Ten."<sup>3</sup>
- NH: It's very, very hard for me to use the word object because I think of this curriculum as having nothing to do with objects.
- EC: I agree with that.
- NH: The Cooper Union curriculum had to do with objects. Have you seen the *Education of an Architect* book? I never heard the word "space" in my five years at Cooper. Nobody ever talked about space. They didn't talk about spatial relationships. They sometimes talked about path but that was all narrative. They would have used the word 'narrative', so narrative and object. But things were very much objects. Nobody talked about the kinds of space that were included in them. So it's very easy to say *matrix* is everything, but, you know, for me I prioritize spatial volume. For me spatial volume is what I want to see.
- EC: We also preference ground here (at UF). Ground is a big thing. That, to me, is part of what makes *Matrix* really evident in lots of things. It's a fragment of something larger.
- NH: Yes. Context was THE issue during the first half or more of my period here. We talked about context relentlessly. That was where this travel narrative in our curriculum became important. I think it is a narrative that started by looking at the campus in D1. Then by D3 we were going to St. Augustine. There used to be a Savannah term and then a Charleston term. (They weren't collapsed into one term.) Then there was a trip to a city, which wasn't always New York. It was someplace: Boston, Chicago, or places like that. And then I don't remember...I think the landscape studio (Architectural Design Five) was an innovation at a certain point. Here the context was not a structured context or a formal context but relied on having to make a diagram to understand the context in non-formal ways. This was kind of new, and I think that comes from the growth of phenomenology in architecture. So you have to look at that (phenomenology) as another stream that comes in. It comes in later and is not part of the Bauhaus. It's just something else that comes in.
- But the context was huge. It was one of the words we used the most, and we sort of described ourselves as a contextual program. I would say that's the point where the Gropius matrix aspects from the Bauhaus probably came in, and I think they came in through two ways:
- I'd say the first wave was people like Harry Merritt and the Gropius people who were literally Gropius students. The early wave of Harvard came through and then MacLeod was part of the second wave that came in. So yeah, I'd say *Matrix* was everything because even interventions were part of the *Matrix* and figured

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<sup>3</sup> Charles Eames and Ray Eames, Eames Office, "Powers of Ten," Youtube, 26 August, 2010, <https://www.youtube.com/watch?v=0fKBhvDjuy0>.

volumes (objects) were nothing. I mean it was a huge shock to me to come from Cooper to here. Figured volumes are different than objects.

EC: I mean, for me, when I think about this, I feel like Josef Albers is figured volumes of space.

NH: Yeah.

EC: And it's not that you couldn't make a field out of those things or read a field into those things...

NH: It's not about the field. It's about edges and volumes.

EC: Right, and Anni Albers is the opposite of that. That's kind of the more complete picture, that she's more about the field condition.

NH: Mhmm. Right.

EC: What she does is very much about making three-dimensional space in two dimensions. Where Josef Albers is about the edges between things and how you make figured volumes of space, I feel Anni Albers is more about a layered reading of space and spatial systems.

NH: Agreed. You know with [Josef] Albers, I'm going to talk about figure ground as opposed to figured volume per se because [Josef] Albers is all about figure ground and indeterminacy, right? (This kind of flipping back and forth of figure ground.) I mean, when Bernie looked at [Josef] Albers, when he did Albers's color studies or when he looked at these axonometric drawings, they were very dense. And he saw volume in the depth. I mean really a lot of volume. His eyes could see it much more than other people. I struggled to learn to see as much depth in drawings as he did. He could take subtle things, see a lot of depth in them, and by the time he talked to me about it I thought, "Oh god, there it is!" It's a way of seeing that you have to learn to see. But he saw a lot of depth and volume.

EC: When I say object, I mean more the construct of the intervention or of the space. I'm thinking more like a building—which is overlapping volumes of space—versus the kind of field (or context) that it sits in.

NH: Right.

EC: So it's not necessarily object as being objective but the node (or moment) pulled out of the field. Could you speak a little bit about that?

NH: I mean I'd say with the moments...I mean this school has been so *Matrix* oriented for a long time, but it wasn't a good thing if you could pull the intervention out of the field. It was a bad thing. You could see it, it was a densification or an emergence, but it wasn't something that you could separate. Things needed to be

...tied into their context and deeply informed by it. I used to say, "If there's a piece of this that you can pick up and take away, that's a problem." It should be that if you pulled on it, there would be so many strands connected to what you're pulling from that you couldn't take it out.

EC: And that's so Anni Albers...but in a way, it's very much how Josef worked too. But I'm sure the two of them talked about things in very similar ways. Have you seen his stained glass projects?

NH: No.

EC: There's this stained glass project Josef did at the Bauhaus, and Anni has a set of weavings that are very alike in the way that they are structured (see Chapter Four).

NH: Oh interesting. So they were in conversation? Well, obviously they were in conversation.

EC: Yes, and it has been said that a lot of their early stuff is more intertwined than their later stuff because they kind of veered off on their own paths. But, in this, it is important to point out that although Anni elevated weaving to an art (which is a big deal) she was never really allowed to leave that art bubble. Josef is historically remembered as an architecture and design professor, but Anni taught architecture courses at Yale too.<sup>4</sup>

NH: She did?

EC: Yes. She taught architecture seminars but no one ever talks about her as being an architecture educator. I just feel like Josef works at the scale of the building and Anni works at the scale of the context. And so you need both, right? And I feel that we are a school that very particularly deals with both.

NH: We are now.

EC: Yes. Now, particularly.

NH: Well, you also have to ask where phenomenology was lurking. Right? And so you know there was the phenomenological theory strain, and there were the phenomenological issues in architecture—which is what you're talking about in the craft of making, the object, the impact of materiality, all that stuff. I don't think that came out of phenomenological theory, which got very popular. I think that existed and had its places where it showed up, but it was when phenomenological theory came in that it (phenomenology) jumped to the forefront of how architectural education took place. Cooper was one of the places

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<sup>4</sup> Nicholas Fox Weber and Tabatabai Asbaghi, *Anni Albers* (New York: The Solomon R. Guggenheim Foundation, 1999), 174.

where a piece of that (the craft piece) was incubating. Craft was incredibly important at Cooper. In terms of the Bauhaus aspect, in the first term at Cooper you had a six credit drawing class, a six credit shop class... (well, shop is not the word for it but basically a shop class), and a four credit studio. And in the shop class you did two or three week apprenticeships in each material. So you did a wood sequence, you did a plastic sequence, you did a plaster sequence, you did a metal sequence, and you learned to use the tools in the shop and were given a specific project. They weren't inventive projects. So, you know, we had to turn a perfect cone or cast a light bulb. They were craft projects.

So that was lurking at Cooper and spread from Cooper to Columbia, Pratt, etc. I got hired here because everybody wanted a Cooper graduate in their school because that was this particular strain of education that was good and people wanted it. They wanted to add it to their curriculum. But I very quickly became fascinated by what was going on here as well. So the Bauhaus apprenticeship, material piece was being held at Cooper and maybe at other places.

EC: I feel like our school, and it could just be the grad program, really deals with this aspect of materials and experiential space...but it (the grad program) is new.

NH: Well the grad program is brand new.

EC: Exactly. That's why I think it's interesting to trace some of these things back. And I'm fascinated by possibility of all these other influences (known and unknown). I've been looking at a lot of collaborations, and, for example, they're never the Alberses, not really. Part of that is because they do completely different things and work in different mediums. They're not like the Eames or the Smithsons who collaborate on the same projects.

NH: Well, I'm writing out a really important person here which is Mae Lee Foster.

EC: Oh, I don't know who that is.

NH: So, Mae Lee Foster was here as long as Bernie [Voichysonk]. She came at the same time as Bernie, but she did not go through Yale. I have no ideas about her education background, but she was all about the diagram.<sup>5</sup> I mean, *all* about the diagram, and she was important here. She also was a printmaker, and she was very interested in Mexico. So my guess would be that she knew or might have been interested in Anni Albers. As to why, I can't tell you, but I know she was a printmaker.

EC: That's interesting because that's what Anni did at the end.

NH: And her themes were very much about Mexico.

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<sup>5</sup> Mae Lee Foster received her Master of Fine Arts from Temple University-Tyler School of Art in 1969 and her Bachelor of Science in Art Education from the University of Bridgeport in 1964.

But she was a part of Phase One of the curriculum, which was before I got here. Phase Two is when I first arrived. I'd say there's a Phase Three that happened under McCarter, and we're now at Phase Four in terms of my sense of the curriculum; Four being Lisa [Huang], Bradley [Walters], and the start of the new grad school curriculum.

And they (Lisa and Bradley) had a lot of practice. That's another thing you have to recognize. I think what they've done with the grad school has a lot to do with two people who have extremely strong practice backgrounds; the strongest practice backgrounds that we've had in the curriculum as long as I can remember. That's about folding the practice back in, and practices that were very much about phenomenology and material experimentation. Particularly Lisa.

EC: Absolutely. We named it *Vorkurs* (the graduate publication) for a very particular reason. We felt like what we were doing in Grad One was so Bauhaus; it was *so* Bauhaus. And I just think now there's an opportunity to consider the possibility that it's not only the men from the Bauhaus who influenced architecture education. There's a quote from Gropius saying that he was fundamentally against women being trained as architects and I feel this attitude has kind of carried forward.

NH: Well, and remember this: neither Mae Lee nor Voichysonk were architects. They were both artists.

EC: Exactly. Just like the Alberses. Robert McCarter writes about that. Particularly he writes about how modern painting has influenced architecture education. That's what "Spatial Speculations" is all about.<sup>6</sup>

NH: You had two camps early on. You had the camp who were architects like Harry Merritt, and then you had the camp who were artists. Bernie and Mae Lee, as much as they fought, were in the same camp. Mae Lee is probably pretty important to your discussion.

EC: Agreed. I just think it is important to recognize that everyone influences each other. So Josef Albers, I'm sure, was influenced by Anni, just like Anni was influenced by him. You can see it in the work, and that's another vector of this research: the Guggenheim exhibit. I'm very disappointed Anni was written out of it. I think it was a rare chance for the Alberses's work to be examined together. It was a missed opportunity. It could have been a really special moment.

NH: So that's where you write. You write what that moment should be. You write the missing text.

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<sup>6</sup> Robert McCarter, "Spatial Speculations," in *Constructions*, ed. Martin Gundersen and Nina Hofer (Gainesville: University of Florida Department of Architecture, 1993), 80-91.

