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Big women

Danielle Christa Hermann
Iowa State University

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BIG WOMEN

by

Danielle Christa Hermann

A thesis submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of
MASTER OF ARCHITECTURE

Major: Architecture

Program of Study Committee:
Mitchell Squire, Major Professor
Chrisy Moutsatsos
Kate Schwensen

Iowa State University

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Dedication

To Lily and Claire...my inspiration.

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Abstract

This thesis is an examination of the status of, and the conditions surrounding, pregnant women in the profession of architecture. It questions the extent to which their presence and influence are diluted by various perceptions and attitudes that not only permeate but also define practice. In this thesis, I use both qualitative and quantitative methods to acquire knowledge about the female position. I also utilize individual narratives, phenomenology, and spatial experience to explore the primary issues. Lastly, I use the design of this document to articulate the causes and effects that surround the pregnant female experience. This work intends to create a platform for discourse within the profession on which an address of the lack of female role models can be made and, ultimately, the lack of a broad based female interest.

Preface

I seem to recall that somewhere near the midpoint of my undergraduate education I was introduced to the idea, in some text that I can no longer recall, that we cannot escape ourselves. Little did I know at the time that this seemingly simple concept would begin to guide my thoughts as I completed my undergraduate degree, began my professional career, and would lead me to this; the culmination of my graduate work.

We cannot escape ourselves. It bears repeating. In all that we do and in all that we make, the mark of our individuality, our inherent beliefs, understandings, experiences and voices, are embedded.

There are really only two ways to reconcile this realization. One is to simply deny or ignore it as something obvious and not worth rethinking. The other is to embrace it and begin to let our actions and creations communicate (or teach) us, as well as others, about who we are. This attitude or perspective of thinking and working led me in directions that departed from one another initially, but eventually came back together in this work.

I began to think about my place in architecture and what that might be or mean. I also began to think about who I was, this person that I could not escape. And as a woman, this led me to feminism, which for me, became a mode of learning how to understand myself and other women, as well as a way to appreciate, embrace and proclaim those things within my work. As such, my research methodology is very much a qualitative one that seeks to work somewhat subversively from within the established norm of quantitative research methods that are more

accepted in the architectural paradigm. This also requires that I take a reflexive view and share my own critical self reflection so that others can fully engage my research and form a basis for understanding - - I must share who I am so that I, and you [the reader] can understand how this work [thesis] is to be *read*. I place emphasis on the word '*read*' because in actuality, my hope is that this document won't just be read. To be successful, it should also, and more importantly, be *experienced*. My epistemology, and that of many other feminists, is essentially an experientially based one and is key to this work. It is referenced throughout, implicitly and explicitly.

You will also find throughout this document that I am research fodder. I refer to my own thoughts, feelings, experiences and choices. This is a conscious decision to not only include myself as researcher and researched, but to make myself a focus. "This breaks from more traditional psychological research approaches in which the researcher is 'the expert' and speaks for the participants."¹ I am the expert on me and I give voice to the research through my own embodied experiences of pregnancy, sometimes in a narrative format, other times not. There is no point in trying to separate myself from the research. In this case, they are one and the same. Of course, I admit that this will mean that the topics presented relate directly to what is important and meaningful to me. I must also acknowledge what is perhaps obvious, that the experiences forming much of the basis for this work are framed by Western philosophies of the body and take place in a technologically advanced Western society. While the discussion between my own pregnancies and these constructs is not an entirely original one, there are few other perspectives

available in the profession of architecture.² I hope this work offers something new to the dialogue.

So then, who am I? A woman. Caucasian, 29 years of age, heterosexual, born and raised in the United States, specifically small town Iowa. I am one of two daughters of a single mother who struggled to raise us on an income that was most often below the national standard for poverty, but I must also recognize that in the context of rural Iowa, although things weren't easy, we were never destitute. Historically, I grew up in an era when women gained much in the way of opportunities. I was always encouraged to be whatever I wanted to be and told that I could become 'more' and have the better life my mother always wanted for me. With this in mind, I entered college by way of grants, scholarships and loans knowing that I could "have it all."

Presently, who I am has been shaped dramatically by my education, opportunities to travel, my status as a professional in a career field dominated by men, and my experiences as a graduate student. As I find myself in the middle of my graduate education, I am also still learning to balance these roles with those of a wife (four years) and a mother of two daughters (two years old and 3 months old). Although I only recently proclaimed myself a feminist and began to really understand what that means, I believe that it has been a part of my belief system at some level since I was very young and that it has taken me many years to find out who I really am and gain the confidence and independence to be able to claim it. I should note that none of this has come without personal conflict for me. Growing up Catholic, and still practicing that faith, I have struggled deeply to try to reconcile the often competing values that I have. I feel that this will be a continual journey for me.

I must disclose that with regard to research, I often assume that many other women struggle in similar ways to myself; an assumption that I am constantly learning to combat. I must also be truthful about the fact that I desire to succeed in my roles – to “have it all” – and to be the role model for other women that I always felt that I never had. At the same time, I have a deep interest in changing, or at the very least, exposing and prompting discourse surrounding the current conditions of women in my profession, both practicing and in academia. With regard to my views about other women, I value the complexities that are inherent in our being and feel that our diverse and dynamic voices are important. I value qualitative research methods as attempts to gain understanding, but I acknowledge that no means of research is going to be truly successful at leveling the critical plane between the researcher and the researched. This does not mean that research should be abandoned, quite the opposite. It means that it needs to be approached with an open mind and an understanding of the limitations (and possibilities) inherent in it. With that said...

A Thesis Defined

Thesis: A disjointed and fragmented collection of thoughts, ideas and feelings, from a woman, an architect, a student, a mother comprise this document. That is also its “thesis.” It is a document that, like other intersubjective forms of research, is equally a representation of my subjectivity. It is non-unitary, fragmented, conflicted, fluid and in flux.³ Its dominant characteristic lies in its contextual perspective of a sarcastic and somewhat pessimistic architect/student/wife/mother. As such, it tended to be constructed at the end of the day when my thoughts and feelings were ruled more by my exhaustion than any epistemic logic. It does,

however, accurately communicate how I tend to reflect on occurrences and ideas. The reader should take it for what it is.

