

Gender and Architecture

Ashlyn Anderson

The Technological Shroud: Sustainability, Ethics, Technology, and the
Environment

ARCH 6290 H01 Spring 2019

Michael K. Jenson

17 May 2019

“...the body in architecture is not only the essential subject... indissolubly linked to the question of gender and sex, a question that has generated the most extraordinary metaphors in the elaboration of an architectural ideology.”

- Diana I. Agrest, *Architecture From Without*

Our society uses gender and feminism as intellectual constructs that are perceived and utilized primarily when juxtaposing balances and imbalances of power. Spatial relationships within the framework of architecture are merely instruments of thought and action as well. Space is a deeply cultural and social concept that exacerbates the struggle of power between genders in our modern Western world. It is the masculine form of spaces that privileges the patriarchal power and exacerbates social issues including the dichotomy of male versus female, as well as the adherence to stereotypical gender roles. The role of the architect and designer is one that plays an essential role in the way that we, as humans, experience and view the world and society that we occupy. Spatial relationships are not inherently powerful - it takes knowledge and practice to create a space that is meaningful. At its core, architecture is a profession that is rooted in designing spaces for all people to use and experience equally. In our modern society, the notions of gender and feminism are discussed within the framework of nearly every aspect of our lives - from politics to social constructs. The role of feminism in our culture “has always been a critical-visionary perspective concerned with understanding problems in the present context in order to envision a brighter future for all” (MacGregor). Gender and feminism are words that establish a basis for how we

view and interact with our world, and create dialogues centered around equality in politics, economics, and cultural constructs. How does architecture fit into and respond to this notion of feminism and gender, however? How can we create a more sustainable architecture, and therefore more sustainable world, through applying feminist thought and theory to the spaces that make up our world?

The role of physical space in our culture is to empower us as humans through enhancing (or, conversely, restricting) the basic activities of our everyday lives. Space is not innate, but is an ever changing aspect of the world as we know it, and is therefore “intimately bound up in social and personal rituals and activities” (Rendell 102). On the whole, spaces (and our perceptions of those spaces) are inherently gendered. This application of gender within the built environment absolutely effects the way in which we experience, visualize, and are impacted by space. The feminine physique in architectural design and spatial arrangements creates an environment of inferiority, exploitation, and subservience due to female under representation. The subtle submission of the feminine is a behavior so deeply ingrained in our society that we typically do not notice or acknowledge it. That is, because traditionally masculine architecture is our norm, we do not recognize that this is an issue, or even notice that it occurs at all. Architecture is more than shelter, or neutral forms that facilitate the interactions of bodies both with one another and with space. Rather, architecture is, in part, a system of representation that provides us with meaning and values. Therefore, architecture contributes greatly to our sense of self and identity, as well as providing us with a framework through which we see the world. However, the spatial marginalization

of the feminine in a system that allegedly represents all people can only result in sustained patriarchal domination.

In the Western world, architecture is studied based upon theory, history, and precedence. Much of the work that architectural practice is governed by is the concept of male hegemony. This is an approach that came forth as early as during the Renaissance. Later, in the 20th century, the rise of modernism and its parent, the Bauhaus, brought forth a concentration of austere, untreated architecture devoid of adornment. The Bauhaus, which was founded in 1919 in Weimar, Germany by Prussian architect Walter Gropius (Cook 1), is known as a critical period in the development of design and architecture as we know it today. Walter Gropius said that “men think three dimensionally whilst women could only [think] two dimensionally” (Rashid 5), a notion which served as the basis for the juxtaposition of male and female students at the school. Female students were expected to pursue the softer, two dimensional arts including weaving, while male students were encouraged to explore mediums including painting, carving, and the male-dominated architecture (Rashid 5). Indeed, even within the scope of architectural education in the present day, students are taught that the best, most successful architects - those whose work you want to study - are predominately white and male.

