ENTRANCE STRATEGIES:

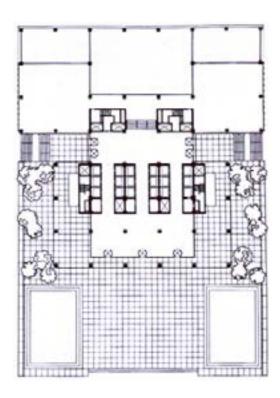
Towards a new conversation about gender, labor, and the built environment

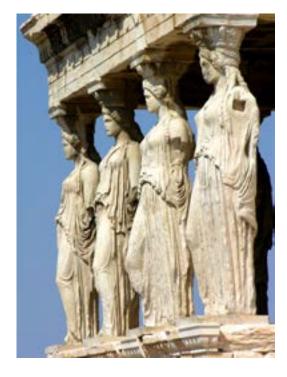
Elvia Wilk & Elizabeth Feder

Architecture is inherently a struggle with borders. Space is imagined, articulated, and defined through differentiating experiences. The first border architecture established was between humanity and nature - a thickened line conceived of, drawn, and built as to distinguish us from the elements of the earth. Perhaps the second border architecture wrought was between each of us.

Within the canon of western architectural thought, there is an indisputable link between the human body as creator, user and muse for architecture and the architectural act itself. As architecture is simultaneously informed by and informs the way the human body is understood within the context of space and society, it is not surprising that the role of gender in the creation and use of the built environment is a potent one (as a body without gender is an impossible body¹).

The physical body is tied to the work it performs. It is through the lens of labor that we are tracing gendered boundaries in western architecture in order to arrive at the present condition where labor, having dissolved into the virtual and immaterial realm has the changed the way we envision and enact gendered spatial limits. When we parse today's conditions of gendered bodies, gendered work, and gendered space within the context of the western architectural tradition, where do we stand?





(*Left*) Mies van der Rohe, Seagram Building (built 1958) Photo: Common Projects. (*Right*) The Caryatids of the Erectheon (built ca. 421-406 BC) Photo: Wikimedia Commons.

I. Where Body Ends and Architecture Begins: Historical Paradigms of Bodies at Work within Western Architecture

As this conversation is situated within the larger trajectory of western architectural and gender discourse, the first part of this paper aims to map the historical landscape of architecture and body's intersection through two main labor lenses: I. Divine labor, as exhibited through the mythology of Ancient Greece and the architecture of the Parthenon; and II. Collective (material) labor, as exhibited by the spatial, social and material revolutions of the Bauhaus in 1930s Germany.

Divine Labor: Architecture of Worship in Ancient Greece

Entering this conversation with the theory and practice of architecture in Ancient Greece is pivotal as it here where the borders between body and architecture begin to become provocatively porous: the body is no longer simply the instrument to conceiving of and constructing architecture, but the body's inherent proportions and measurements are used as the foundation for the architecture's design (fig. 1). Additionally, societal body constructs, namely gender roles and respective division of labor, further informed the conceptual development of Greek architecture, from anthropomorphic development of the architectural orders (i.e Doric=male; Ionic=female), to the segregation of specific programs and users (fig. 2-3). Looking at the Parthenon in particular as an introductory case study reveals a co-evolution of gendered body, labor and the built environment in the west that has set the stage for our current questions.

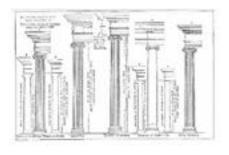


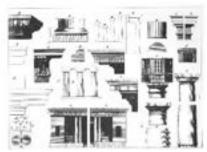


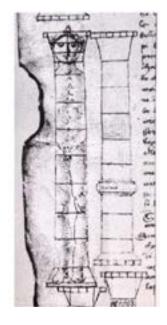


(fig. 1) Francisco di Giorgio Martini, body/temple studies (1482). Source: Body & Building.