Organization

This work offers a discussion about the pregnant female *in* architecture and how feminism might be used to frame that discussion. The more typical understanding of this statement might imply that this thesis is about the pregnant body in a particular ‘place,’ but in actuality, I am referring to how the pregnant woman [here understood to mean both mind and body] exists within the space of architecture as a whole, or the profession as a whole, and the pregnant woman’s place in it. Of equal importance, this thesis poses questions that stem from an alternate view of the current professional dilemma. It is not about a feminist architect or feminist architectures, but the question may be worth asking: can you have either of the above without first understanding the position of women who are currently in the professional setting? What truly underlies this female position? Feminism might suggest that, as all other things, our ability to be mothers. But is this not the case for all other professions?

The purpose of this work is then to provide one perspective on how you might understand the current condition of the practicing female architect and how that condition is affected by the onset of motherhood in the physical form of pregnancy as well as how the pregnant body is situated within architecture [environments and work places]. Because the issues of diversity and discrimination in general within the profession of architecture are embedded in this topic, I will continually work to focus these larger problems to the pregnant woman/body and discuss how

these conditions are amplified or accentuated by pregnancy and its physical and emotional manifestations.

Two basic methods will be used to develop knowledge with regard to the female position. The first will be to understand and review the circumstances for women from an intellectual perspective. The second method, which I hope will actually be more valuable to a real understanding of the current state of affairs, will be a more experientially based perspective. This may often be a singular experience. It will lead to a deeper, more meaningful awareness of the physical and spatial changes that take place; those that impact and inform the changing female condition. The point at which these intersect is where the most complete and informed questioning and analysis can be developed.

This thesis is structured by two main components. The first section serves as a tool to situate the work of the second. It provides a comprehensive background for the pregnant woman from as many perspectives as possible.

It starts by commandeering a well-known architectural process: site analysis. Site analysis is an initial part of a building design process that allows the designer to gather information about the context and location of a project. This knowledge is used as a base for organizing design and making decisions regarding the work. This particular analysis is broken into three parts and starts by presenting relevant thoughts surrounding the body as a site itself. This is followed by an in-depth discussion of another site, an architectural typology, if you will, the pregnant body and the 'knowledge' associated with it. This site analysis concludes by grounding the work in feminist methodologies as the larger context in which I've constructed this thesis.

The remaining background information necessary to contextualize the work is the status of women in the profession of architecture. This data is presented in order that one might have a glimpse of the overall condition of gender diversity, as well as providing specific insights that begin to hint at the disparity that exists specifically for *mothers* in the professional setting. Here, motherhood is understood as the obvious conclusion of pregnancy and its relationship to work-life balance is researched as a way of accessing knowledge that is on the periphery, but is key to full understanding of the pregnant female body in Architecture.

As the thesis document transitions from ‘the scholarly’ to the experientially based creative work, it is important to note that the introductory sections described above were also heavily influenced by my lived experience in that they coincide with *my* background. They are my educational base and the work environment which produced me and my work.

With that said, ‘the work’ of the thesis is ordered using the well-known stages of pregnancy; the trimesters. The work contained in each trimester coincides with and is defined by the progression of pregnancy and the emotional characteristics that accompany it. So the first trimester work reflects a period of questioning and discovery for a woman by exploring the predominant method for placing bodies in architectural spaces, graphic standards. The second trimester, often referred to as ‘the honeymoon of pregnancy,’ is a relative interval of calm. As such, the work of the section is indicative of that composed phase. It takes a scholarly approach in how it edits and presents the questions and information assimilated in the first trimester. To finish, the third trimester is undoubtedly marked by a sense of anxiousness and tumultuous frenzy. Likewise, the work of this

trimester illustrates this rare perspective in the form of a journal or diary. Both text and images are used to form a visual essay that communicates with force and passion.

To conclude, this document differs from a traditional thesis in that it is a visual, ‘graphic’ method of narrating, exploring, or questioning a problem of a lived experience. The choice to approach this thesis in such a visual nature is in tune with and reflective of the language of architecture. We, as architects, understand and communicate through aesthetics. The document’s *design* informs the meaning of the words and graphics it frames and will visually, in addition to textually, communicate. The graphic handling of the figures and texts should not be seen as additions to or explanations of text entries, but rather a narrative device with their own meaning. Captions are included on some, as they were found in the resources, but only at my discretion. In addition, page numbers do not appear on these pages for purposes of liberating the reader from a linear comprehension of their interrelation and meaning and for minimizing visual distraction.

Disclaimer: My thoughts. I’ll be up-front about them...

Yet another precursor to this work: IT CONTAINS stereotypes. I make no apologies for this. Throughout this document the reader will definitely, most assuredly, and with absolute certainty, read passages in which thoughts have been formed or written about a subject that makes use of male and/or female stereotypes. Some of them will have occurred consciously, while others, likely, will have been used without any realization. This notice is given because it is the firm belief of the author that some stereotypes are so engrained in our society (our patriarchal society) that many people don’t even recognize certain thoughts or

intuitions about a person as stereotypical. And because this topic is so interwoven with the phenomenon of stereotyping, it would be futile to either try and avoid them or call them out every time one was mentioned in an intentional or unintentional fashion. So, the moral of this insert is, they're there. The author knows they're there. And now the reader also has been informed. We can all move on now.

INTRODUCTION

*SITE-ing the Work**Walking Wombs*

Much of this work is focused on, influenced by, or a direct effect of the pregnant female body (representations of that body, it's size, shape, volume, spatial affect/effect, as well as the woman in the body, her actual and cognitive experiences, her feelings, her thoughts, her unique knowledge). A pregnant woman's body is the physical manifestation of the most obvious cause of discrimination and represents an altered state of being (I would argue both physical and mental). **Representationally, this body can be used as a platform for discourse about thematic, theoretical, and actual spatial experience and knowledge. Architecturally speaking, the pregnant female body is a relatively unexplored inhabitant of constructed space.**

An honest beginning lies in my understanding of this body. From a feminist theoretical standpoint, which is the perspective from which much of my epistemological theory and practice stem and is the perspective which most engages and intrigues me, the pregnant female body is a source of required accommodation. It is also controversial from the perspective that exposing it (actually and representationally) can invoke mixed responses. Is it a threatening reminder of times when a woman's worth was determined almost solely by her reproductive ability or is it a source of empowerment that allows a woman to embrace her unique reproductive power? ⁴ I prefer to think the latter. And in making that decision and distinction, I also choose to structure much of my background work and the writing about/surrounding it on that premise. This document then becomes a literary

representation of the pregnant female body and will serve to bring these issues to the forefront.