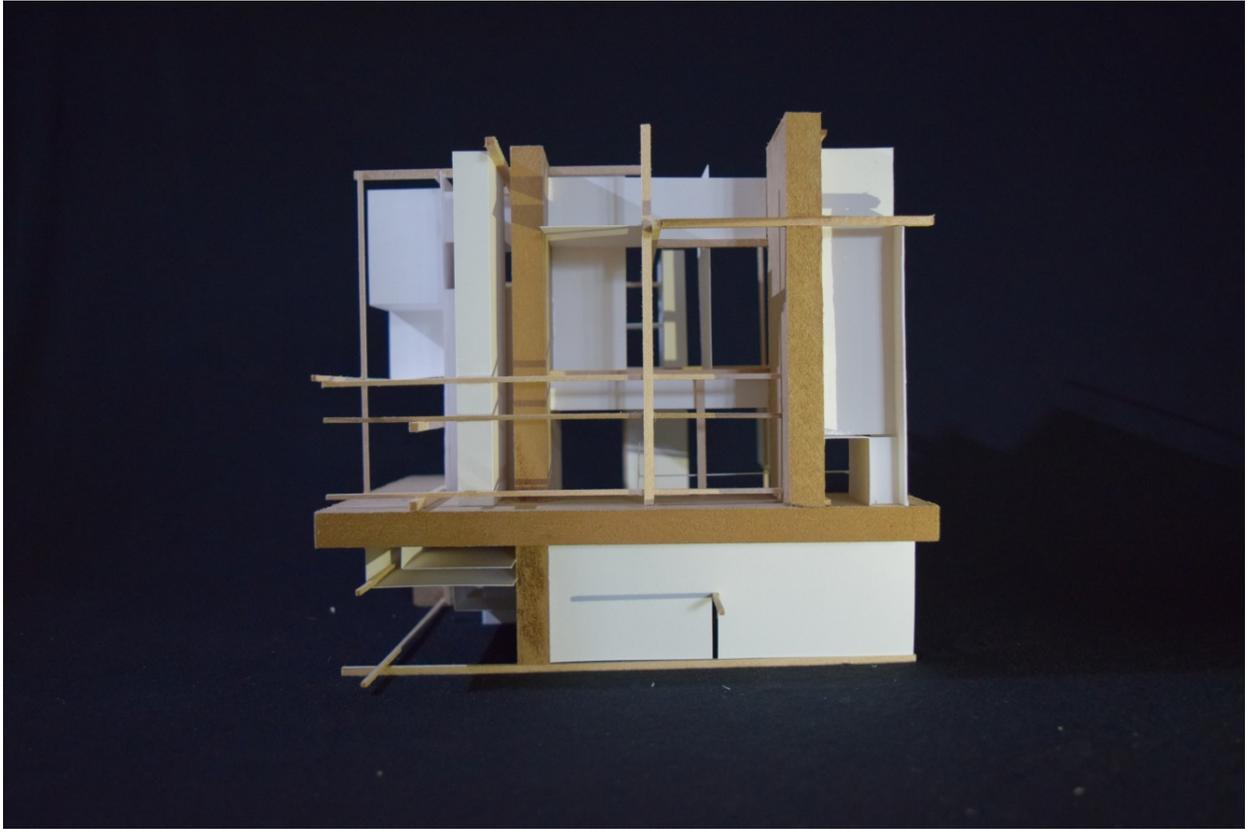


Figure 3-1. *Cube*. Image credit: Jonathon Haist, Architectural Design One, 2016.

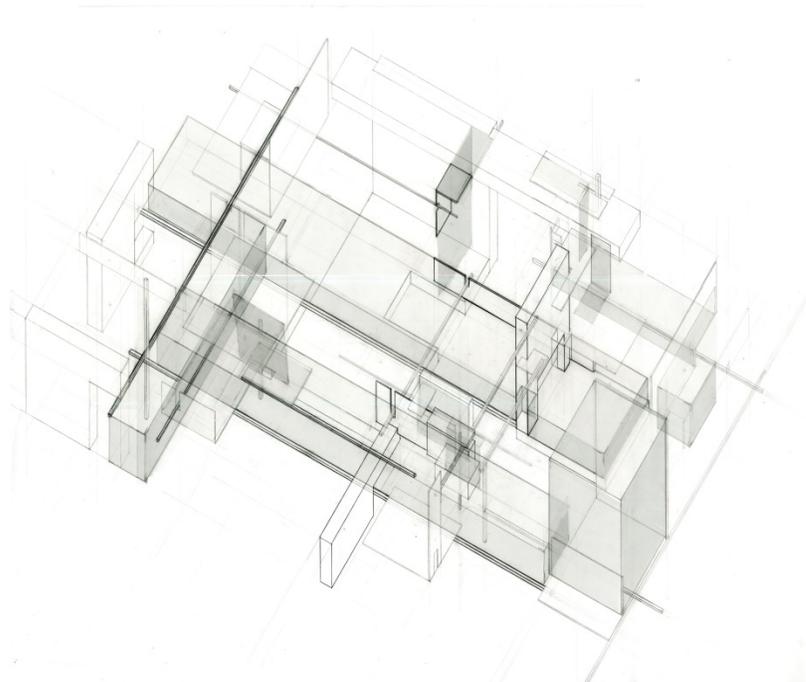


Figure 3-2. *Matrix Axonometric*. Image credit: Daniel Mecca, *Architectural Design One*, 2016.

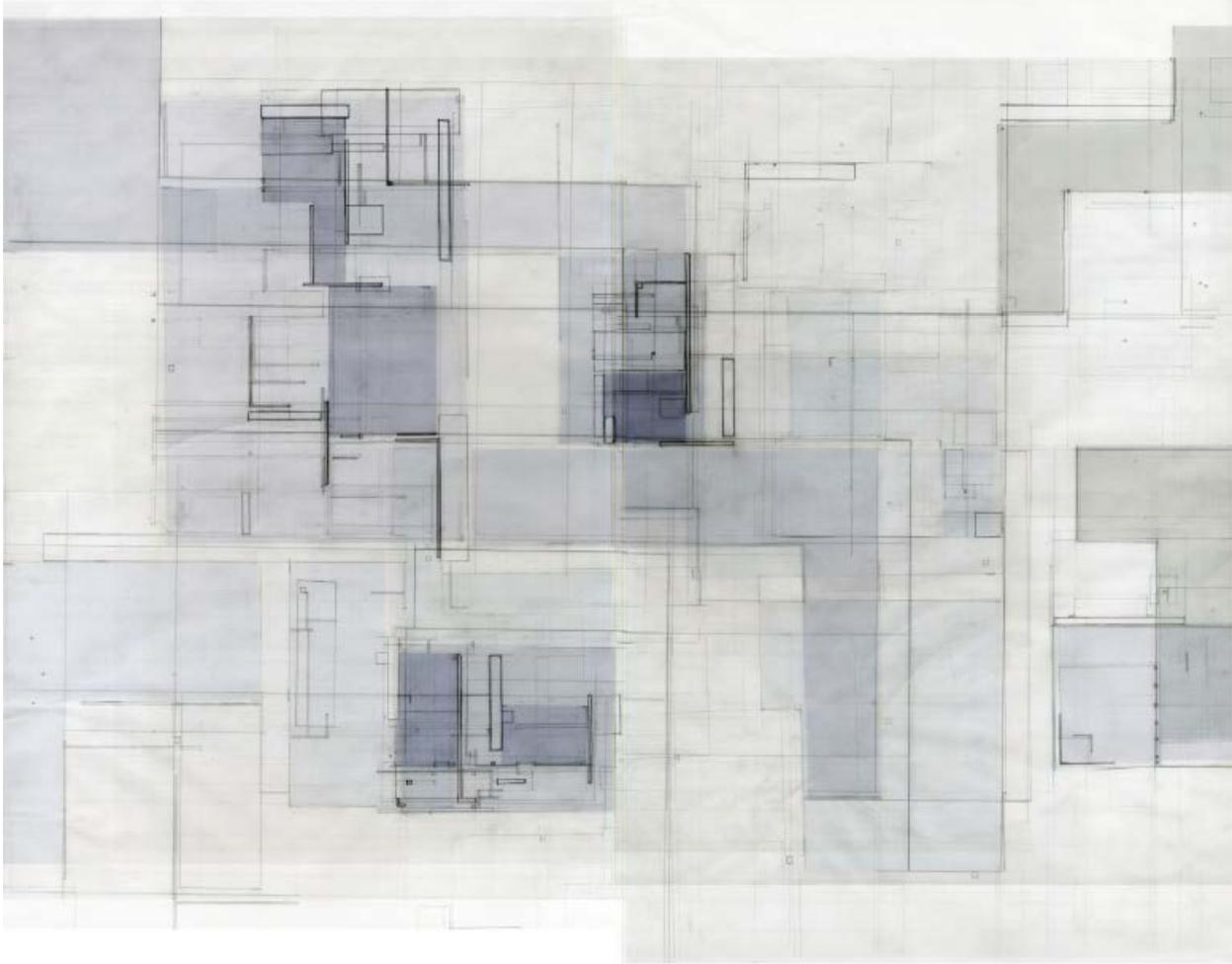


Figure 3-3. *Matrix from cube sections*. Image credit: Daniel Mecca, *Architectural Design One*, 2016.