*These drawings point to the expanded trajectory of classical architectural thought from Ancient Greece to the Renaissance. In the re-exploration, -appropriation, and -definition of classical Greek architecture during the Renassiance, there is a prolific emergence of drawings and texts that explore the male anthropomorphisms in architecture that had not been found in the classical Greek records.







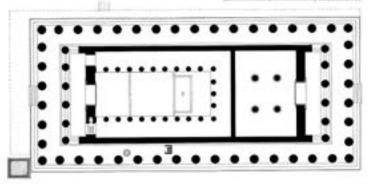
(fig. 2) Vitruvius, "The Ionic Columns and Capitals" & "The Doric Columns and Capitals," *The Ten Books on Architecture* (ca. 15 BC).

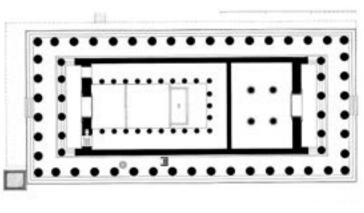
(fig. 3) Francesco di Giorgio, detail from drawings of columns, capitals, and pilasters. Source: Ashburnham Codex, Florence, Bibliotheca Mediceo-Laurenziana (ca. 1495).

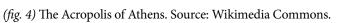
The religious construct of Ancient Greece was based on a hierarchy of male and female deities, where each embodied particular acts of labor and thus predicated specific spaces of worship. The Parthenon, and much of the Acropolis as a whole, is an architecture dedicated to the worship of Athena. The devotion to Athena is curious within the gender/labor dialogue, as her narrative embodies the splitting and fusion of male-female labor borders, as is realized in the architecture of the Parthenon itself.

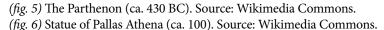
In plan, the Parthenon (fig. 4) is evidence of how inhabitation along male/female borders was expressed in architectural form. For one, the nesting of facades- layering of rows of columns between the city and the sanctuary- reveals several dichotomies. On the one hand, the temple is an introverted construction: a microcosmic series of architectural shields built to protect the sacred space of the virgin (Athena, in spite of her powerful and active female form, is antithetically desexualized). On the other hand, the Parthenon is emphatically open in that it has no walls to create barriers along its primary axis (fig. 5). The circulation and views into the temple are virtually uninterrupted through the field of deliberately aligned columns. For another, struggles with gender divisions are evident in the sanctuary itself, which is divided into two unequal spaces: a larger one to the east and a smaller one to the west. It could be read as a split between the civic body and the individual: the larger space to the east housed the cult statue of Athena, large devotional audiences, as well as the funds for the city of Athens; the smaller space to the west may have functioned as an intimate chapel for quiet reflection. This dichotomy is analogous to the













split between male and female spaces in the city below: the more communal, public space being definitively male; the more intimate, private space designated as female.

To gender Athena, and the aspects of her architectures, as purely female or male is too simplistic. There are elements of gender-fusion and confusions in the rendering of Athena when one looks closer at both the narrative and architectural texts of the time. In various myths, Athena appears as a balance between male and female labor: she is simultaneously the patroness of weaving and metal-forged weaponry; wisdom and warfare. Her visage is an explicit intersection between male and female elements: the traditional dress of a noble, married woman, for instance, is paired with the armor and helmet of a soldier (fig. 6).

While this next case study comes significantly later (and jumps over no less relevant case studies in the centuries between), it represents perhaps the most complementary bookend to that of Athena and the Parthenon. Here we are temporarily omitting the significant developments of the Renaissance, the transition from medieval craft culture to the industrial revolution, the Enlightenment and so on for brevity's sake, the Bauhaus is a critical moment where all the prior labor and spatial typologies come to a head.





The Implications & Limitations of the Bauhaus Workshops at the Onset of the Modern Movement

In Germany of the 1920s and 30s, the Bauhaus took hold of western borders of craft, industry, technology, and leisure in order to redefine the space of creation, art, and communal life. Where the Bauhaus had created exciting potential and even, early on, a hopeful renegotiation of spatial and labor borders along gender lines, their progressive developments ultimately fell short ultimately because labor and, consequentially, its architecture remained framed by gender divisions and all the dichotomies it implies.