In any feminist discussion of the pregnant body, questions surrounding identity and self arise. The naturally occurring dichotomy between mind and body seems amplified by the state of pregnancy. While some early feminists may have felt the need to choose between scholarly pursuits of the mind and the biological ability to bear children, this work directly combats the obsolete patriarchal dogma of the "...impossibility of combining maternity with intellectual activity..."⁵

Constructing the 'Event'

Is it possible, having made the informed decision to embrace our reproductive ability, to determine an architecture that houses the pregnant female body? One which could be referred to as a specific location of inhabitation and area of study? Few come to mind. The single most inclusive 'space' (using this term in a loosely defined manner), one which all pregnant women will ultimately occupy and which carries the most meaning, is the birthing space, the clinical and exclusive space the body occupies at the point of birth. What are these spaces? Who occupies them? How have they changed over time? How have women's experiences of birth evolved? What influences can be discovered and articulated as the cause of this evolution? And, ultimately, what can these spaces and experiences teach us about the intersection of the pregnant female body with architecture?

In looking at the moment of birth through history, writings provided by those historically involved in the birthing process are invaluable. The attainable written record of the birth event begins in the 1600's, although much can be gained by reviewing images

and artifacts from much earlier.⁶ These literary resources begin mostly as instructional texts provided by those with expertise in birthing and midwifery. Later, in the 1900's more literature begins to be available to the pregnant woman herself in the form of "guides" for preparation. What can be garnered from this information as a whole is that the birth process has evolved as a construct of culture and has shifted with those cultures, their attitudes and beliefs.⁷

The birth event was once an all-female affair, involving the pregnant woman, a midwife, and the female family, friends, and neighbors of the woman's choosing, which took place at home.⁸ The pregnant woman was ultimately in control of the natural and everyday occurrence and there was confidence in her ability to bear a child without intervention. The midwife was there only to assist, and the process of birth and the roles of each involved helped to establish a bond within the female community.⁹ The knowledge of how to birth was gained through experience and participation. The gestures, rituals, and traditions involved were part of a specific way of 'doing' birth that was passed on through memory and repetition. It changed and evolved with the lifestyles of the participants, as well as any invention they might add or education that the midwife could attain and share.¹⁰ This system only continued to thrive as long as the women within it supported the customs and believed in the relationship between themselves and their bodies as natural, safe, and in their own best interests.¹¹

Evidence of the everyday nature of the birth event can be seen in the modest technology involved. The only material used in many births was a chair or stool which was often an adaptation of something the family already had, and in many instances, would

convert and return to its everyday use. Labor and delivery were considered practical and efficient.¹²

The decline of the all-female birth can be linked to several societal conditions. During the inquisition, female midwives were often connected with witches and witchcraft, usually under the auspices of ‘good witches,’ but nonetheless, witches, and so the church began to consider women less acceptable for the role of midwife. Later, as the period of the enlightenment progressed, the influence of the church declined and the impact of science on all facets of life began to take hold.¹³ All of this led to the strengthening trend of the male midwife, “with his bag of scientific instruments” and the persistent portrayal of female midwives as less qualified and even ignorant.¹⁴ The declining status of the female midwife led to a lessening belief in traditional birthing methods and the woman’s active role in childbearing, and at some level might be linked to a deterioration in the general status of women.¹⁵ Here begins the war between men and women for the ‘ownership’ of pregnancy (and hence, the pregnant female body) and the spaces of birth, as well as a shift in gender to the male birth practitioner proclaiming themselves as “women’s saviors.”¹⁶

With this change in gender came a shift in perspective on the birth event. What once was considered a natural, everyday occurrence by the women involved was now portrayed as difficult and dangerous; a condition that required special medical care, or even *cure*. As knowledge started to disseminate more rapidly through printing processes, male birth practitioners who had once only been called in to consult on difficult deliveries were now circulating an image and knowledge of birth throughout the growing medical community that was focused on abnormalities, reinforcing birth as a perilous phenomenon.¹⁷ As the birth process

continued to become a more medicalized experience, the materials, instruments, and spaces used quickly grew to be elaborate and technical.¹⁸ Traditional methods ceased to evolve and lost their usefulness. Women began to believe that the science and technology of medicine could not only replace the knowledge of their own bodies, but was better. Time-honored customs and the materials used lost both their utility and meaning. Rituals were no longer practiced, repeated or passed on and became only memory.¹⁹

Jumping forward to the mid 1900's, "how to" instructional books become available to women to help in preparing them for childbirth and mothering. The specific items of interest with regard to these guides is *who* the authors are, or more specifically, *who* has the expertise or knowledge and is providing that information to pregnant women, as well as the delineation within the guides [standards] of the spaces, materials, and *technologies*, of birth and the relationships between those involved in the birth process.

In a text from 1942 titled *Getting Ready to be a Mother* the author, who is a woman, is providing instruction to other women on how best to deal with pregnancy as well as what will happen. Specific technical knowledge is limited to checklists for materials needed for a home birth. At this juncture, home birthing and hospital births are equally acceptable, but in all cases, it is advocated that women find a "good doctor," who happens to always be male in the text.²⁰ The male medical professionals represented in the text are said to have special expertise and women are told that things will go well if they "do what he tells you to."²¹ In fact, continued medical supervision is advised far after pregnancy.²² It is clear that the male doctors' knowledge far

outweighs the experiential knowledge of the mother, or even of others who have given birth. For instance, women are told to “ignore the advice of neighbors, friends, and relatives” and that they should listen only to their doctor.²³ Use of all *technologies* and *equipment* are solely at his discretion, with all preparatory gestures done at *his* directive and for *his* use, including in cases of home birth.²⁴