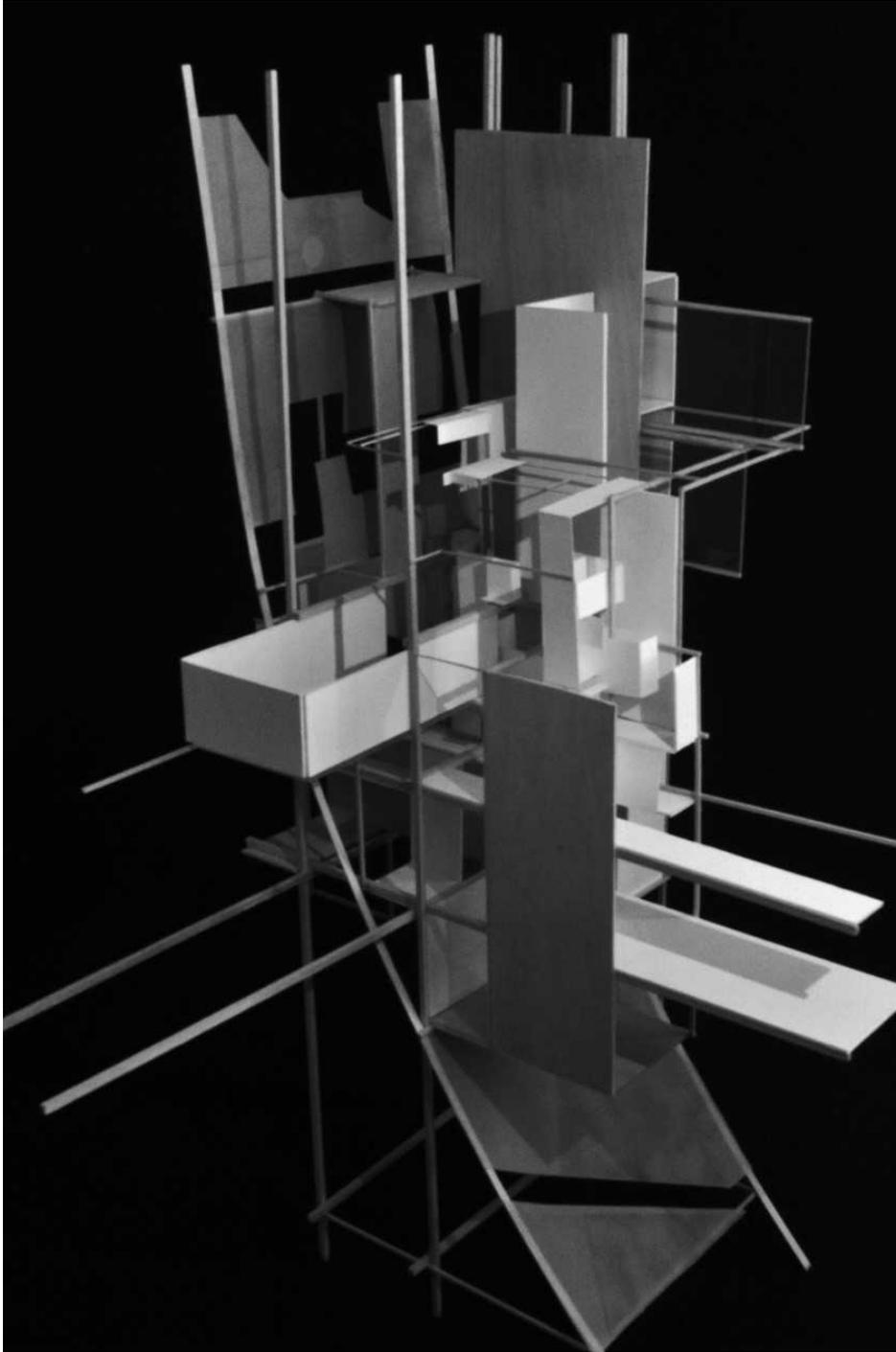


Figure 3-4. *Itinerary*. Image credit: John Vieweg, *Architectural Design One*, 2016.

CHAPTER 4  
REVIEW OF THE GUGGENHEIM NEW YORK EXHIBIT *JOSEF ALBERS IN MEXICO*

**The Alberses in Mexico**

‘We were aware of layer upon layer of former civilization under the ground,’ she wrote of her visit to the site.

—Anni Albers  
*Anni Albers*<sup>1</sup>

From November 3, 2017 to April 4, 2018 the Guggenheim Museum New York hosted the exhibit *Josef Albers in Mexico*. It focused primarily on an archive of Josef Albers’s photographs and photo collages from his wife Anni’s and his many trips to Mexico as “these innovative works offer a new lens through which to view his major series of prints and paintings from the late 1930s on, including *Variant/Adobe* (1946-66) and *Homage to the Square* (1950-76).”<sup>2</sup> In a similar time frame (October 6, 2017-January 14, 2018) the Guggenheim Museum Bilbao hosted the exhibit “Anni Albers: Touching Vision.” This exhibit “offer[ed] a focused survey of the work of Anni Albers..., an artist distinguished by the originality of her practice, pictorial and textile, and by her profound knowledge of the materials and techniques of weaving.”<sup>3</sup> These two separate exhibits are meant to consider the individual artistic accomplishments of this husband and wife pair to give a focused image of each. As *Josef Albers in Mexico* curator Lauren Hinkson notes:

Because the Alberses worked and traveled together, their achievements are to a certain extent inseparable. This acknowledgment should not, however, be an excuse for Anni’s practice to be overshadowed by that of her husband, as has occurred in

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<sup>1</sup> Nicholas Fox Weber and Tabatabai Asbaghi, *Anni Albers* (New York: The Solomon R. Guggenheim Foundation, 1999), 31.

<sup>2</sup> Lauren Hinkson, *Josef Albers in Mexico* (New York: Guggenheim Museum Publications, 2017), 16.

<sup>3</sup> *Anni Albers: Touching Vision*, Guggenheim Bilbao, accessed 16 March, 2017. <https://annialbers.guggenheim-bilbao.eus/en/introduction>

the past. In recent years, scholars and curators have begun revising the historical record, creating a more accurate, nuanced representation of Anni's work as an artist and craftsman. These efforts, critical in their own right, highlight the importance of examining the depth of the Alberses' individual practices.<sup>4</sup>

While the need to examine each as individual artists (particularly Anni) is justified, these two exhibits do not consider the possibilities of Mexico as a primary source of collaboration between the Alberses. ("In Mexico they aimed to revitalize pre-Columbian traditions within their own Modernist art."<sup>5</sup>) The exhibit in Bilbao is a wonderful tribute to Anni's prolific career as an artist and warrants acknowledgment as a device for elevating her work to the same status as her husband's, but for all its strengths it seemingly fails to examine the possibilities for her to work extend beyond the boundaries of her craft. Were the exhibit in New York about Josef Albers of a similar quality (an overview of his achievements as a painter, photographer, stained glass artist, furniture designer, or graphic designer), this goal of examining their individual practices would be defensible. However, as an exhibit about the impact of their trips to Mexico the absence of Anni's work and creative voice renders the picture of the Alberses's time there incomplete. The exhibit not only excludes Anni's revolutionary works achieved by the techniques she learned in Mexico but insinuates her work might have been overshadowed by Josef's had the two been exhibited concurrently. Rather than only highlighting their individual practices, it is time to look to the richness and diversity achieved through their collaboration—particularly in the work of two artists in different mediums—and the potential it holds as a method of inclusion.

It is clear that despite Anni and Josef having little formal collaboration, each greatly influenced the work of the other. However, perhaps because of Anni's status as a feminine designer/artist, their work seems to seldom be examined in conjunction with one another. In a

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<sup>4</sup> Lauren Hinkson, *Josef Albers in Mexico* (New York: Guggenheim Museum Publications, 2017), 15.

<sup>5</sup> Ibid.

rare example—an exhibit at the Cooper-Hewitt National Design Museum entitled *Josef + Anni Albers: Designs for Living* (October 1, 2004-February 27, 2005)—“objects of domestic life” created separately throughout the careers of the two artists were paired together: “a little-known facet of Josef’s career—his furniture, graphic art, and tabletop objects—with Anni’s designs and textiles.”<sup>6</sup> As Cooper-Hewitt director Paul Warwick Thompson points out, “Ironically, Josef and Anni never collaborated on a specific project, yet they lived collaboratively.”<sup>7</sup> The Alberses were unlike other couples of the modernist movement—such as the Eames and Smithsons—in that they “were not co-professionals and direct collaborators;” however, “their work in disparate media, especially at the Bauhaus in the 1920s, ran in closely parallel tracks, with notable cross-influences,”<sup>8</sup> and thus the strength of their collaboration (whether formalized or not) lies in its interdisciplinary quality. Mexico was a large influence for both artists and the work produced from this time (if examined together) might begin to indicate a more direct collaboration, one that spanned decades and mediums.

To the credit of the Guggenheim, Anni is largely acknowledged in the writings for *Josef Albers in Mexico*—in the Alberses’s thoughts, perceptions, and experiences—and physically present in many of the photos. Nonetheless, the absence of her corresponding work is disappointing. *Josef Albers in Mexico* examines Josef’s photos and photo collages from Mexico as an aspect of his work able to shed new light on two of his series, but these photos and photo collages are so imbued with the spirit of Anni—in their use of the “floating weft” and layered space—that they also warrant examination alongside her work. It is important to recognize the

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<sup>6</sup> Nicholas Fox Weber, *Josef and Anni Albers: Designs for Living* (London: Merrell, 2004), 6.

<sup>7</sup> Ibid.

<sup>8</sup> Ibid., 34.

prolific influences of Mexico on the works of both Alberses', so while "Anni mastered some of the traditional weaving techniques she observed, and Josef pursued new directions in his paintings," moments of cross-pollination between the painted and woven are evident.<sup>9</sup>

### **Mexico: A Collaboration in Monte Alban**

It is important to begin by looking further back than Mexico to the early years of the Alberses work at the Bauhaus. Here can be seen the "clearest proof of the interchange of ideas between the two."<sup>10</sup>

Josef Albers's *Goldrosa* of c. 1926 [Figure 1-1], a minimalist composition of sandblasted pink flashed glass with a surface application of black paint, typifies the restrained qualities of his new process. Its pronounced warp-and-weft structure, one cannot help thinking, may well reflect the works that his young wife... Or did the influence flow in the opposite direction? There is no question that Anni Albers's horizontally banded textiles of 1925 and 1926 [Figure 4-2] relate closely to Josef Albers's glass panels of those same years, and they offer the clearest proof of the interchange of ideas between the two.<sup>11</sup>

Here, Anni's weavings (pre-Mexico) tend to rely on harder edges—where one color meets the next—and the ability to make space through more figural shapes and implied volumes. Although these earlier works are much more related to Josef's in the hard-edged quality of the indeterminate volumes, the influence of Anni's repetition in the pattern and structuring is also present and lends itself to a more field-like construction.

The field, or matrix, -like quality of her constructions becomes truly evident in her post-Mexico weavings, namely *Ancient Writings* [Figure 4-3] and *Monte Alban* [Figure 4-4]. In an essay entitled "Thread as Text: The Woven Work of Anni Albers," Virginia Gardner Troy notes the impact Mexico made on the artist saying, "The dramatic changes that occurred in Albers's

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<sup>9</sup> Lauren Hinkson, *Josef Albers in Mexico* (New York: Guggenheim Museum Publications, 2017), 15-16.

<sup>10</sup> Nicholas Fox Weber, *Josef and Anni Albers: Designs for Living* (London: Merrell, 2004), 37.

<sup>11</sup> Nicholas Fox Weber, *Josef and Anni Albers: Designs for Living* (London: Merrell, 2004), 37.

woven work immediately after her first visit to Mexico reflect her deepening understanding of ancient American art.”<sup>12</sup> These weavings tend to have a more layered quality and are able to achieve transparency through the opaque materials. They appear to be more about constructing, reading, and clarifying systems of space in a collapsed, simultaneous time, rather than creating a repetitive pattern. This is most evident in Anni Albers’s learning and use of the Andean technique of the ‘floating weft,’ a technique “still widely used in modern Latin America.”<sup>13</sup> In *Monte Alban* she employs this technique, of “the supplementary, or floating, weft, in which an extra weft thread is threaded, or ‘floated,’ above the woven surface.”<sup>14</sup> She uses this method to draw lines of thread that float above the underlying structure of the weave in order to “devote attention to [its] surface.”<sup>15</sup> This adds another layer of information that physically sits on top of the matrix below but acts as an integral part of the existing field. *Monte Alban* uses the floating weft to map “the ascending and descending steps, the flat plazas, and the underground chambers of the ancient site after which the work is named.”<sup>16</sup> Here, the constructed piece becomes less about figural volumes of space and more about depth through layering. Anni Albers is able to map the depth of space and time present in the Monte Alban site through the building up of opaque materials on a two-dimensional surface.