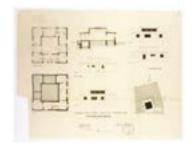
However, let's start with Bauhaus' initiation of breaking down spatial borders according to gendered labor. In earlier examples of art and architecture coming from both masters and pupils of the Bauhaus school, there is a utopian, egalitarian atmosphere being projected. The architectural drawings workshops and living spaces are infused with figures of students working, resting, filling the space with diverse content. The photography coming out of the school was particularly successful at painting this idyllic narrative (fig. 7), where men and women cohabitated in bliss: working and living in tandem. And before relocating the school to Dessau, the male-to-female ratio of students was almost 1:1 (incredibly progressive for that, or any, time).

Evidence of a reversion back to gender imbalance, and spatial/labor segregation begins to emerge in the art and architecture coming out of the school nearly three years before the move to Dessau from Weimar. For instance, Walter Gropius' design for Haus am Horn in Weimer in 1923 (fig. 8) is based on an egalitarian, square, plan, anchored around a prominent communal space in the center of the house. However, Marcel Breuer's design for one of the rooms in Haus am Horn (fig. 9) is specifically rendered as "woman's bed and dressing room," which begs the question, why differentiate at all?





(fig. 7) T. Lux Feininger, *Untitled* (*Group of Bauhaus Students*), (1929), and *United* (*Sports at the Bauhaus*), (1927).

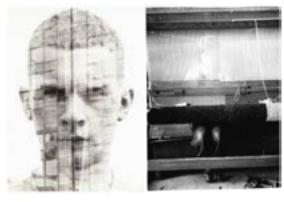




(fig. 8) Walter Gropius, drawings for Haus am Horn, (1923). (fig. 9) Marcel Breuer, design for women's bed and dressing room for Haus am Horn (1923).

By the time the Bauhaus had moved to Dessau in 1924, the male-to-female student ration had halved, to 2:1, with the gap continuing to increase until the school dissolved in Berlin in 1933. Alongside these





Left- (fig. 10) Lazlo Maholy-Nagy, Eifersucht (Jealousy) (1927). Right- (fig. 11) Hajo Rose, Untitled (1930) and Untitled (1931).

disappointing numbers, work by both masters and students such as Lothar Schreyer - whose Death House for a Man and Woman explicate a separate visual language based on gender even when the body becomes obsolete; Lazlo Maholy-Nagy (fig. 10) - whose collage, Jealousy, curiously stages a mirthful woman passing through a portal towards the foreground of the frame only to be shadowed by three different iterations of the same man (a shadow, a ghost, a frame) disenfranchising her through objectification (the frame's

gaze directly at the woman's breast), the ghost enforcing a separate portal in the background, and the ominously encroaching shadow); and Hajo Rose (fig.11) - whose photomontages veil a female and male student with the labor of textiles and architecture, respectively. All express the increasing gender divide at the Bauhaus.

The architecture of the Bauhaus Dessau building itself engendered this divide. The main stair from the ground floor up to the studios and workshops enforced a bifurcated circulation (note the photo on the left of all the women of the textiles workshop populating one half of that stair) (fig.12), while the overall plan of the main Bauhaus building (fig.13) maintains an interrupted circulation no matter which floor the students occupied. Continuity and cohesion fall apart at the level of the architecture.

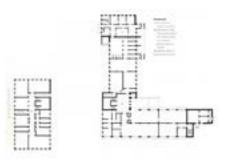








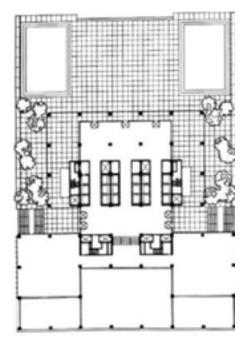




(fig. 12) T. Lux Feininger, Women Weavers on the Stairway Bauhaus Dessau (1927-8), and photograph of the Bauhaus Dessau stair ca. 1926. Source: Bauhaus 1919-1933: Workshop for Modernity.