Another slightly later text from 1953 titled *Childbirth Without Fear* is written by a male doctor who seems to be an advocate for pregnant women. He is, of course, still writing from within the patriarchal medical paradigm that has conditioned him, but he does disclose some surprising information. He acknowledges the continuing struggle between men and women for the possession of birthing and commends women’s efforts to regain some amount of control through their demands for educational classes. He also concedes that medicalized birthing techniques have become stern, cold, institutionalized regiments that occur almost exclusively within hospitals.²⁵ One anecdote within the text quotes a colleague and illustrates the prevailing attitude that male doctors at the time freely expressed about their role in the birthing process as opposed to that of the pregnant woman:

“It is better for us if they don’t know anything about childbirth, and anyhow, it is our job, not theirs.”²⁶

Another doctor boasted of the advantages of *scientific* and *technological* interventions in the natural birthing process, telling his colleagues that:

“75% of his deliveries were performed with instruments, 85-95% were induced for convenience, no woman was allowed to experience the appalling agony of labor or be conscious, all were performed with episiotomys, and all were advised not to breast feed due to the time it took and the disruption of their social and domestic routine.”²⁷

Both of these comments demonstrate what I have found to be a possible peak in the male domination of the birthing pregnant woman and her body. The use of instruments requiring action by a doctor to perform the *task* of birth had completely taken the place of the natural action of the body.²⁸ These new medical maneuvers were only made possible by women’s belief in their necessity as being in their own best interests, or in the interest of the fetus.²⁹ The woman had again become the “unskilled spectator” of de Certeau’s writing, who only witnessed the functioning of another in her place. Her personal experiential knowledge of the birthing sensation was removed by drugs and the *technical* knowledge that produced the child was only available to the *male* doctors.³⁰

In 1965 Axel Ingelman-Sundberg wrote a book titled *A Child is Born* which publicized an even newer technology that allowed images of the child inside the woman to be seen for the first time. This added a new element to the already unbalanced and disproportionate location of knowledge. What once could only be ascertained by the mother’s experience, the existence of the child within her, could now be seen through a type of *scientific surveillance*. This further robbed the pregnant woman of her claim to knowledge and ownership.

Somewhat offsetting this was an increase in the education provided to women through classes that revealed some of the technical knowledge used in the birthing process now firmly established within hospitals. Though women could now learn what

may be used during a delivery, they were still not allowed to touch or use it and are instructed in the text that they will be told when they are “*allowed* to assist by pushing.”³¹ (author’s emphasis added) Great attention is still given to complications and miscarriages in these texts, further reinforcing the notion of birthing as risky and a medical event needing treatment, rather than a normal process, and although women are told they have some control over choosing which drugs will be used, it seems to still be assumed that they will be used, possibly at the doctor’s discretion.³²

A revised edition of the above text was released in 1977 which continued to elaborate on the previous technologies and prenatal classes had become an established and recommended norm.³³ Methods and gestures surrounding birth continued to be *technical*, but specific actions were assigned to women in the form of timed breathing to produce a trained reaction.³⁴ In addition to this small element of control, women also gained much more power to manage any use of drugs during their deliveries, albeit in consultation with their doctors.³⁵ Breast feeding is also advocated with the somewhat ironic expression “Nature is practical” used to describe it.³⁶

As I move forward to the conditions of the present day and the 10 years that precede it, I would like to note that although guides such as the popular *What to Expect When You’re Expecting* and others were reviewed, I have moved to researching more theoretical texts that have become available on the topic of women, their pregnancies, and their birth experiences. We are at a point when this topic seems to be recognized and widely discussed among the public and women in particular. It is no longer necessary to try to decipher spatial and personal relationships and

the position of knowledge and power through the instructional texts of the past because the spaces of birth and the position of women within those spaces is now being scrutinized much more closely.

In the current environment, although hospital births are still the norm and account for the majority of deliveries, women have other options available to them that are becoming *much* more commonplace. This diversifies all elements of the birthing experience, including the spaces of birth, who is involved in them, and how birth is done. These expanding options are often viewed as a revolt against the medical model, and may involve home birthing, midwives, and birth centers, all of which try to, in differing degrees, empower women by returning total or partial control of the birth experience to the mother.³⁷

To begin to synthesize all of this material it is important to recognize that the advancing science and technology of the past several hundred years, especially in the field of medicine which is relevant to us here, is commonly recognized as serving a purpose of categorizing and classifying and is inherently a logic of domination.³⁸ Medicine stems from a human (possibly male) need to know and understand the human body abstractly, to be able to explain and categorize its parts and what ails it, and to be able to control and fix it.

Pregnancy and birth, when tended solely by women, were once naturally occurring events that were allowed to take their own course and were rarely intervened upon. As medical science began to play a greater role in pregnancies and the birth event, the problem of control became an issue. Birth could not (and still cannot) be predicted. So medical procedures and processes overlaid on pregnancy and childbirth have been used to intervene

in it and provide both actual control of the event, as well as an outward appearance of control to society and the culture it is a part of.³⁹ These new medical rituals have replaced the actions of the birthing woman, who becomes marginalized and subservient to the doctors who instruct the progression of birth. The knowledge, technology and materials used are all controlled by the physician and kept from the birthing woman, enabling maintained authority.⁴⁰ The continued medicalization of childbirth has erased the once active role of the mother in the birth process. She has been relegated to a position of passive observer where she no longer gains the knowledge and experience of birthing, but is instead an object to be dominated through instruments and maneuvers that have been established to create a hierarchy that favors technical knowledge and control.

It is important that I note the absence of the flip-side of the debate. The issues of race, class, and social status are of equal importance when locating knowledge and power with regard to birthing. For my purposes, understanding the location of knowledge, especially *experiential* and *female* knowledge, is the relevant issue. This should not be understood as ignorance or dismissal of the important dialogue surrounding the availability of medical care to the elite. In the knowledge/power scenarios that I present above, those that can *choose* medical intervention are essentially those who have the option due to their economic status.

Feminism and Architecture: where I perceive the connection

The connection, or overlap, between these two fields may be tied to their futures, or more appropriately, how they hope to move forward and what goals they have in common. Feminism is fundamentally grounded in the questioning of and active

combating of the white male paradigm that so broadly blankets our culture and is embedded in nearly every facet of life in one form or another. Feminism recognizes that this paradigm is overwhelmingly accepted and unquestioned and provides a methodology which organizes a collaborative effort to break away from this paradigm that frames the female existence and experience as we know it. This is the same paradigm that is still boldly apparent in the architectural culture and which dictates circumstances for women in this field. The architectural profession has recently stated, as one of its goals, the need to encourage diversity. It has recognized and accepted that diversity is a needed circumstance for a successful professional setting and is essential to forward progress. This means that our professional culture will need to recognize that the white male paradigm is defeating that stated goal.