Much of modernist architecture included materials such as raw, brutal concrete (béton brut) that was emphasized by basic geometric form. Additionally, the presence of ornamentation and decoration was eradicated and criticized to the point that

architectural form was admonished of all femininity. The “sensuality of ornament” was used to identify architectural features as being feminine, and in turn, used this association to remove the “threat of femininity” (Rashid). However, the Bauhaus did not invent this concept. For centuries, primarily in Western societies, architectural projects have been predominantly designed both by men and for men. This is true not just of architectural design, but is true of discussion regarding spatial relationships in general. For example, Le Corbusier’s Modulor - and its predecessor, Leonardo da Vinci’s Vitruvian Man - are based solely upon male anthropomorphism and the male physique. It is not a coincidence that both of these anthropometric scales of proportions were drawn by two of the most influential and renowned designers of history to explain proportions upon which spatial hierarchies should be based. Though these drawings are frequently used to explain systematic and mathematical measurements of the typical human body and create an improved appearance and function of architecture, they are ultimately unsuccessful in achieving this goal. This failure is primarily due to the simple fact that these figures are based upon nude, able bodied six foot tall male figures - when only roughly half of the population is male, and a significantly smaller portion happen to possess the proportions of a six foot tall male. The result of this is that the majority of buildings, spaces, and furnishings are designed for the usage and comfort of male bodies, while feminine proportions are rarely considered, and almost never designed for specifically.

The human body has been long utilized as a metaphor for architecture. The built environment is merely an artifact of our culture, a symbol of our own self image. As

Gerard A. Rey Lico wrote, “the metaphorical appropriation of the human body is a powerful force in the design of buildings and cities...analogies between body and building are ever present in our architectural vocabulary - skeleton, skin, face, legs, and feet.” Metaphors are frequently used to attribute human qualities to buildings in an abstract manner because much of the population is able to conceptualize these ideologies. Additionally, architects have long attempted to humanize architecture, and in doing so have created a formal relationship between the human physiology the spatial form. In his *The Ten Books of Architecture*, Vitruvius indicates that “the form and mathematical symmetry of the human body is the paradigm for design.” It is from this notion that male anthropomorphism in the Modulor and the Vitruvian Man are presented. Additionally, Louis Sullivan, an architect known as the “Father of the Skyscraper” described a building designed by his contemporary, Henry Hobson Richardson as “a man to look at, a virile force, an entire male. It stands in physical fact...therefore I have called it, in a world of barren pettiness, a male, for it sings the song of procreant power” (Rendell 1).

Additionally, in Ayn Rand’s 1943 novel *The Fountainhead*, the protagonist, Howard Roark, is presented as being the idealistic man. This is initially indicated in the first passage, which describes Howard Roark’s physical appearance. He is a man standing naked a cliff’s edge, a man whose physique is strong and is composed of “long, straight lines and angles, each curve broken into planes” (Rand 15). Howard Roark works as an architect. Not only is Howard Roark an architect, but his physical attributes embody and can be likened to complimentary descriptions of the physicality of

architecture. Rand's description of Howard Roark leaves no doubt that he is not only the embodiment of the ideal man, but that his profession as an architect (and related physical attributes) can be likened to the pinnacle of male anthropomorphism. Throughout the novel, Rand utilizes building metaphors to express the theme of male worship. *The Fountainhead* is not only a story that explains the integrity of buildings in conjugation to the integrity of men, but it is a story that establishes "how culture and society enlist architecture and architectural metaphors to construct, circulate, and maintain beliefs about gender (Lico 32)." This notion not only creates the impressions that all architects should be male, and that all male architects are ideal and to be valued, but purports how our culture organizes architectural conversations around the reverence of masculine attributes.