FROM THE ARCHITECTURAL OBJECT TO THE URBAN NETWORK: SEAGRAM AND LEVITTOWN

If the Bauhaus hinged on the shifting gap of gendered labor and space at the entry into the modern movement, the extension of that discrepancy from a singular work of architecture to the urban network proliferated a gender-space condition dramatically polarized and endemic. Mies van der Rohe's Seagram Building in New York (fig. 14) (and the New York City grid itself) (fig. 15) ushered in the architectural stage for the corporate businessman, while the simultaneous construction of suburban communities like Levittown (fig. 16) designed and advertised towards the parallel housewife introduced a magnification in scale (fig. 17) that predicated gender-based labor and spatial divides on a swollen level of the urban, global, and eventually virtual.





(fig. 14) Mies van der Rohe, Seagram Building (built 1958) Photo: Common Projects. (fig. 15) Grid of Manhattan. Source: Storefront for Art and Architecture, 49 Citites.



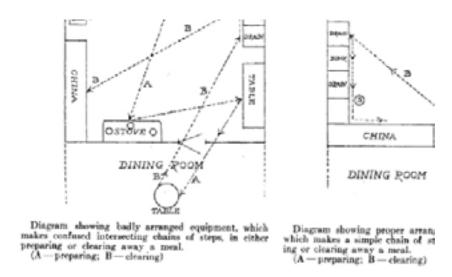


(fig. 15) Brochure advertising Levittown suburban housing (1957). Source: Wikimedia Commons. (fig. 16) Suburban plan of Levittown community. Source: Storefront for Art and Architecture, 49 Citites.

II. Gendered Zones of Virtual Labor

This half of the paper will attempt to locate zones of gendered labor within today's communication economy. Because our current economic system is based on a vast amount of labor classified as "immaterial," labor spaces and the boundaries between them are also immaterial – namely, on the internet. Because physical restrictions are decreasing and virtual boundaries are difficult to define, it is generally assumed that zones of gendered inclusion and exclusion in the immaterial labor sphere are nonexistent. By examining the nature of immaterial labor throughout recent history and the theoretical tools used to confront it, we will arrive at the hypothesis that labor has not been un-gendered through the separation of labor from physical site.

Immaterial labor is often defined as labor that produces "social networks and forms of community," the labor of reproducing existing, naturalized social systems as opposed to producing new cultural artifacts or materials for technological advancement. Until the post-industrial era, such immaterial labor was relatively unquantified – it was work with neither a tangible product nor direct monetary value. The vast majority of labor within this category was performed by mothers and (primarily female) domestic workers within the home. Until the last few decades, immaterial labor was therefore gendered and its architecture was typologically distinct: the private, domestic sphere.



(fig.?) Christine Frederick, *The New Housekeeping: Efficiency Studies in Home Management* (1913). Frederick writes: "Im going to find out how these experts conduct investigations...and then apply it to my factory, my business, my home."

To illustrate the relationship between labor typologies and gendered space, we can look to the work of Lillian Gilbreth and Christine Frederick in the 1920s in the US. Among others, Gilbreth and Frederick produced notable "home-efficiency" studies, borrowing strategies of Taylorist scientific factory management for work within the home (fig.?). Via spatial reorganization and modifications of daily movement, production could be maximized in order to, say, reduce the number of kitchen operations necessary to make a strawberry shortcake from 97 to 64. Their extremely popular theories were widely published and their methods copied by American women; Gilbreth's L-shaped kitchen arrangement is still one of the most popular layouts today.