So here is the link between feminism and architecture - - the architectural profession needs to recognize and be actively combating this paradigm which is so detrimental to a goal of diversity. The lens of feminism and its methodology provide a relevant framework from which to structure research, understanding, and most importantly...progress in this effort.

As an example, I would like to point out how feminism has affected change in another institution. I propose that the medicalization of the birthing process discussed above can be viewed not just as a *siting* of the pregnant body, but on a deeper level, it can be understood as a metaphor for architectural practice. Through feminist efforts to alter the perception of birth and interrupt the medical model, there has been a resurgence in the understood value of women and their experiential knowledge that has allowed the birthing process to turn a corner and transition

away from the male paradigm that has ruled it. The continual institutionalization of childbirth as a medical procedure and its modern recovery due to the feminist movement *could* mirror architectural practice. This might then become a model of how the architectural profession could make use of a feminist lens or methodologies to help shift thought and suspend the grip of the white male paradigm to affect change within the architectural culture. In order for this parallel to be successful, architecture would then need to find a way to embrace feminist ideals and methods. Experiential epistemology provides one possibility of where and how to begin. The work that follows in the trimesters presents one opportunity to explore this mode of thinking.

An End and a Beginning

To be fair to any discussion of the pregnant female in the setting of architecture the status of women in the profession in general, and mothers in particular, must be addressed. When birth marks the end of pregnancy, it also establishes a new state of being – motherhood. For women in architecture, as for all working women, this can present a perilous dilemma. The choice of whether to continue working or stay at home is a complicated and emotional one. In architecture, the typical issues of juggling work and mothering can be compounded by the demands of a career that has historically been, and continues to be, male dominated, and therefore makes very little if any attempt at accommodation or flexibility. Added to this is the overwhelming social pressure placed on mothers in the form of the model for successful child rearing, namely, staying at home.

Susan Chira discusses these issues in *A Mother's Place* and offers a contrast to this as she recounts her own experiences as a working mother and provides a dialogue that exposes multiple viewpoints and opposes a singular model of motherhood. She acknowledges a certain “joy and power” that can come from embracing both ‘selves’ of a woman *as mother and as professional*.⁴¹ I must confess that this resonated strongly with me and is why I am sharing it here. But I offer it also as a possible counter to the more conventional and repressive modes of thinking with respect to working mothers. It is clear that there is conflict inherent in the relationship between mothering and working. It is discussed in many texts in different forms. There is the urge women feel to be mothers which is offset by an outward or inward need to have a professional existence and maintain a certain identity.⁴² There are complex emotions that women feel and

choices or compromises that they make to integrate work and family, and this is paired with an overwhelming social message: you can be a good mother OR be good at your career, but NOT BOTH. This is not just in architecture. “Having it all” has been deemed unrealistic and if women don’t get sidelined by the “mommy track,” then they are selfish because they have a successful career and have clearly put ambition ahead of their children’s welfare. We often hear about the stresses of working, but rarely hear about the joys.⁴³ And as women, we have a tendency to review our roles separate from each other...employee and mother...second guessing the decisions we make at both with a dual inner voice that recounts everything as either positive or negative.⁴⁴ Yet the fact remains; women challenged and rewarded by their work who are allowed some measure of control over their hours and have quality child care available to them thrive.⁴⁵ So the question remains, why are women in the profession of architecture even less likely to succeed in their chosen career than women in general? Are women in architecture more susceptible to media messages that bombard us with a standard of perfection for motherhood?⁴⁶ Or do women in architecture fear that if they don’t work a typical forty-plus hour week during the standard business hours of eight to five that it won’t really “count” as work?⁴⁷ These are all questions that women continue to struggle with in general, not just in architecture. There are no easy answers, but the following information, taken from multiple sources that constitute the most recent knowledge on the diversity (or lack there-of) in architecture, provide a snap-shot of the current realities. These ‘bits’ have been chosen to illustrate and highlight specific qualities (and/or problems) of the literature from which they were taken,

and when combined, help to express a certain judgment on the current situation for women in architecture.

AIA 2005 Demographic Diversity Audit Report: ⁴⁸

“there is no *comprehensive* (emphasis added) demographic data on the profession in terms of race/ethnicity, gender, and age, and no information on sexual orientation and disability that is maintained by any of the collateral organizations, or any other source...” (page 2)

“...a lot of the existing demographic data is unreliable and/or unverifiable.” (page 2)

“The AIA’s membership includes approximately half (52,000) of all registered architects in the United States, and the AIA collects and maintains demographic information on most of them.” [‘Most’ = 75%]

December, 2004: 2% = Hispanic/Latino
 3% = Asian
 1% = Black

Gender information for 95%: 12% = Female

No information on disability or sexual orientation. (page 2)

US Census 2000 Special Tabulation (*self-identification* is equated with inflated numbers):

192, 860 architects.
 20.3% women
 2.7% Black
 5.6% Hispanic
 6.3% Asian
 .3% American Indian

NCARB 2004 figure:

Roughly 101,179 architects (page 2)

Primary Reason for not Practicing – “Survey results say...”

“female respondents rated “personal/family circumstances” and “inflexible hours” as their primary reason for not practicing at a rate nearly three times the rate of male respondents (19% versus 7%).” (page 6)

Australian research – Going Places: ⁴⁹

Major findings = “balance is key”

Family commitments are noted as one of the greatest barriers to career progress.

RIBA Report – Why do women leave architecture?: ⁵⁰

Of note:

“research found that women’s career paths slowed after childbirth and that inflexible working arrangements, including long hours and a lack of transparency in relation to pay and promotion, were the main reasons cited for *women with children* (emphasis added) leaving the profession.”

“the report also stresses that many of these factors would apply equally to men leaving the profession.” ---- this implies that the right questions aren’t being asked, because, clearly, men are not leaving the profession at the same rate as women. Logically it follows that these reasons (as cited) alone, are not the contributing factors, or at least, they are not the root of the problem. Dig deeper!