Interestingly, this depth through layering can also be seen in a piece from *Josef Albers Mexico* created from their (the Alberses) visit to Monte Alban. It is entitled *Etude Dry-Hot* and is

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<sup>12</sup> Nicholas Fox Weber and Tabatabai Asbaghi. *Anni Albers* (New York: The Solomon R. Guggenheim Foundation, 1999), 31.

<sup>13</sup> Ibid.

<sup>14</sup> Ibid.

<sup>15</sup> Ibid.

<sup>16</sup> Ibid.

the only example on display that exhibits a deviation from Josef Albers's usually juxtaposed edges (Figure 4-5). While depth of space in his paintings is usually achieved through the indeterminacy of figure ground and "the flipping back and forth of figure ground,"<sup>17</sup> *Etude Hot-Dry* (Figure 4-6) achieves depth through overlapping layers. He is able, like Anni, to find transparency in the opaque paint. He also achieves a texture on the surface that appears to float above the underlying painted volumes, much like Anni's use of the floating weft. Here, the ideas from Anni's weavings can breach into the sphere of painting, and vice versa, "but no matter which of them was the source of the motif, both artists showed their ability to develop it in a wholly convincing and completely personal matter."<sup>18</sup>

Looking to the medium of photography, which focused the entire *Josef Albers in Mexico* exhibit, Hinkson notes, "Links between Albers's travels and the work he produced have to be contextualized within his overarching interest in experimental compositional structures and repetition."<sup>19</sup> As a weaver, this interest in experimental compositional structures and repetition was also shared by Anni. In fact, in "The Pliable Plane: Textiles in Architecture" she describes weaving as "primarily a process of structural organization," and in *Ancient Writings* and *Monte Alban* her interest in the underlying structure of the weave as capable of floating the weft is clear.<sup>20</sup> Her works tend to deal most with context and thus warrant a closer look through this lens of Josef's photos and photo collages, as his photos warrant viewing through the lens of her weavings.

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<sup>17</sup> "A Conversation with Nina Hofer," in *Architecture and Feminism: Discussions Towards Inclusive Ideologies, Pedagogies, and Practices*, transcribed by Elizabeth Cronin (University of Florida, 2018), 49.

<sup>18</sup> Nicholas Fox Weber, *Josef and Anni Albers: Designs for Living* (London: Merrell, 2004), 37.

<sup>19</sup> Lauren Hinkson, *Josef Albers in Mexico* (New York: Guggenheim Museum Publications, 2017), 18.

<sup>20</sup> Anni Albers, *Anni Albers: Selected Writings on Design*, ed. Brenda Danilowitz (Middletown: Wesleyan University Press, 2000), 45.

Figure 4-7 shows a specific photo collage of Josef Albers's time in Monte Alban. It shows images that document the places and artifacts experienced by the Alberses: the details floated on the surface of the Andean ruins, the hard edges dividing space, and the texture and scale of crumbling material. In this collage, however, the composition and structure become an important aspect to analyzing the collaboration and cross-pollination between Josef and Anni Albers. Here, close attention should also be paid to the ruins themselves and ornamentation on their surfaces (Figure 4-8). This ornamentation can be seen as influencing Josef in the definitive, figural edges it creates. Josef's photographs on the right side of the collage appear to behave in this way. While these photographs create hard edges against the backdrop of white space of the page—evoking the figure-ground characteristics seen in much of his work—the images on the left begin to be overlapped and layered. Although transparency is not achieved in layering, as has been shown in several examples of Anni's work, the smaller scale images placed on top seem to float—resembling the floating weft of her *Monte Alban* weaving. These striking floating wefts can also be found in the ornamentation of the ruinous surfaces, as opaque materials are layered together and seem to float away from the stone structure behind.

Like Josef, Anni also pushed outside the boundaries of her art—into photography, printmaking, industry, etc. Despite this, she is written out of *Josef Albers in Mexico*, her weavings unable to breach the realm of photography and paint. Like Josef's stained glass and Anni's weaving from the Bauhaus, in each medium the influence of the other can be seen. Anni is just as much in Josef's work in Mexico as he is in hers, and it is disappointing that—while “their achievements are to a certain extent inseparable”—the Guggenheim still managed to

separate them, further writing Anni out of one of the most revolutionary aspects of her own work.<sup>21</sup>

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<sup>21</sup> Lauren Hinkson, *Josef Albers in Mexico* (New York: Guggenheim Museum Publications, 2017), 15.

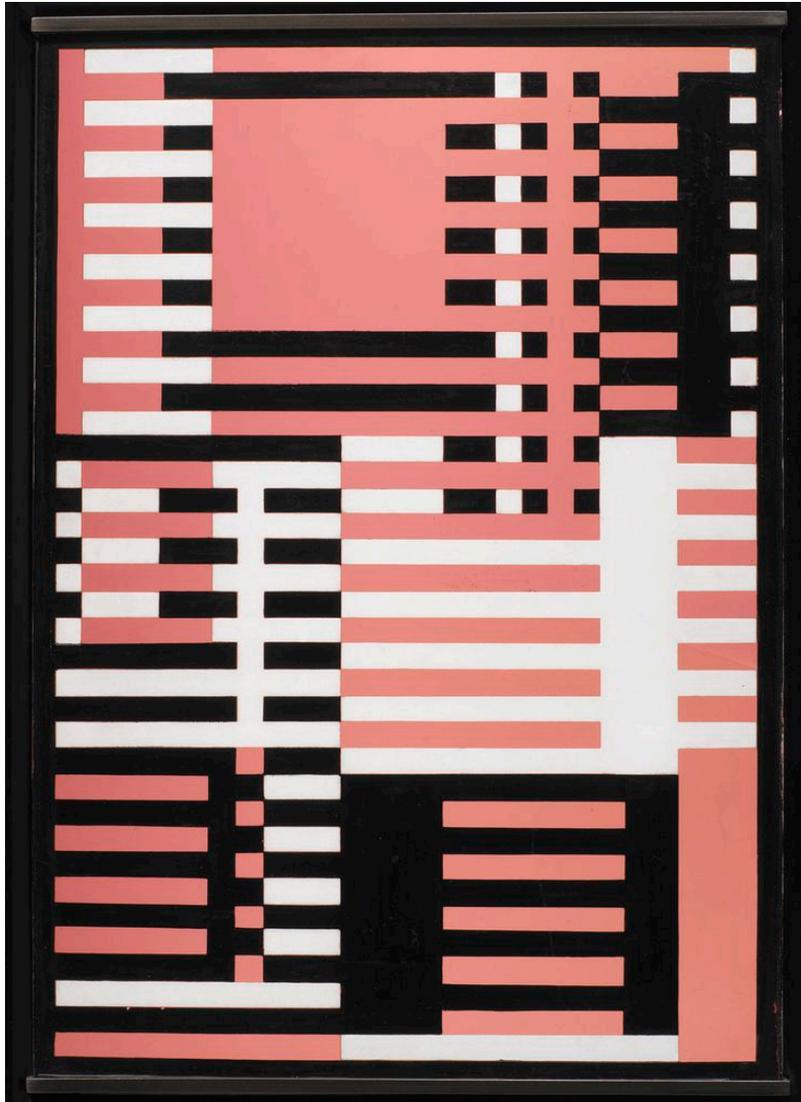


Figure 4-1. *Goldrosa*, Josef Albers, 1926. Source: Nicholas Fox Weber, *Josef and Anni Albers: Designs for Living* (London: Merrell, 2004), 78.



Figure 4-2. *Wall Hanging*, Anni Albers, 1926. Source: Nicholas Fox Weber, *Josef and Anni Albers: Designs for Living* (London: Merrell, 2004), 65.



Figure 4-3. *Ancient Writing*, Anni Albers, 1936. Source: Nicholas Fox Weber and Tabatabai Asbaghi, *Anni Albers* (New York: The Solomon R. Guggenheim Foundation, 1999), 41.



Figure 4-4. *Monte Alban*, Anni Albers, 1936. Source: Nicholas Fox Weber and Tabatabai Asbaghi, *Anni Albers* (New York: The Solomon R. Guggenheim Foundation, 1999), 42.

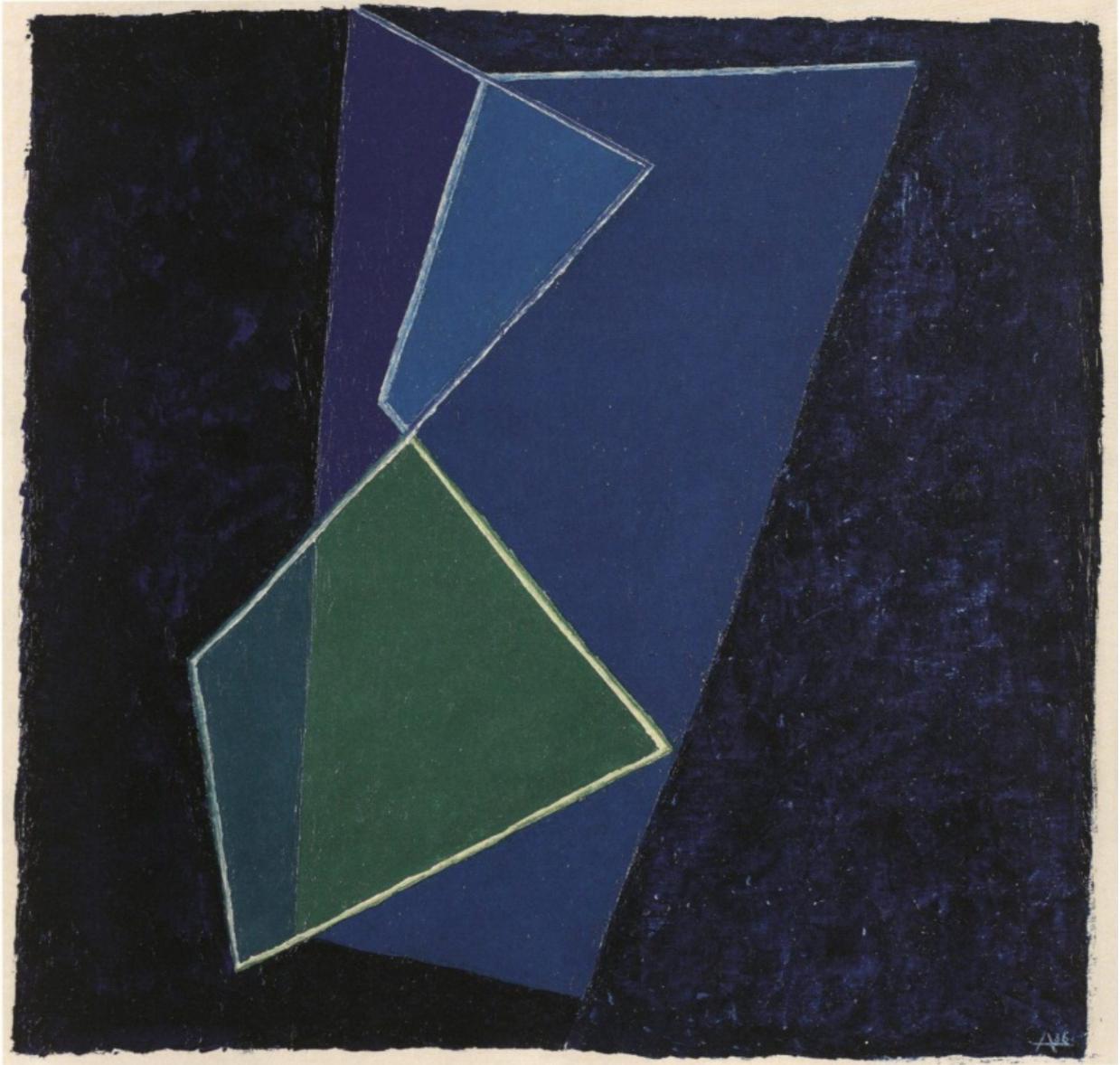


Figure 4-5. *Prismatic II*, Josef Albers, 1936. Source: Lauren Hinkson, *Josef Albers in Mexico* (New York: Guggenheim Museum Publications, 2017), 69.