Gilbreth's and Frederick's theories were not intended to level the work of the wife with that of the husband. Rather than argue that women's work was comparable to paid labor, assert that women were contributing members of society, or even imply that women shouldn't have to do housework, Fredrick's explicit goal was modernize the home so that women's "necessary" tasks could be made less "daunting" and "oppressive." It was this new attitude that housework could be conquered and minimized through which it became understood as work in the first place: something to be physically counted and managed. If home productivity could be maximized, family life could improve; the end products of domestic work were not dishes, laundry, or money, but new workers themselves. Frederick writes: "The end and aim of home efficiency is not a

perfect system of work, or scientific scheduling, or ideal cleanliness and order; it is the personal happiness, health, and progress of the family in the home." (Citation: Efficiency studies in home management.) Throughout this and other home-efficiency studies during the Taylorist era, up through the work-saving electronic appliances of the 1950s, the home became a space of innovation, productivity, and advancement. Despite superficial resemblance to the factory or office, it remained entirely distinct spatially and programatically, perhaps becoming more entrenched in its typology via the parallel. Labor's value hierarchy remained intertwined with spatial segregation.

In the last 50 years, attempts at valorizing immaterial gendered labor have been extensive and varied. Notably, feminisms in the 1960s-80s attempted to explicitly label the home as a workplace and therefore women as direct producers of value: unwaged workers. To quote from political scientist Kathi Weeks: "Socialist feminists...built on Marxist political economics to conceive unwaged reproductive labor, particularly household caring labor, both as a locus of exploitation and as a site from which resistant subjects and alternative visions might emerge." (Citation) Such strategies acutely demonstrated the intrinsic literal and metaphorical connection between the home and the female body as laborer within an economic system still dependent on material production. In this context, the labor strike was appropriated as a feminist tool. The threat of the housewife on strike, a threat which was carried out at various moments, aimed to rebrand domestic space as public and politicized. Wrote Italian feminist Silvia Federici in 1974, "They say it is love. We say it is unwaged work. They call it frigidity. We call it absenteeism. Every miscarriage is a work accident. Homosexuality and heterosexuality are both working conditions...Neuroses, suicides, desexualization: occupational diseases of the housewife."

Yet as many have pointed out, trying to level reproductive with productive labor both depends on and reinforces the remaining "spatial division between production and reproduction," unable to move beyond co-dependent gendered or spatial dichotomies (Citation: wWeeks). Arguing that "natural" caring labor deserves equal status as cultural production does not necessarily de-naturalize it, and it continues to retroactively enforce a vision of history that is organized according to an inside/outside, man/woman dialectic – which this paper itself, for example, is entirely dependent on.

Today, the spatial division between production and reproduction *is* changing, and gendered labor lines are shifting in tandem. In our contemporary economy, immaterial labor has become directly productive of capital. It's no longer women's work; it's everyone's work. The conflation of life and work that was once the condition of the housewife is becoming generalized. Socialist-feminist strategies reliant upon the life/work divide are unable to confront our situation. What strategies emerged in its wake?

Arresting a key moment of economic shift in the 1980s-90s, cultural theorist Donna Haraway lept beyond arguments about the workplace vs. the home that had become deadlocked and stagnated. Through her invention of the cyborg figure, a conglomeration of "natural" body and techno-prosthetics, Haraway proposed a radical acceptance of technological innovation in the face of the feminized techno-phobia that perpetuated the alignment of cultural advancement, innovation, technology, and militarization with masculine domination. With her self-professed "ironic" science-fiction vision, she described how the old public/private spatial divide was already rapidly becoming a different kind of zone of biopolitical control on a geographic scale, and argued that this moment of border redefinition could be coopted to "heal the terrible cleavages"



(fig.?) "Claudia Mitchell's RIC neuro-controlled Bionic Arm (2006) Photo: flickr

Haraway writes in *A Cyborg Manifesto*: "The relation between organism and machine has been a border war. The stakes in the border war have been the territories of production, reproduction, and imagination. [The cyborg] is an argument for pleasure in the confusion of boundaries and for responsibility in their construction."

of gender" using technology as a catalyst. Biotechnology, prosthetics, implants, transgender operations – these things were already modifying the body in a way that "naturalized" biological gender concepts could no longer accommodate – how could these advancements be appropriated by women towards the aim of "ungendering"? Rather than internalizing a formerly external division, could the line be dissolved?