Our society has an extensive history of creating differentiation between masculine and feminine forms and their relationship to the public and domestic spheres. Even our cities are built upon this notion. Everywhere we look, the dichotomy of male/female is at the forefront of our spaces. Within the home, women are not only assigned to the role of domesticity, but are confined as deep as possible within the home, to spaces not typically visited by guests - the bedroom and kitchen - as far away as possible from the public eye. This notion expresses a culture of masculine authority upon the feminine. Because there is a spatial order in which the woman's position in the home is at the end of a spatial series, women are hidden from the view of men other than her husband. The roles of different spaces within the home, and the users of those spaces directly reflects the culture of domination that is present in our society. Even

within the profession of architecture, men dominate traditional architecture roles, while the majority of women are assumed to be decorators. The eradication of boundaries between the male and the female is furthered by the phallogocentric society which we live in. Male physiology is common place in architecture, and has been for centuries where the “phallic construction of skyscrapers to the muscular construction of civic architecture” (Lico 32) represents the domination of the feminine. Vertical architecture and angular construction are representative of male hegemony, while horizontal and curvaceous architecture correspond to the feminine body. In particular, the skyscraper represents the pinnacle of masculine symbology, being that its most basic form is “rooted in the big, the erect, the forceful” (Rendell 1).

As aforementioned, building materiality and ornamentation are at the forefront of the conversation on genderization in architectural and spatial design. Architecture is a discipline that inherently engages the body directly. It is concerned with the formulation of space within the context of rational human constructs. According to Deborah Fausch, the materiality of architecture in and of itself is directly correlated with the human physiology and femininity. During the Modernist movement, the sensuality of ornamentation (and its related association with femininity) was considered to be a threat to architectural design. Adolf Loos, a Bauhaus architect and theorist, declared “ornament [to be] a crime.” Because of this, a movement in which architecture was stripped of all adornment and was reduced to its “truths of construction, materiality, form, and function” (Lico 34) became the accepted practice. The Modernist movement viewed ornament not only as criminal, but considered it to be a way to mask the heart,

or the pure reality of the architecture, and liken it to femininity and frivolity. The severity of the primary “modernistic materials such as brutal, hard, simple concrete, steel, glass was emphasized by plain architectural forms” during this era, and “ornament and decoration [were] criticized and abandoned,” acts which “deprived architecture of feminine features” (Lushnikova 716). A building’s integrity (in terms of architecture) began to be considered as being a derivation of its permanence. In other words, architecture was only considered a relevant part of the dialogue if it had an element of permanence, and if it was devoid of frivolous adornment. On the whole, the masculinization of material properties became the accepted standard - less is more - with hard, cold, raw, permanent spaces being revered over the usage of applied ornamentation.

The role of the architect is to be “responsible for the existence of buildings that considerably affect the lives of their users” (Lageaux 118). Historically, women have not had spaces of their own, rather, each space is utilized by the woman in a manner that fits into the traditional cultural role including “hostess in the living room, cook in the kitchen, mother in the children’s room, lover in the bedroom, chauffeur in the garage” (Rendell 2). However, this notion began to shift during the 1920s, when feminist thought became widely recognized for the first time in Western culture. During this period, women were provided with the opportunity to experience their lives outside of the home. This led to projects performed by women architects and designers, which were created to establish spaces that were functional for female occupants. Grete Schütte-Lihotzky’s Frankfurt Kitchen is an example of such functional architectural

design. Schüte-Lihotzky modeled her kitchen after galley kitchens seen in train cars, and designed the space for optimal function and ease of use. All proportions were created based specifically upon the proportions of the female body. She also “experimented with new materials and simple, strong color”, creating a space that not only responded to the spatial needs of the feminine, but created a dialogue about the usage of material and ornamentation in architecture that specifically responded to the desires of a female occupant of a space, rather than simply eradicating the usage of adornment to create a more masculine design. The Frankfurt Kitchen ultimately came to be seen as a symbol for the eradication of the oppression of the housewife. Furthermore, because architecture is both informed by and informs the way in which the human body is perceived within the context of spatial relationships in the built environment, it is clear that gender plays a significant role in both the design and function of architectural form. Annmarie Adams and Peta Tancred suggest that “the sexual division of space into interior/female and exterior/male” is sustained by the notion that “interior design...(is) the ‘feminine’ side of architecture”, including the continuing presumption of “women’s supposedly innate understanding of things domestic.”