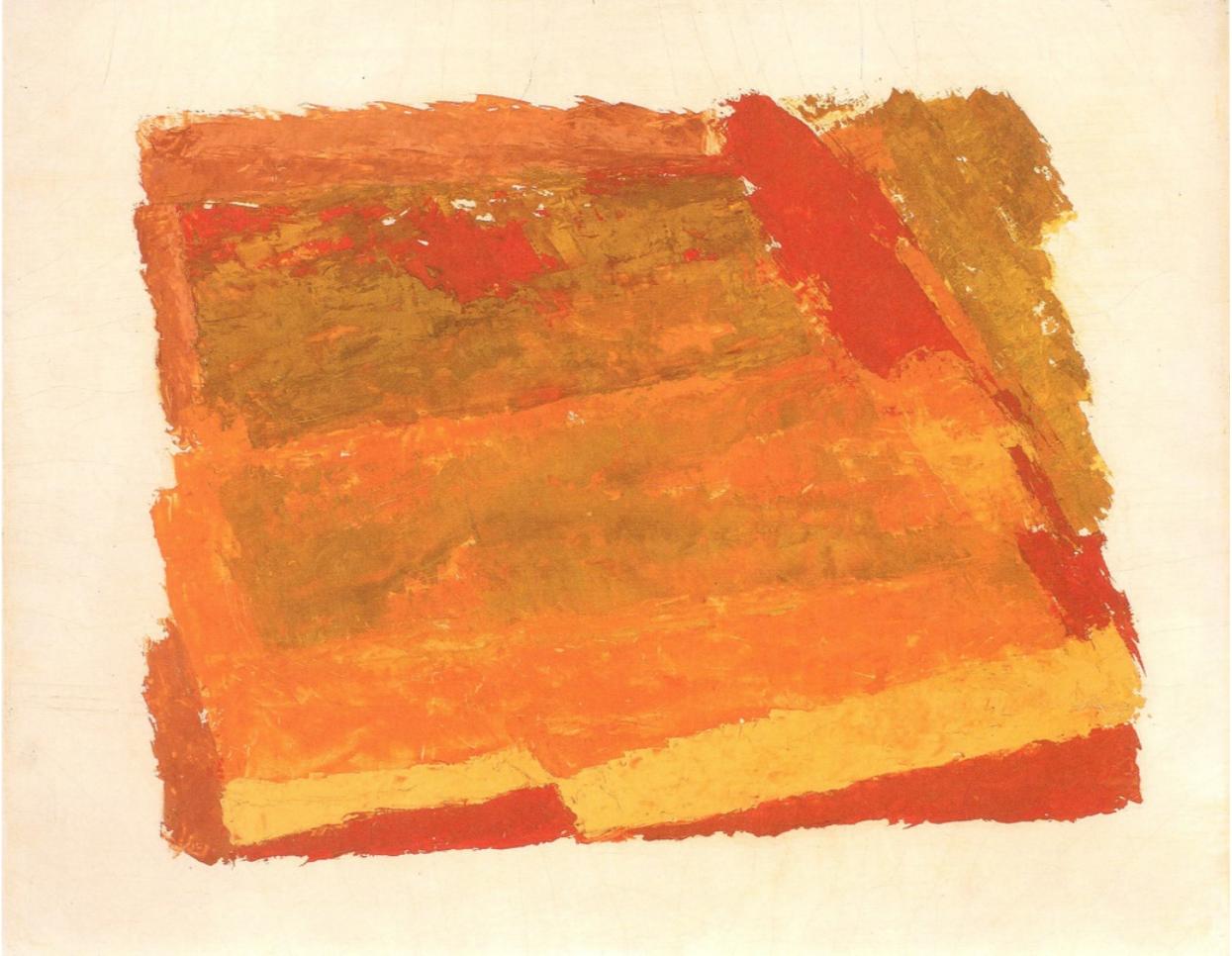


Figure 4-6. *Etude Hot-Dry*, Josef Albers, 1935. Source: Lauren Hinkson, *Josef Albers in Mexico* (New York: Guggenheim Museum Publications, 2017), 68.

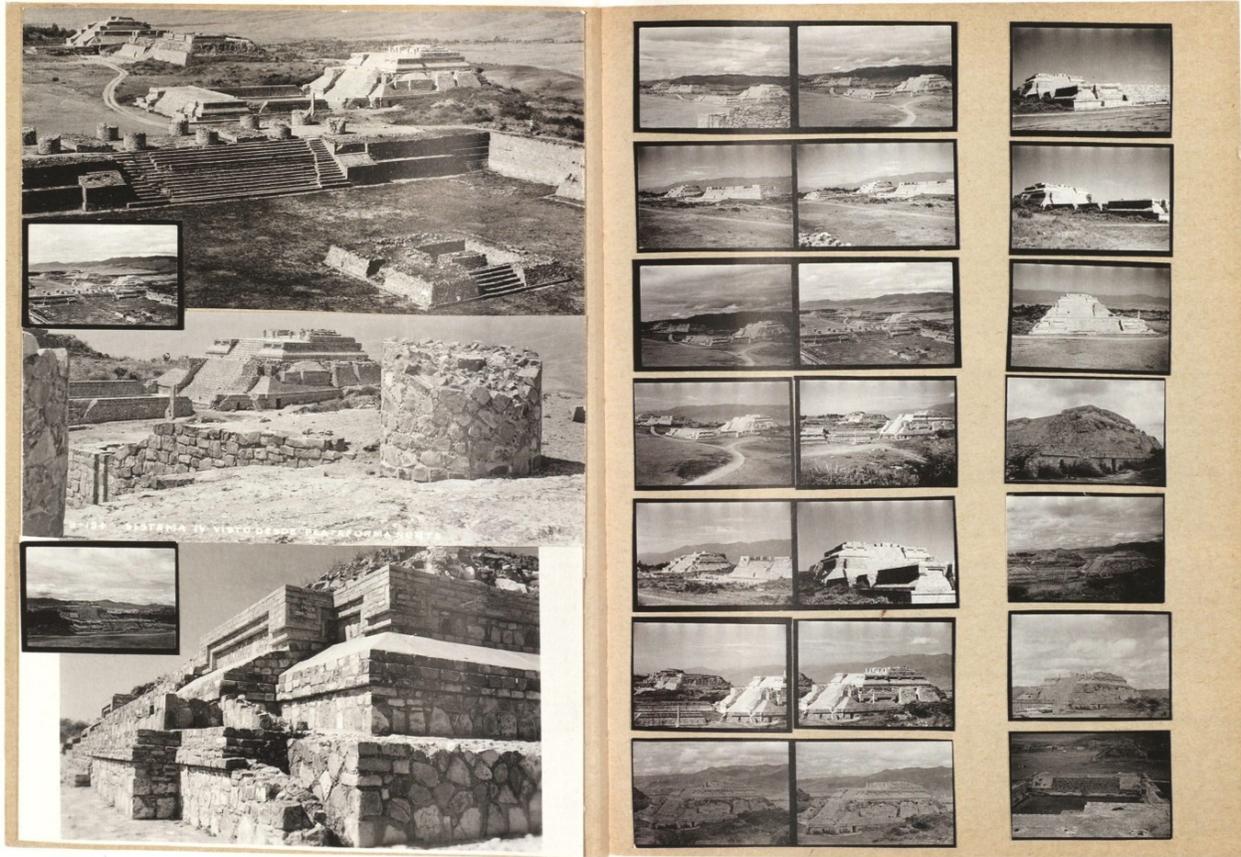


Figure 4-7. *Monte Alban photo collage*, Josef Albers, 1937. Source: Lauren Hinkson, *Josef Albers in Mexico* (New York: Guggenheim Museum Publications, 2017), 60-61.



Figure 4-8. *Anni Albers at Monte Alban*, Josef Albers, 1939. Source: Lauren Hinkson, *Josef Albers in Mexico* (New York: Guggenheim Museum Publications, 2017), 62.

CHAPTER 5  
THE ALBERSES IN THE UNIVERSITY OF FLORIDA ARCHITECTURE CURRICULUM

**Field and Intervention**

In her work with textiles, Anni Albers believed in the idea of craft and learning through experience with a material as a design process capable of developing a deeper understanding of the built environment. In “Material as Metaphor” she says:

To make it visible and tangible, we need light and material, any material. And any material can take on the burden of what had been brewing in our consciousness or sub consciousness, in our awareness or in our dreams...Ideas flow from it to us and though we feel to be the creator we are involved in a dialogue with our medium. The more subtly we are tuned to our medium, the more inventive our actions will become...material is a means of communication.<sup>1</sup>

She developed the woven craft as one that could extend beyond its feminine boundaries and branch off into other mediums—like drawing, photography, architecture, and printmaking—and, through her writings, she began to develop weaving as an intellectual craft.

Despite these accomplishments, she is seldom able to breach the boundaries of her feminine craft and has rarely been recognized for her contributions to architecture education. On the other hand, Josef Albers is often acknowledged as both an artist and architecture/design pedagogue, and it is widely accepted that he had a huge influence on the University of Florida architecture curriculum, particularly through his student Bernard Voichysonk. While her direct ties to UF are somewhat unclear (and still under investigation), Anni Albers’s profound influence on the Bauhaus (and other Bauhaus professors, like Walter Gropius) is undeniable. In fact, while Josef was teaching at Yale, Walter Gropius commissioned Anni Albers “for his Harvard Law School building...[to] create bedspreads and partitions for the dormitories,” and it has been noted by Charles Sawyer (Dean of the Yale School of Art, 1995) that “ ‘It was ironic in a way that

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<sup>1</sup> Anni Albers, *Anni Albers: Selected Writings on Design*, ed. Brenda Danilowitz (Middletown: Wesleyan University Press, 2000), 73-75.