In a 2002 essay called "Homes for Cyborgs," architecture theorist Anthony Vidler described the techno-domestic space that Haraway's cyborg might inhabit. Rather than a woman-dominated space for reproduction of male workers, he noted that the home was already becoming an abstract place of remote, machine-dominated labor. The home itself had become prosthesis for the body, an ergonomic environment whose intricate physical and virtual machinations created a machine-like subjectivity in its inhabitant. Vidler cites a 1987 artistic installation by architects Diller & Scofidio at San Francisco's Capp Street Project as an expression of the home as techno-prosthesis (**fig.?**). "Where, in the taylorized settings of the twenties and thirties, the home was to be retooled to produce a generation of engineers and technocrats, the woman smoothly integrating time and motion into the carefully calculated spaces of a 'kitchen-house-factory,' now the space of technological competency is reduced to the flat surface of the monitor, the breadth of two hands on the keyboard. In this context the spatial order of the home carries less and less meaning...." In contrast to the homes inhabited by women like Gilbreth and Frederick at the start of the last century, Diller & Scofidio's home, aptly titled *The withDrawing Room*, is a dislocated space -- a non-space within which minimum physical labor occurs. All labor and interaction within the rooms are now remote, transmitted from and to elsewhere. The formerly productive and programmatically-distinct house collapses into two dimensions.







Elizabeth Diller & Richard Scofidio: The withDrawing Room: Versions and Subversions, plans for the Capp Street Project (1987).

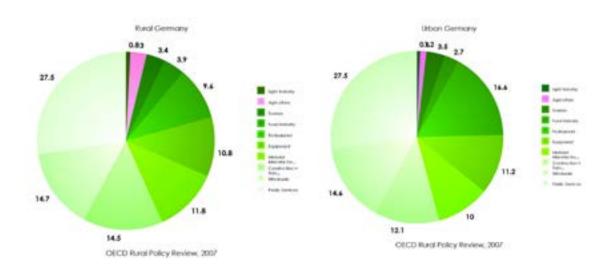
However, like Haraway, Vidler posited another possibility for the cyborg future: an architecture that takes advantage of technological innovation for a fluid fusion of organic and inorganic, creating a space of imagination and access rather than surveillance and self-control. Technology need not remove us from our bodies, both Haraway and Vidler claimed: we do not become "un"-gendered by becoming robots, but through radical new embodiment.

Haraway and Vidler are brought up here not in order to re-vivify cyborg theory but rather to revisit the cyborg's legacy in today's context. Cybernetic feminism (and cybernetics in general) has become a retro, nostalgic theoretical tool -- and yet it hasn't been supplanted by a new kind of gender theory based on virtuality, as one might expect according to our increasingly virtual existences. In contrast to the writing of Vidler, for instance, gender theory has dropped out of the discourse of architecture. Perhaps issues of gender have indeed become irrelevant in regards to the built environment in a literal sense. Furthermore, feminism itself has been largely relegated to the discipline of gender studies and debates about identity politics, dominated by a neoliberal philosophy purporting equality based on free-market tendencies. What are our entrance strategies to a discussion of gender and the body in the built environment today? What *is* the built environment today?

To attend to the cybernetic legacy, let's begin by questioning its predictive capacity -- asking to what extent Haraway's cyborg pan-citizenship on a geopolitical scale been fulfilled, and to what extent Vidler's techno-domestic home has become a reality. The amount of remote labor made possible through technology points to some striking similarities between fiction and fact.