The Reasons: Because We Said So, That's Why!

According to RIBA, AIA, Harvard, and an architect in Australia...long hours, low pay and a lack of advancement and creative opportunities all contribute to the minority status of women in architecture and their attrition from the profession. HAH! Do these problems not exist for everyone in architecture? They admit it. What's really causing these to be a problem for women and not men? That's where you might start to find the answers. (...expanded, undocumented, discrimination?)

With regard to the limited research that the AIA has done on the status of women (and diversity in general) in the profession of architecture, the field of potential respondents is, at best, a limited sample, and at worst, a totally unrepresentative group. Because the AIA's resources and research only extend to its members, the pool that can be researched is already a biased one. According to the AIA's statistics (2003) twenty percent of registered architects are female. But because no one can truly account for the unknown numbers of architects that do not belong to the AIA, no one is able to answer a series of questions that are truly determinant of how skewed the results might be. No one knows if men are more likely than women to be members of the AIA to begin with. And how can anyone draw any kind of conclusions from a group of people that is, likely if not certainly, less than representative. It is known, in fact, that AIA membership is less than 50% representative of the pool of architects practicing within the US, which means that whatever results are obtained, no real information of value or substance can be equated.⁵¹

Who Should I Be Like?

“According to a number of psychological theories, people look to individuals who are perceived as similar to themselves in terms of personality characteristics, background, race and sex as models to emulate; thus, women role models would demonstrate and legitimize the professional role for women...”⁵²

“...female mentors may be particularly important for women who plan to balance a career with motherhood.”⁵³

Similar to academia, women are a minority in the architectural profession. Our presence is growing in both, but because this is a somewhat recent phenomenon (the growing population of women in both, less so in architecture) females are lacking established role models. I believe similarities can be drawn between academia, or graduate students, and female architects trying to matriculate through the ranks. I've heard it said that once you graduate from college (BArch), your real education begins. I've found this to be true. So let's assume that the process of architectural internship within a professional setting is similar to a sort of post professional education. Then interns and graduate students are not so dissimilar. Once this correlation is established, it wouldn't be much of a stretch to assume that similarities could be drawn between the well researched effects of a lack of female role models on graduate students and the same lack for female architects. The glaring question in my mind then centers on why it is that for nearly twenty years the gender diversity at the level of architectural education has been nearly equal while the ratio drops dramatically before these same students ever reach 'professional' (licensed/registered) status? Women who lack role models and mentors that are like themselves are much more likely to be dissatisfied and have a much higher rate of attrition.⁵⁴ Of course,

there are women out there who are architects, artists, theoreticals, *AND* mothers/wives. Andrea Leers, Jane Weinzapfel, Denise Scott-Brown, and Frances Halsband to name a few. But these examples are too few and too far between. It's also interesting to note that most of these women are married to other architects and are not always the foremost persona. Where women are in the leading role, such as Elizabeth Diller of Diller-Scoffidio, or Zaha Hadid, they tend not to have children. This is not the focus of this work, but it seems to be an important question in our profession - - in order to lead the way, must a female architect forfeit her reproductive ability? And if so, what do these role models signal to the young women looking to them as mentors?

Alternately, some studies have found that the possibility exists that the gender of a mentor or role model might not be as important. "We had expected that female mentors would be important for female students. Our results imply, however, that for these students [interns] it was not the gender of their advisors [mentors] that necessarily was most significant; rather, it was the overall supportiveness of the mentor – including attitudes about balancing professional and personal lives – that influenced students' [interns'] stress and career commitment."⁵⁵ Can this be applicable to architecture? If so, this might tell us that the opportunity exists to improve diversity if the mentors that women have (male or female) available to them support balance.

You want a reason? Pick one...

No one singular reason is to *blame* in this scheme. I can't point a finger and say, "that's it!" It's complex (like women!). There are many underlying factors, but most seem to stem from the established architectural paradigm [WM]. When working in proper sync, a spiraling, self-perpetuating cycle that sets women up for failure has continued and succeeded. Now, more than lip-service will be required to interrupt and move beyond this pattern/norm. But let's face it...is that what you really want?

So, What's In It For Me?

What does the profession of architecture stand to gain from the female presence, influence, thoughts, feelings, ideas, emotions, and sensibilities? Expansiveness, breadth, and depth. Design that is more fully encompassing.

Clearly there is benefit and value in the feminine perspective. It truly remains to be seen what might become of architecture with the growth of a female population. But, in reality, if the profession of architecture doesn't begin to change, I fear it might die. I once heard a lecturer proclaim architecture as "the last strong-hold of the white male dinosaur," and we all know how the age of dinosaurs ended - - in extinction. I hope to see our profession grow and thrive, but for that to happen, there *needs* to be some ground gained in diversity on all levels. So my motive is simple...self-preservation. The best route to self-preservation may be an appreciation and supporting of the work, knowledge, experiences, and methods that are *BIG WOMEN*.

EXPECTING...on MY TERM(s)

The First Trimester:

"Honey! Guess What?"

Main Entry: stan•dard

Pronunciation: 'stan-d&rd

Function: noun

Etymology: Middle English, from Anglo-French estandard banner, standard, of Germanic origin; akin to Old English standan to stand and probably to Old High German hart hard.

1: a conspicuous object (as a banner) formerly carried at the top of a pole and used to mark a rallying point especially in battle or to serve as an emblem

2a: a long narrow tapering flag that is personal to an individual or corporation and bears heraldic devices

b: the personal flag of the head of a state or of a member of a royal family c: an organization flag carried by a mounted or motorized military unit

d: BANNER

3: something established by authority, custom, or general consent as a model or example : CRITERION <quite slow by today's standards>

4: something set up and established by authority as a rule for the measure of quantity, weight, extent, value, or quality

5a: the fineness and legally fixed weight of the metal used in coins

b: the basis of value in a monetary system <the gold standard>

6: a structure built for or serving as a base or support

7a: a shrub or herb grown with an erect main stem so that it forms or resembles a tree

b: a fruit tree grafted on a stock that does not induce dwarfing

8a: the large odd upper petal of a papilionaceous flower (as of the pea)

b: one of the three inner usually erect and incurved petals of an iris

9: a musical composition (as a song) that has become a part of the standard repertoire -stan•dard•less adjective synonyms STANDARD, CRITERION, GAUGE, YARDSTICK, TOUCHSTONE

This is about standards in general, which includes societal standards as well as 'Graphic Standards' (The actual publication) or graphical standards (in a more broad and general sense).