Harvard was giving her more recognition as a creative artist than Yale.’ ”<sup>2</sup> While her ties to Yale (through her husband Josef) might at first glance be her gateway to UF, it seems she may have actually had a more impactful influence at Harvard (which ties to UF can be traced back to Gropius students like Harry Merritt and other Harvard graduates like Bob MacLeod). It is also important to note that, while she may have been given very little recognition at Yale, in the 1950’s she “was often asked...at Yale, to give a few seminars to the architectural students.”<sup>3</sup> Despite this, she has never really been attributed as an architecture educator. It is time to recognize the huge impact she has had on architecture education, if even retroactively—for she is still often written out of histories where she was definitively impactful and present—through the reading of the work at the school as it exists today.

If the UF curriculum, and arguably architecture as a whole, can be divided into three ideas of space—volumetric space (*Cube*); spatial relationships (*Matrix*); and sequencing of space and time (*Itinerary*)—Josef can very clearly be seen in UF’s approach to volumetric space. Anni on the other hand is most present in the way UF’s curriculum deals with materials, field, and spatial relationships (*Matrix*).<sup>4</sup> This combination of field (*Matrix*) with intervention (volumetric space/*Cube*) to yield *Itinerary*, exposes the importance of Anni’s recognition as part of an Alberses’s collaboration as her voice and methods become critical in attaining a more complete and inclusive understanding of the University of Florida’s architectural curriculum as a whole.

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<sup>2</sup>Nicholas Fox Weber and Tabatabai Asbaghi. *Anni Albers* (New York: The Solomon R. Guggenheim Foundation, 1999), 174.

<sup>3</sup> Ibid.

<sup>4</sup> “A Conversation with Nina Hofer,” in *Architecture and Feminism: Discussions Towards Inclusive Ideologies, Pedagogies, and Practices*, transcribed by Elizabeth Cronin (University of Florida, 2018).

## Spatial Relationships and Materials

Because Anni Albers worked with textiles and printmaking, she is most obviously connected to the two-dimensional tool architects employ: the drawing. Both drawings and woven textiles utilize line, tone, and textural qualities to create depth, volume, and implications of three-dimensional space on a two-dimensional surface. On this Anni writes, “Our experience of gaining a representational means through the use of different surface qualities leads us to the use of illusions of such qualities graphically produced, though not by the means of representational graphic—that is, the modulated line.”<sup>5</sup> This method of creating depth and “illusions” of surface quality (particularly in a drawing) is one often used in the University of Florida studios, as we too discourage the use of “graphic language” in drawing and model. Such “graphic language” preferences two-dimensional objects and lacks any implication of three-dimensional volumetric space or depth. It tends to concretize ideas too quickly and develop static forms that work “towards a unified and singular interpretation.”<sup>6</sup> Just like Anni Albers describes embroidery, graphic language “is a working of just the surface, since it does not demand that we give thought to the engineering task of building up” and can become “in danger of losing itself in decorativeness.”<sup>7</sup>

Instead, according to Robert McCarter, the work (abstract drawings) in the University of Florida studios “tend towards complexity and multiplicity of spatial interpretations...[in] an

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<sup>5</sup> Anni Albers, *Anni Albers: Selected Writings on Design*, ed. Brenda Danilowitz (Middletown: Wesleyan University Press, 2000), 72.

<sup>6</sup> Robert McCarter, “With Obstinate Rigor,” in *Constructions*, ed. Martin Gundersen and Nina Hofer (Gainesville: University of Florida Department of Architecture, 1993), 6.

<sup>7</sup> Anni Albers, *Anni Albers: Selected Writings on Design*, ed. Brenda Danilowitz (Middletown: Wesleyan University Press, 2000), 72.

effort to capture the experiential as opposed to the easily legible.”<sup>8</sup> He points out that in the drawings from UF “one often finds the layering of several spatial interpretations, with the final forms being drawn up from out of the depth of those composite drawings.”<sup>9</sup> These ‘composite drawings’ create field conditions and matrices that act as the underlying structure of the drawing and implication of structure in the built environment (Figure 5-1). Using this structure, volumes of space can be embedded and held by the field, not as hard edges, one placed next to the other (Josef Albers), but through the layering and building up of line and tone. Many drawings from the current University of Florida studios utilize the method of ‘jellyfish’ or ‘x-ray’ drawing to further encourage a “multiplicity of spatial interpretations”<sup>10</sup> (See Figure 5-2), bringing to mind Anni Albers’s woven piece *Monte Alban* and her use of “the supplementary, or floating weft, [as] an extra weft thread... ‘floated’ above the woven surface.”<sup>11</sup> She used this technique to draw lines and reinforce extractions from the field of underlying woven structure. In much the same way, University of Florida students layer, collage, and draw out order from a composite drawing, allowing each iteration to pull out and float new information on the drawn surface until the final form is extracted (See Figure 5-3). Here, “the inner structure together with its effects on the outside are the main considerations.”<sup>12</sup>

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<sup>8</sup> Robert McCarter, “With Obstinate Rigor,” in *Constructions*, ed. Martin Gundersen and Nina Hofer (Gainesville: University of Florida Department of Architecture, 1993), 6.

<sup>9</sup> Ibid.

<sup>10</sup> Robert McCarter, “With Obstinate Rigor,” in *Constructions*, ed. Martin Gundersen and Nina Hofer (Gainesville: University of Florida Department of Architecture, 1993), 6.

<sup>11</sup> Nicholas Fox Weber, *Josef and Anni Albers: Designs for Living* (London: Merrell, 2004), 31.

<sup>12</sup> Anni Albers, *Anni Albers: Selected Writings on Design*, ed. Brenda Danilowitz (Middletown: Wesleyan University Press, 2000), 73.

Although Anni Albers’s process of weaving and conceptual development closely follows a similar process to the University of Florida drawings, it is in relation to model making that Robert McCarter makes reference to her work. In “With Obstinate Rigor” he points out her particular affinity for materials and notes that “the models from the University of Florida are also used as instruments for investigating the nature of materials in the making of space.”<sup>13</sup> This investigation of materials is evident in the undergraduate curriculum (Figure 5-4) but can most clearly be seen in the new graduate curriculum. Developed by Lisa Huang and Bradley Walters, this new curriculum is focused in material experimentation, construction at a 1:1 scale, and particularities of site and context as being capable of enhancing the future of the profession and aiding in the transition from academia to practice. On this they say, “it is critical to engage matter hands-on to know its characteristics (weight, dimensions, limitations) and its relationship to other materials (joints, intersections, adjacencies).”<sup>14</sup>

The first semester of the new graduate curriculum begins with material testing and the building of a fragment of space at a 1:1 scale (Figure 5-5). Here students are encouraged to explore the “possibilities for attack the material offers in its appearance and in its structural elements” to “call forth imagination and productiveness.”<sup>15</sup> Armed with a new understanding of materials, the semester continues with a project at a representative scale and takes on the context of two extreme climates. This is paired with a second semester project that is also deeply rooted in climate and context (Seattle, WA), and so the entire first year of the UF graduate program

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<sup>13</sup> Robert McCarter, “With Obstinate Rigor,” in *Constructions*, ed. Martin Gundersen and Nina Hofer (Gainesville: University of Florida Department of Architecture, 1993), 7.

<sup>14</sup> Lisa Huang and Bradley Walters, “Oculata Manus,” in *Vorkurs: Making*, ed. Elizabeth Cronin and Zachary Wignall (Gainesville: University of Florida School of Architecture, 2017), 36.

<sup>15</sup> Anni Albers, *Anni Albers: Selected Writings on Design*, ed. Brenda Danilowitz (Middletown: Wesleyan University Press, 2000), 8.

introduces materials and site as drivers that can inform and shape the design decisions made in an architecture project. In all of these things, Anni Albers is very much present, but nowhere is this presence more palpable than in the work of the third semester, in design/build. Here, at the intersection between material and field, a 1:1 scale construction is woven into the site. This is the moment where the structured diagram lines of the spatial relationships we can draw but cannot see become built in the material world.

### **Case Study: Design/Build at Seahorse Key, FL**

Designing today...deals no longer directly with the medium but vicariously:  
graphically and verbally.

To restore to the designer the experience of direct experience of medium is, I think,  
the task today...The material itself...is a source of unending stimulation and  
advises us in most unexpected manner.

...If we, as designers, cooperate with the material, treat it democratically, you  
might say, we will reach a less subjective solution of this problem of form and  
therefore a more inclusive and permanent one.

—Anni Albers

“Design: Anonymous and Timeless”<sup>16</sup>

Design/build offers a unique opportunity in architecture education to work with materials at a 1:1 scale and complete a project in a site. It “join[s] the practical with the pedagogical” and “makes room for experimentation, which is integral to learning by doing.”<sup>17</sup> It also provides unique opportunities for collaboration, which “plays a critical role for practicing and teaching design/build,” and (in these collaborations) avenues for Feminist design practices.<sup>18</sup> Design/build

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<sup>16</sup> Anni Albers, *Anni Albers: Selected Writings on Design*, ed. Brenda Danilowitz (Middletown: Wesleyan University Press, 2000), 38.

<sup>17</sup> Charlie Hailey, *Design/Build with Jersey Devil: A Handbook for Education and Practice* (New York: Princeton Architectural Press, 2016), 123.

<sup>18</sup> *Ibid.*, 65

is hands-on and provides experiences for “understanding a site, working in groups, handling materials, and listening to clients.”<sup>19</sup> It also creates space in architecture curriculums for “open-air studios, labs for experimentation, and learning-by-doing classrooms.”<sup>20</sup> In many instances, design/build offers students their first opportunities to work with full scale materials and tools “to follow the promptings of material, of color, line, texture; to pursue a thoughtful forecast of function, a cleverly conceived construction, to wherever it would lead” them.<sup>21</sup>

In the University of Florida design/build program, collaboration is a key element, and ‘consensus’ is used as a tool for strengthening and encouraging group dynamics. Here, ‘consensus design’ insists every individual in the studio agrees with the project design and is able to participate in all decisions being made. Charlie Hailey runs the design/build program at the University of Florida, and on ‘consensus’ he notes, “Unanimity helps keep everyone fully engaged throughout the entire process.”<sup>22</sup> Thus, through ‘consensus,’ design/build lends itself as a more inclusive and Feminist design methodology, both in education and practice. It opens up channels of communication and “keeps egos in check” to encourage the participation of every student and the accompanying diversity of ideas and experiences.<sup>23</sup> Another important aspect of design/build is the idea of ‘reflective building.’ In his book *Design/Build with Jersey Devil: A Handbook for Education and Practice*, Hailey says: “Pedagogically, design/build returns students to the basics—elemental concepts and techniques first explored in early design studios.