Both agricultural economies and industrial economies relied on spatially-specific labor: the farm and the factory (to be reductive). It's not that material production has become irrelevant – but it's increasingly managed by remote technology. Due not only to economic tides and governmental initiatives but to the prevalence of automated machines, the EU's agricultural workforce has fallen steadily between 2 and 4 percent each decade since the 1970s; in the United States, the agricultural workforce is down to 2 percent of the population (from 40 percent at the start of the century). The global average of robot usage in factories amounted to 55 robots per 10,000 workers in 2012, and is increasing exponentially -- in China alone, robotics sales rose 51 percent by the end of the year. (sources)

Remote labor, in addition to other economic factors, has resulted in the dissolution of typological labor borders on a large scale. This phenomenon can be observed in comparisons between formerly distinct urban/rural regions: the labor of agriculture and fabrication today is almost evenly distributed across rural and urban areas in much of Western Europe (fig.?). Outsourcing labor and manufacturing to other regions of the globe is paralleled by outsourcing of labor from the country to the city, and vice versa. (Citation: Koolhaas) It's now possible to farm and produce goods from anywhere - mobile technology and vast mobile networks release spatial dependency. Take the multitude of farming iPhone applications -- like JD Link, an app



produced by John Deere that remotely monitors fleets of farming equipment, or HerdeMobil, which allows farmers to check a cow's insemination records from on the run. (fig.?)

In tandem with this splintering of work and site on the large scale, the former programmatically-distinct spaces of Home and Work, or Work and Leisure, are conceived of and designed differently by architects: architecture is de- or un-programmed to allow for multiple uses and users. Recurrent trends in office design illustrate the shift: open-plan and flexible-use floorplans, treadmill desks, coffee bars, game stations: workplaces that look more and more like places for life and leisure (fig.?). This approach to programming is comparable to the attempts of high modernism to level different aspects of life and labor into a cohesive



figure number...and number....

whole. However: deprogramming spaces has not deprogrammed gender. It has complicated gender's relationship to spatial boundaries. Moreover, spatial boundaries cannot only be considered in the physical sense anymore.

Michael Hardt wrote in his definitive sociological essay, *Affective Labor*, in 1999: "As general social knowledge becomes ever more a direct force of production, we increasingly think like computers, and the interactive model of communication technologies becomes more and more central to our laboring activities." The virtual, interconnected, mobile and remote aspects of technology today not only set up the conditions within which we work and live but shape the way we understand what it means to work and live. To retain a central aspect

of Marx's materialist philosophy in the absence of Marxist economics: economic systems reflexively create subjectivities. Each economic system creates the type of workers it exploits.

Given the dominance of virtual networks in today's economy of virtual, affective labor, the most appropriate built environment to examine when charting new zones of inclusion and exclusion is the internet. If the web is increasingly where we do work, and the physical places from which we access the web are increasingly irrelevant, the design and infrastructure of the web-based economy are crucial to emerging conceptions of labor and self. As demonstrated throughout this essay, labor in connection with gender, labor in connection to space, and space in connection to gender have been extensively written about over the last century; what is vital at this moment is a holistic consideration of all three variables.

As the remote economy increasingly estranges labor from its site -- and perhaps further estranges worker from labor -- the laborer's conception of self, including gender, also alters in ways not yet possible to graspable. Against the backdrop of claims by proponents of the internet as a "free zone" of anonymity and disembodied sex/gender experimentation, positivist arguments about the internet as a tool of radical political





Figure number... The fun offices of Facebook

organization, and contradictory techno-phobia about the negative effects of online interaction, it is a crucial moment to assess the affects of virtual space upon labor and gender barriers. The hopeful notion of the internet as "ungendered" and "non-hierarchical" space must be drawn in strict comparison with the short-sighted promises of the Bauhaus school.

Several recent surface-level sociological surveys can be examined for clues about whether conceptions/performances of gender are in any way becoming estranged from self or site through the influx of remote technology. Preliminary data about who uses the internet do not provide a way in: general internet usage is relatively equal across genders (although this is a good time to reiterate that we are

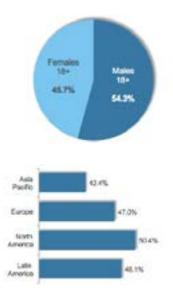


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talking about the Western world and that there are distinct regional differences across the globe (fig. and fig.?). The question we are asking is not who goes online, or from where, but who spends time in which specific zones of netspace.