Modernism sought to not only create architecture that followed its function with little adornment, but brought forth different schools of thought surrounding what exactly the purpose of domestic architecture is, and how it should manifest within the context of its site. Le Corbusier stated that the “house is a machine for living in”, indicating that the architecture of the home should truly be established upon its use. That is, the essence of his domestic architecture was the notion of Louis Sullivan’s expression “form follows

function". His Villa Savoye (1931), a modernist villa located outside of Paris in Poissy, France on a site that was "originally surrounded by woodland" follows this sentiment exactly by adhering to Le Corbusier's own Five Points of Architecture which include 1. Pilotis, 2. Free design of the ground plan, 3. Free design of the facade, 4. Horizontal windows, and 5. Roof gardens. Though Le Corbusier was successful in implementing his Five Points of Architecture, Villa Savoye is a contradiction of the architect's goal of "form follows function". This is due to the fact that Villa Savoye leaked both air and water, creating a "very noisy environment for the residents" (Carlén 2). As a result of these issues, the Savoye family left the home, declaring it uninhabitable. The goal of pure functionality that Le Corbusier set out to create ultimately resulted in a home that did not protect from the elements, and therefore did not function in the manner in which a home is supposed to function on the most basic level. Also relevant is the fact that Le Corbusier designed a truly modernist building in Villa Savoye - there was no female influence on the formal architecture of the home - other than the chaise in the bathroom which was famously designed for Madam Savoye. Additionally, the circulation of Villa Savoye is primarily vertical. The design of the home is essentially based around a central ramp that winds through the building, making it vertically designed and therefore representative of the masculine hegemony. The home has virtually no ornamentation and contains little application of color. Therefore, Le Corbusier's Villa Savoye is an example that, even within domestic architecture, the notion of spatial dualism is not always present. That is, even within the interior spaces of the home, the architecture is cold and oppressive, fitting in with the standard of masculine centric architecture.

During the same time period, Lina Bo Bardi began to develop an architectural language based on modernism. Her Casa de Vidro, translated to English as “Glass House”, which is located outside of São Paulo, Brazil and was built in 1950 follows many of the same modernist principles as Le Corbusier’s Villa Savoye. However, Bo Bardi establishes her own modernist language within the framework of her architecture. Unlike Le Corbusier, Bo Bardi utilizes color and a wide variety of ornamentation in the design of Casa de Vidro, which convey emotion and spatial function. Her spaces are created with great attention to the female physique - varied ceiling heights and spatial proportions designed specifically for the function that they require reflect this, as does the galley kitchen, which takes influence from Grete Schütte-Lihotzky’s Frankfurt Kitchen. Her concept of architecture “and architectural freedom as a social issue that must be seen from inside a political structure” embraces the notion of utilizing the female physique and feminist ideology to create a space that is truly comfortable and functional for all people, and that accommodates and encourages the perspectives of female occupants. While Le Corbusier failed at his attempt to create a home that was purely functional and worked as a machine, Lina Bo Bardi was much more successful in her design. This is primarily due to her acknowledgment of the female body - something that she embraced in the design of a comfortable and functional home that still fits in with the modernist aesthetic. Additionally, Lina Bo Bardi herself was at the forefront of the conversation on sustainability, being one of the first female architects to do so. After building and living in Casa de Vidro for several years, Bo Bardi described the home as “an attempt to arrive at a communion between nature and the natural order” which can clearly be seen though the fact that Bo Bardi maintained the topography of the area,

designing the house around the landscape, and replanting every tree that was removed for construction.

The dialogue between feminism and sustainability is a relatively new topic when considered within a historic contextualization. In part, this is due to the relatively recent conception of the conversations on both feminism and sustainability respectively. This interaction between feminism and sustainability is best discussed within the framework of ecofeminism, a movement that started in the 1970s as a synthesis of the concepts of ecology and feminism. The ecofeminism movement draws parallels between the oppression of the feminine, and the oppression of the natural landscape. Ecofeminism is based upon “the connections between feminism and environmentalism...an appreciation of which is essential for the success of the women’s and ecological movements” (Warren). Therefore, ecofeminist thought suggests that the integration of the female traits in architecture cannot occur “without the inclusion of feminist concerns for diversity in general and gender equality in particular,” and the lack of these concerns directly renders “most green approaches incomplete” (MacGregor). Ecofeminism serves as a dialogue that draws parallels between women and nature, and within those comparisons, establishes a rhetoric that seeks to end all forms of domination while incorporating ethics into conversations about the dichotomy of human destruction and the natural world. Ecofeminism is not about flipping the script on traditional domination - that is, creating a world in which the feminine dominates the masculine. Rather, ecofeminism seeks to create a frame of reference through which we can understand the intellectual constructs of man versus nature and man versus woman, and use the