Standards in society:

1. Unattainable goals that are set for women

From a young age the female perception of self, of value, of worth, of beauty is set by others. It is handed down to us by our mothers and reinforced by our sisters and friends. And where does this perception come from? It comes at us from every angle! Media sources and advertisements, shows, movies, even cartoons and toys (Barbie...need I say more...). Our view of ourselves, of what we are expected to be, or what we think we are expected to be, is skewed, warped, and twisted until we believe that what we SHOULD be is something that we can NEVER be.

2. "Men"

Men as a (or maybe THE) standard. Why are we (women) inclined to compare ourselves to men? We rarely speak of our experiences in isolation of the male experience or some sort of comparison. The fact that we do compare ourselves already precludes the fact that there is some sort of difference. Of course, to be fair, this conversation cannot be complete without at least considering what the male experience is, but since that is not the topic of interest here, it will have to suffice that the question has been raised of whether or not this constant comparison is a reality that we should continue to passively support through our own indifference (no disrespect to the many who are already actively combatting this so-called 'standard').

Standards: Definitions

To preface all of the work that will follow I must start at the beginning – *the standards* themselves. From the start I had a nagging suspicion that something wasn't quite right. What are these *standards* that are so engrained in the methodologies of our professional practice?

Graphic Standards have been in existence, in one or more forms, since the early 1930's and have been updated and revised repeatedly through the years. The changes tend to reflect the environment which produces them and their historical context, mimicking cultural conditions of the time and contemporary societal norms. What remains constant throughout the renditions is their prevalence in architectural practice and their wide acceptance and use as a guide for the design of our inhabitable spaces. Other steady characteristics are maintained in their representativeness and their presentation – both of which reflect the white male composition of architectural practice, past and present, and the intrinsic values embedded in this practice.

The anthropometric studies of Henry Dreyfuss, which I will focus on heavily for my work as a specific sub-set of “standards” in general, are much less sexist than *Graphic Standards* in their depiction of the human body since they try to give equal coverage to the female form (I must note, however, that they are not much more inclusionary when it comes to race).⁵⁶

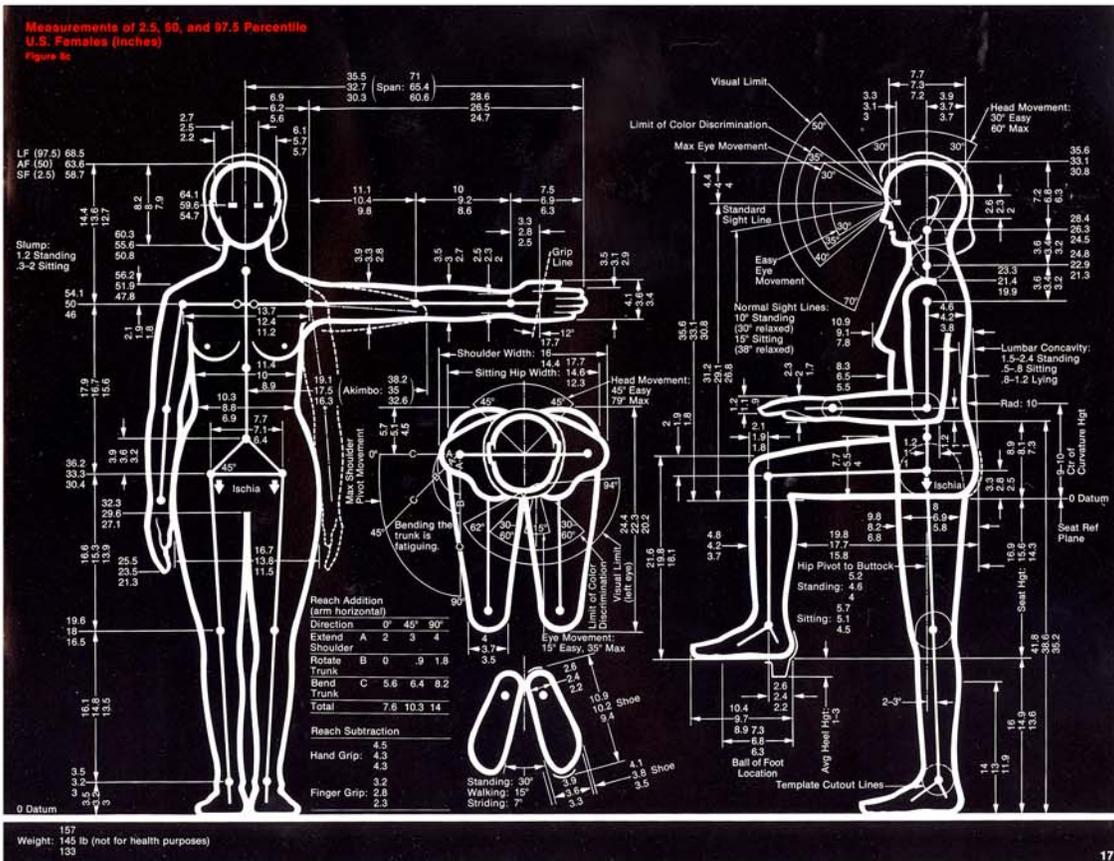
‘Standards,’ such as those described above and their counterparts, by definition set a generalized level for what the human body should conform to...what is normal, typical, average...what is accepted. All of this language is loaded with connotation that is significant to any understanding of the standards. It both implies and supports a patriarchal dichotomy. If

the standards are the prevailing or usual, then everything else is an ‘other.’ The singular forms they present, whether referencing the strikingly *male* form that is the entire basis of the *Graphic Standards* or the inflexible silhouette of the female body in the Dreyfuss studies, little or no room is left for alteration or deviation. They set a stern and unyielding tone for how the human body is to be read, interpreted and positioned in architectural spaces. This disturbing and problematic condition is an overt assertion or judgment about what the human body *should* be according to the system which itself initiated the standards themselves – it is self-serving to the construct of architectural practice and the white male paradigm which rules it. As Diana Agrest states, the “system is defined not only by what it includes, but also by what it excludes, inclusion and exclusion being parts of the same construct. Yet that which is excluded, left out, is not really excluded but rather repressed.”⁵⁷ In the *Graphic Standards*, woman and her body is entirely excluded, parenthetically referenced, and utterly subordinate to man.⁵⁸ In the Dreyfuss standards, though the female form is included in an attempt at parity, the repression remains as an inherent characteristic of the singular state that is expressed by the diagrams. Simply put, the deficiency inherent in BOTH of these ‘standards’ is their rigidity and lack of ability, or willingness, to accept altered states, or bodies in flux ,such as the pregnant female form.