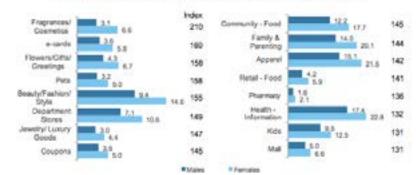
It is easy to demonstrate that there are gendered zones online. No surprise: the websites most frequented by women in comparison to men include those in the stereotypical categories of cosmetics, flowers, gifts, pets, beauty and fashion, jewelry, food, family and parenting, apparel, pharmaceuticals, and health (fig.?). Our claim is that these gendered spaces are still directly and identifiably connected to traditional gendered and spatialized labor, for the following primary reasons:

Firstly, domesticating the computer did not re-gender it. According to one study in the Netherlands, men have more home computers with internet access than women do, and women in couples with joint home computer access often view the

device as belonging to their male partners. More importantly, the home computer is given priority usage for work-related tasks, which are primarily done by men in the household. There is no concrete reason to believe that the techno-domestic home in its contemporary manifestation has not preserved the distinction between "techno-" and "domestic."

Behavioral scientist N.A.J.M. van Doon describes this situation: "The domestication of the computer in the





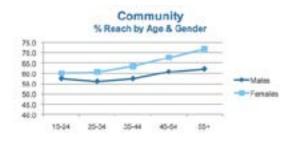
Worldwide Audience (15* accessing from Work or Home), April 2010 Source: Media Metrix Worldwide

household leads, in these cases, to a reiteration [rather than a reversal] of traditional gender roles." While the home computer has created a "shared techno-social domain," technology has not been un-gendered by being re-located; it becomes an artifact upon and through which normative gendered practices are further enacted and naturalized. (Cite: van Doorn.

Secondly, immaterial labor online contains identifiable gendered subsets. The activities of women online are in many ways still analogous to the traditional "caring" labor of the domestic worker: women make the most online goods purchases, as per their traditional role of household consumers. More to the point, they spend a lot of time on community-building websites trading vernacular and social information – what can easily be equated to the affective labor of reproducing subjectivities and family-based networks (fig . and fig.?)

Lastly, if there is an analog to material labor done online, it is being done by men. If we address netspace as analogous to realspace, the material labor of its design and production is male. Women are vast – and possibly declining -- minorities when it comes to the programming and the aesthetic decisions that literally shape the internet (fig.?). It is not only men who create female consumer audiences, but who forge our conception of the phenomenological online landscape, an artifice that is by no means pre-determined, but has become a new naturalized environment. Men continue to design and build the architectures that women are supposed to occupy.

It is important to acknowledge theoretical arguments that the internet provides unprecedented platforms for political organization and unificiation of underrepresented groups, resurgence and emergence of fem-



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inisms, vast amounts of knowledge exchange, and explorations of sexuality and gender beyond the binary. (**Citation: van Doorn).** However, for our purposes, rather than focus on the qualitative question of "Is the internet good for women?" or "Does the internet perpetuate sexism?" we'd like to zoom out for a broader and more nuanced consideration of *the internet as a type of architecture with repercussions upon our physical, gendered bodies* -- far beyond carpal tunnel and eye strain. This search encompasses a study of the labor that new virtual technology engenders within the historical framework of western architecture.

Is the architecture of the internet anthropomorphized? How does it reflect inherited spatial organizations, both formal and metaphorical? Does it recreate or mirror normative zones of inclusion and exclusion? Assuming, as our research suggests, that these borders still exist, how can we seek new forms of embodiment to transgress them? The cyborg was meant to conglomerate the female and the feminine with technology and the technological, re-routing the cultural entrenchment of masculine domination with technological advancement to create another figure, another body, and another architecture based upon this new self. If the cyborg was part human, part machine, who or what is part human, part virtual?

Citations (Citation: see NAJM van Doorn's excellent disseration, Digital Spaces, Material Traces: Investigating the Performance of Gender, Sexuality, and Embodiment on Internet Platforms that feature User-Generated Content (2010), for a lengthy and sensitive discussion of how the internet simultaneously allows and restricts transgressive gender performance)