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<sup>19</sup> Ibid., 123.

<sup>20</sup> Ibid., 65

<sup>21</sup> Anni Albers, *Anni Albers: Selected Writings on Design*, ed. Brenda Danilowitz (Middletown: Wesleyan University Press, 2000), 37.

<sup>22</sup> Charlie Hailey, *Design/Build with Jersey Devil: A Handbook for Education and Practice* (New York: Princeton Architectural Press, 2016), 65.

<sup>23</sup> Ibid., 66

By extension, this context offers students a place of reflection...The studio offers the time and place for students to consider their educational experiences. It looks backward and forward.”<sup>24</sup> Design/build becomes the hinge between academia and practice not through the notion of pure practicality—what we do in practice and how we do it—but through the unique space it occupies in architecture education, pressed between classroom and site—why we do things in practice and why we were educated in a particular way.

“With design/build, making things combines work and play and parallels the mix of intuition with technical skill found in improvisation.”<sup>25</sup> Improvisation played a huge role in the design/build project at Seahorse Key: a stair for the University of Florida Biology Lab (Figure 5-6). Sited on the beach, many of the design decisions were made in response to building on an island. Materials and people were brought by boat and movement to and from the Key needed to be coordinated with tide cycles. After Hurricane Hermine a giant piece of driftwood that once held a lower edge of the site drifted north to destroy the existing stair (and site for the new stair). The sand offered little stability and the ground would change with every gust of wind. As a result, the site became the largest constraint and driving force in the project.

Certain points in the landscape acted as anchors to provide structure to this impermanent site. These points created boundaries and opportunities for wayfinding (visual markers) and movement. The stair—embracing this impermanence—also developed a series of anchored structure points. These points touched the ground lightly as wooden posts (on the handrail side of the stair) and became a datum off of which to measure (Figure 5-7). From this datum the rest of the project—platforms, stair, and gate—could float. By floating the project within the site, the

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<sup>24</sup> Ibid., 123.

<sup>25</sup> Ibid., 68

ground was permitted to continue its ritual of constant change and space was created to build around the shifted driftwood. In this, the stair itself became an anchor point in the site as well.

In the Seahorse Key project, Hailey implemented aspects of ‘reflective building’ in the studio’s constant dialogue between construction and drawing. Plans and section were developed throughout the project (before, during, and after construction), and mappings of Seahorse Key were completed by each student. As part of the ‘reflective building’ process, these mappings began after the first trip to the site and were re-visited after every subsequent trip, allowing time and the process of the build to influence each iteration. The mapping exercise was a way to explore the phenomenological aspects of the site through drawing, wayfinding, measure, precision, boundaries, and invisible relationships at first unseen. These drawings served as moments (before and after every build day) to reflect on the site and use the accompanying analysis to influence the things being made.

### **Anni Albers in Design/Build**

The essentially structural principles that relate the work of building and weaving could form the basis of a new understanding between the architect and the inventive weaver.

—Anni Albers

“The Pliable Plane: Textiles in Architecture”<sup>26</sup>

And here before us we can recognize the essence of designing, a visually comprehensible, simplified organization of forms that is distinct from nature’s secretive and complex working.

—Anni Albers

“Designing as Visual Organization”<sup>27</sup>

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<sup>26</sup> Anni Albers, *Anni Albers: Selected Writings on Design*, ed. Brenda Danilowitz (Middletown: Wesleyan University Press, 2000), 51.

Patterns in the sand briefly hold memories of tide cycles, gusts of wind, and interactions with plant and animal life. These memories however are fleeting and impermanent. The motion of these encounters activates the sand and just as quickly sets into motion changes, one after the other, into its surface. Deep water has the capacity to hold these patterns for a moment longer, a frozen moment in time, but reflections from below mirror light and cause the pattern of the fluid surface to ripple and become as impermanent as sand in the wind.

This mapping (Figure 5-8) is an exercise in understanding the impermanent experience of place. It acts as a filter for discoveries and encounters at Seahorse Key and uses visual representation as a method for unpacking the latent forces in the site. Seahorse Key is in a constant state of flux. The lower sand and wrack move with every swipe of the tides, some cyclical and others out of the ordinary (Hurricane Hermine). Plant life and constructed ground are eroded away, while materials weather under salt and sun. The history of this place is constantly being re-placed, leaving few permanent indicators of what came before; the ground of this site changes every day, every hour, every minute. Thus this project needed to rely upon materials, phenomenon, and experience of place to provide a structured field capable of anchoring the intervening stair.

Of particular influence on this mapping is Anni Albers's woven piece *Monte Alban* and its use of the Andean technique of the 'floating weft' (discussed in previous chapters). Here, as a study of the subtle changes at Seahorse Key during our time on site, the idea of 'floating weft' is used to anchor and clarify the most present systems of the project. The rhythm of the moving water acts as the warp of the drawing—moving in a horizontal timeline along the bottom of the

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<sup>27</sup> Anni Albers, *Anni Albers: Selected Writings on Design*, ed. Brenda Danilowitz (Middletown: Wesleyan University Press, 2000), 58.

page—and vertical strands pull up to document the rhythm and movement of the changing tide. The ephemeral details of the site—views, light, shadow, textures, patterns in the sand—act as the weft of the project and become built up like a palimpsest over time. Therefore, our constructed stair, which floats so delicately above the sand, becomes a ‘floating weft.’ It is structured by the experience of the place and relies on the field of phenomenon—its rhythms, cycles, and ephemeral details—to secure it as the most tangible addition to the site.

Building the stair over several weeks provided the unique opportunity for new iterations of the mapping drawing to document the most recent accumulation of construction. In every iteration the new construction would sit at the top of the mapping surface, as the ‘floating weft’, while previous iterations faded back into the experiential weft of the site. This produced a surface that was constantly changing and being reshaped with each new pass, much like the surface of the Seahorse Key beach. The final drawing (shown here) presents a field created over weeks of build-up. It incorporates a variety of scales—from the context of lighthouse trail to the joint between hill and beach to the detail of the handrail construction and rhythm of the board spacing—and documents our memory of the site as it slowly adapted the stair into its system. It is here, in design/build, where field meets material; where academia meets practice; where the latent forces of diverse contexts can become the material realities of a built world.

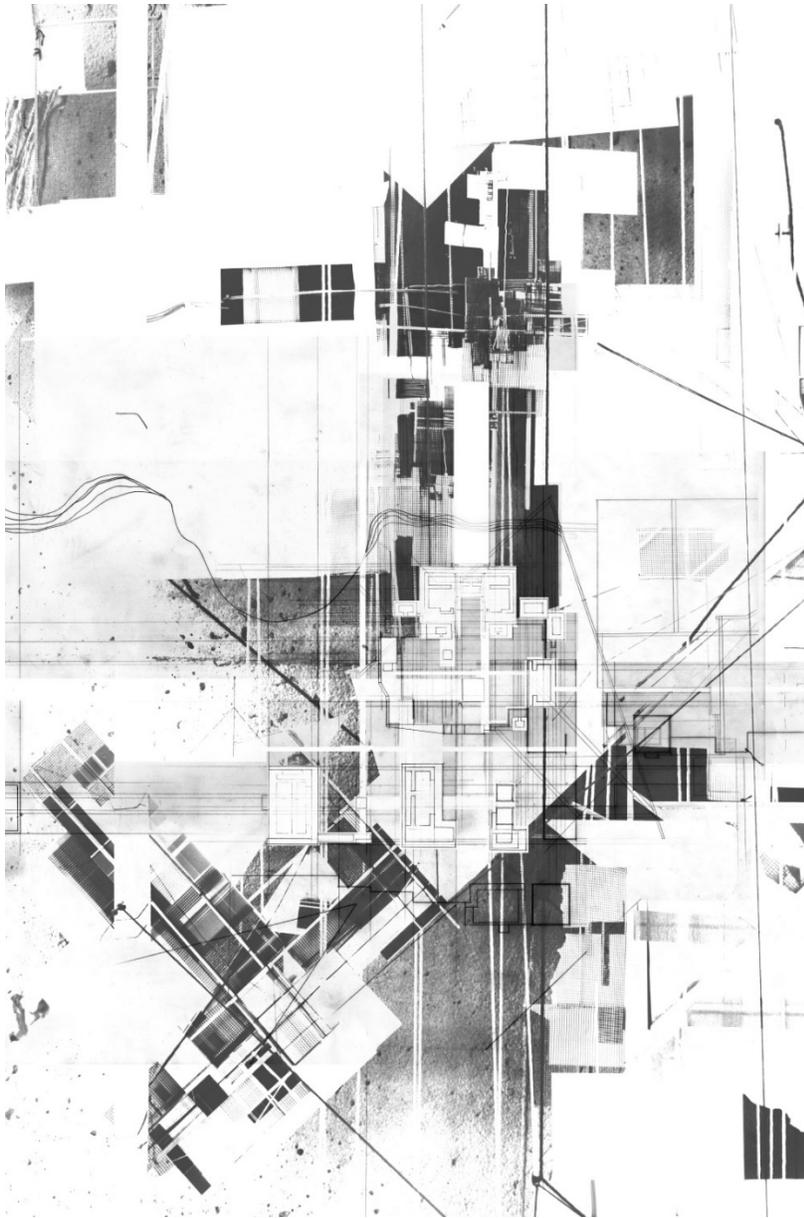


Figure 5-1. *Ruins Mapping*. Image credit: Tessa Register, *Architectural Design Three*, 2016.

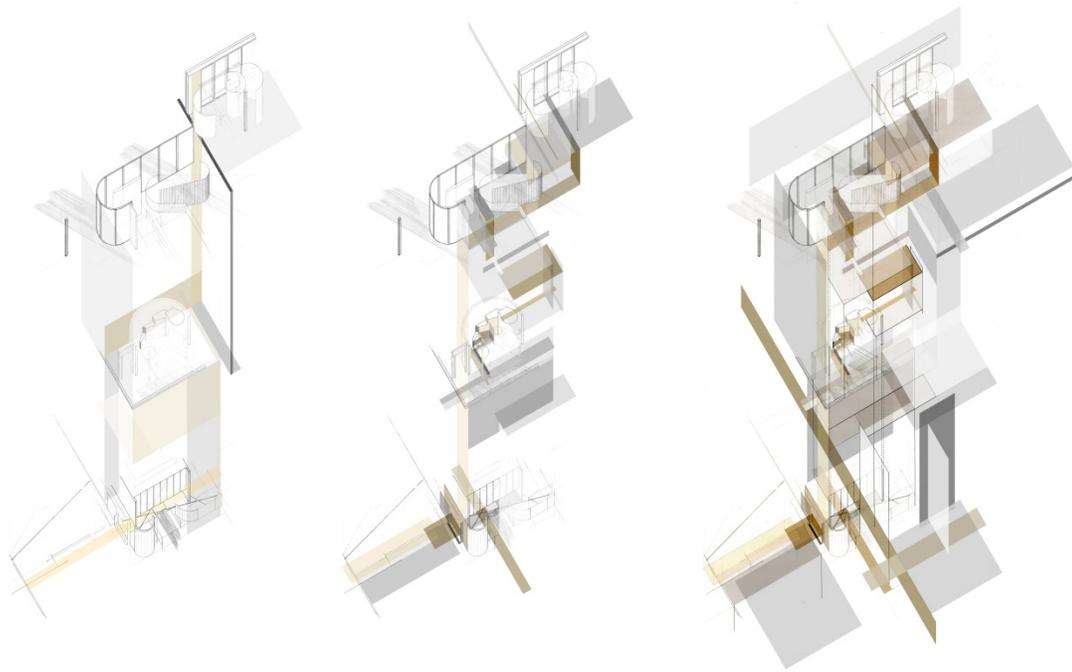


Figure 5-2. *Building Analysis*. Image credit: Cole Altar, *Architectural Design Two*, 2015.