understanding of these constructs to create a world that is more equal between genders and that moves towards sustainable behavior within the building industry and beyond.

According to Sherilyn MacGregor, “the contemporary linkage of feminism and environmentalism in the West is attributed to French feminist writer and activist Françoise d’Eaubonne who coined the term ecofeminism in 1974...explaining that this new global movement within feminism draws upon the specifically feminine power to combat the ecological crisis and the systems of male dominance that have given rise to it.” The notion of sustainability has become a heavily discussed topic in many disciplines over the course of the past several decades. Sustainability in architecture, then, has been greatly established and debated. For the purpose of this paper, sustainability is defined as “the preservation of the existing environment for the usage of present and future generations”. In the framework of architecture, sustainability is inclusive of material choice, consumption of non renewable resources, emissions, occupant health and comfort, and the goal of saving energy and water. Ecofeminism and sustainability in architecture are inherently interconnected through the common goals of establishing a world in which all beings can live equally without regard to the domination of gender or the domination and eradication of nature. Ecofeminism seeks to create a world in which all people are equal both with each other, and with the natural world. Similarly, sustainability seeks to preserve the natural world for all people, both present and future, without regard to gender or status. The synthesis of these two schools of thought establishes a “realization on the part of growing numbers of feminists that the quest for

gender justice and equitable social transformation takes place in the midst of an ecological crisis that threatens all life on the planet” (MacGregor).

In conclusion, the notion of masculine hegemony has been part of the architectural conversation since before Leonardo da Vinci drew the Vitruvian Man. It was exacerbated in the modernist movement, through the eradication of ornamentation and the creation of further developed male centric design concepts, including Le Corbusier’s Modulor. It extends into the architectural forms that we create today, and is so deeply ingrained in our society and practice that it has become subconscious - almost second nature. Within the architecture profession, history often forgets to mention the influence of female architects in the design and construction of many of our most beloved and respected buildings and spaces. However, gender inequality within architecture is not merely based on the numerical and statistical domination of men employed within the profession - that is, the gender gap. Rather, it is the disproportionately masculine influence in theories, standards, practices, and ideologies that must be informed by feminist thought. Architecture is physical, just like human bodies are physical. The differentiation between the masculine and the feminine physiques results in differing spatial needs - needs that are, for half of the population, not met with current standard architectural design practices and theories.

Feminism remains an inherently positive approach to lead change both in architectural practice and in the creation and development of the built environment. The ultimate result of the application of gender and feminist thought to the built environment

is the creation of spaces that all people feel safe and comfortable occupying. Additionally, eradicating the domination not only of the feminine, but also eliminating the domination of nature will ultimately lead to an architecture that not only considers the preservation of the natural landscape, but attempts to improve it. Feminist thought merges theory and practice, encouraging us both as architects and as people who occupy the built environment to rethink the relationship between the principles of traditional space and the people - both male and female - who occupy it. Feminism links individuals to systems, establishing a humanistic outlook and approach, which allows us to create dialogues about the future of architecture, wedding gender and space to the manifestation of ecofeminism and sustainability in the built environment. This fosters new ways of understanding and experimenting with what architecture means within the context of society, and leads us to an empowered architecture that responds to the political, social, and environmental needs of both our culture and our planet. The ultimate result of this is a resilient, inclusive, and future focused profession that embraces the concepts of feminism and gender as the concerns and needs not just of women, but of our entire population as a collective whole.

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