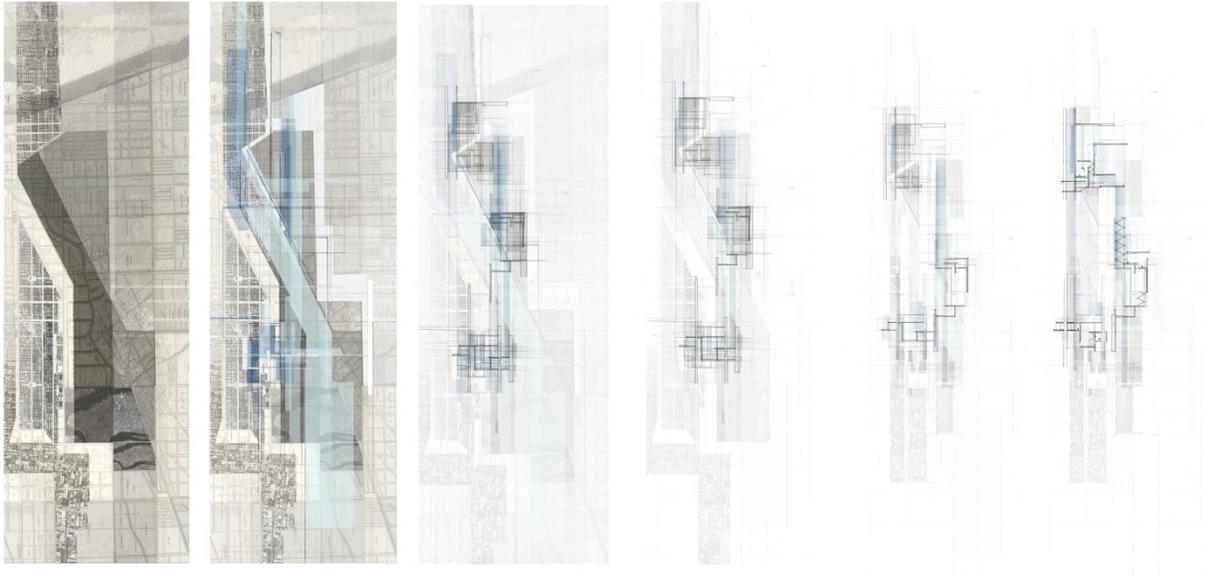


Figure 5-3. *Composite Tower Drawings*. Image credit: Elizabeth Cronin, *Architectural Design Four*, 2010.

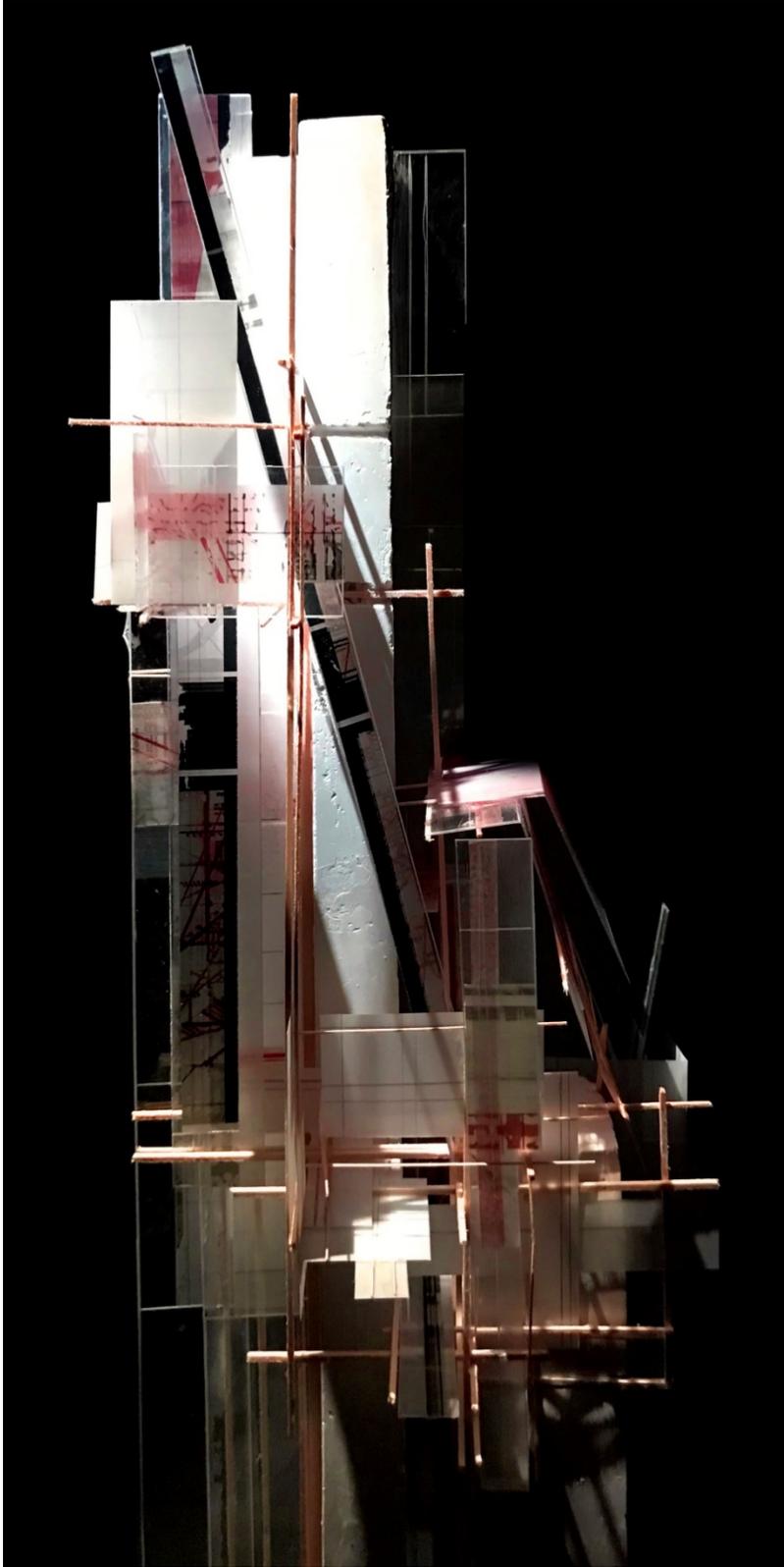


Figure 5-4. *Plaster and Plexi Tower*. Image credit: Emily Mason, Architectural Design Four, 2018.



Figure 5-5. *Concrete Experiments*. Image credit: Elizabeth Cronin, Graduate Design One, 2015.



Figure 5-6. Stair at Seahorse Key, FL. Image credit: Elizabeth Cronin, 2016.



Figure 5-7. Build day at Seahorse Key, FL. Image credit: Elizabeth Cronin, 2016.



Figure 5-8. *Mapping of Seahorse Key*. Image credit: Elizabeth Cronin, Graduate Design Three, 2016.

## CHAPTER 6

### CONCLUSIONS: ON MORE INCLUSIVE ARCHITECTURE EDUCATION AND PRACTICE

Design/build is a collaborative design and education method and warrants examination as a Feminist process of design. It is here that “collaboration, communication, and construction infuse objectives for curriculum and community alike.”<sup>1</sup> It addresses communal education and emphasizes learning through making—as it pertains to 1:1 scale assemblies and specificities of site—and embraces feminine methods of design as being capable of extending into the realm of architecture. Design/build has provided a starting point for longer term research goals of engaging more inclusive and feminist design practices, both in academia and the profession; practices based in collaborative design methodologies and engagement with the community.

This research focused on the intersection between architecture history, pedagogy, feminine design processes, and materials and making as they pertain to architecture and feminism (Figure 6-1).<sup>2</sup> It looked to more inclusive, diverse narratives and contexts as being able to present alternative readings of domestic space and highlight women who are often written out of history. It also explored collaboration as a method of inclusion; one that provides the opportunity to discover richer histories, develop more diverse curriculums, and engage with new mediums. These writings offer a humble beginning to reignite conversations about architecture and feminism, but in order to truly “arrive at a fuller, more complex [and inclusive] vision of” architecture, we need to look at all aspects—history, theory, education, practice, etc.—and continue to carry on conversations capable of reshaping our cultures’ ideologies.<sup>3</sup>

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<sup>1</sup> Charlie Hailey, *Design/Build with Jersey Devil: A Handbook for Education and Practice* (New York: Princeton Architectural Press, 2016), 21.

<sup>2</sup> Reference Figure 6-1. Photo credit: Elizabeth Cronin, 2018.

<sup>3</sup> Mary McLeod, “Perriand: Reflections on Feminism and Modern Architecture,” *Harvard Design Magazine*, no. 20(2004): [www.harvarddesignmagazine.org/issues/20/perriand-reflections-on-feminism-and-modern-architecture](http://www.harvarddesignmagazine.org/issues/20/perriand-reflections-on-feminism-and-modern-architecture).



Figure 6-1. *Subjective Dress*, Gallery exhibit, *Architecture and Feminism*, Elizabeth Cronin.  
Image credit: Elizabeth Cronin, 2018.

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## BIOGRAPHICAL SKETCH

Elizabeth Cronin graduated from the University of Florida with a Master of Science in Architectural Studies in the spring of 2018. She also received a Master of Architecture from the University of Florida in 2017 and a Bachelor of Design in architecture in 2014. As a graduate student she was a Graduate Teaching Assistant for first year architecture design studios and Executive Editor for *Vorkurs: Making* (UF's Graduate School of Architecture publication). As a post-graduate student she taught lower division design studios and co-taught in the design/build program. Her research lies at the intersection between architectural pedagogy, materials and making, inclusive design methodologies, and Feminism in architecture.