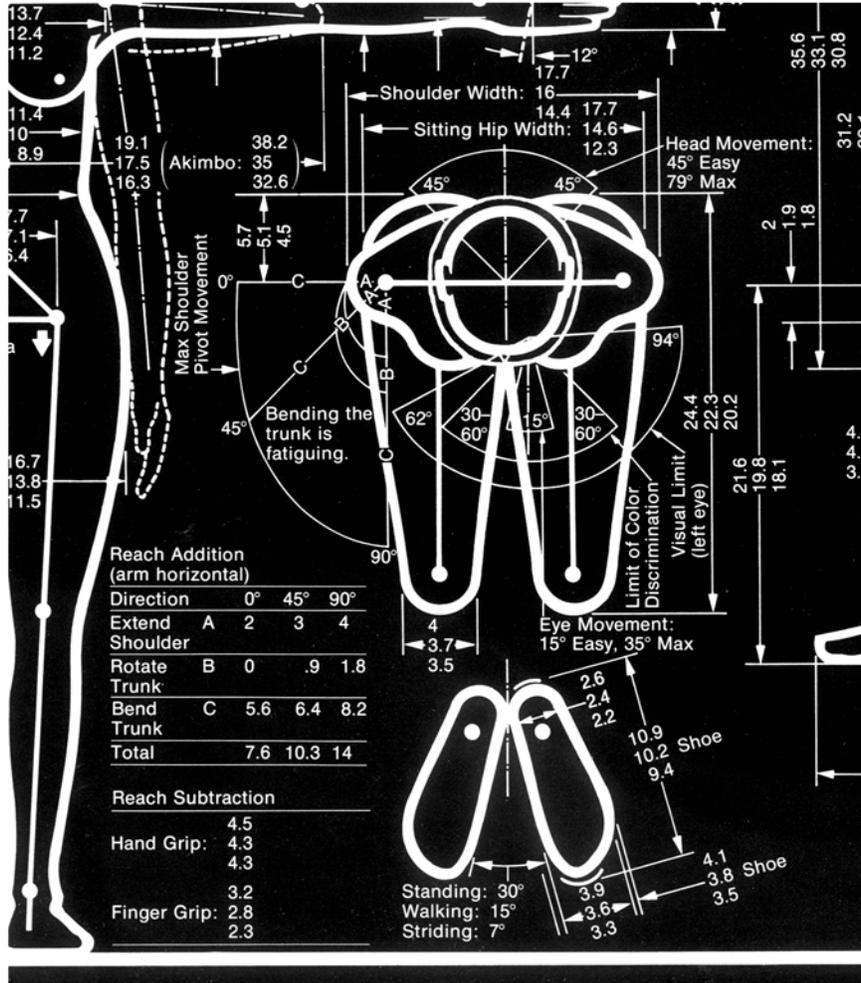
If the ‘standards’ that have been created over the past 75 years can be understood as a record of the social and political environments which created them (which I believe they can), then they tell a story of ritual and convention that has been handed down in the institution of architectural practice that is biased heavily in favor of the white male and his bodily form. The sexism

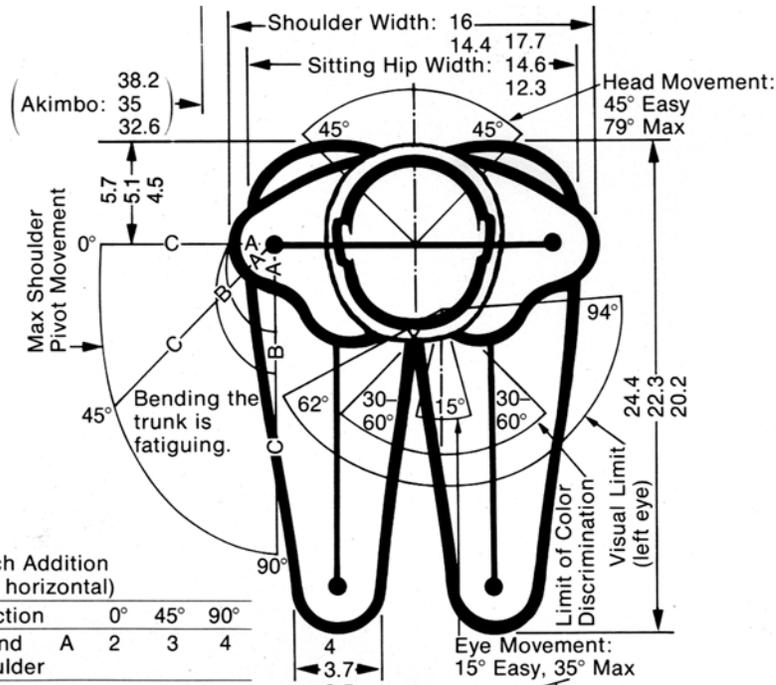
that is replicated in architecture and our profession is unreserved and absolute - manifested in our sluggish advance with regard to gender and race.

Measurements of 2.5, 50, and 97.5 Percentile U.S. Females (inches)
 Figure 82



157
 Weight: 145 lb (not for health purposes)
 133



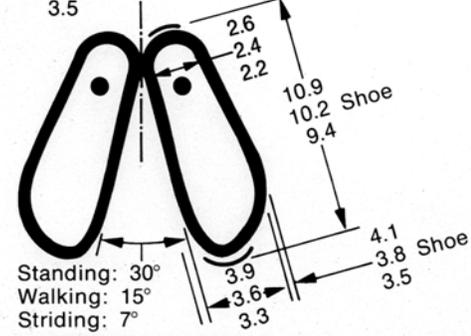


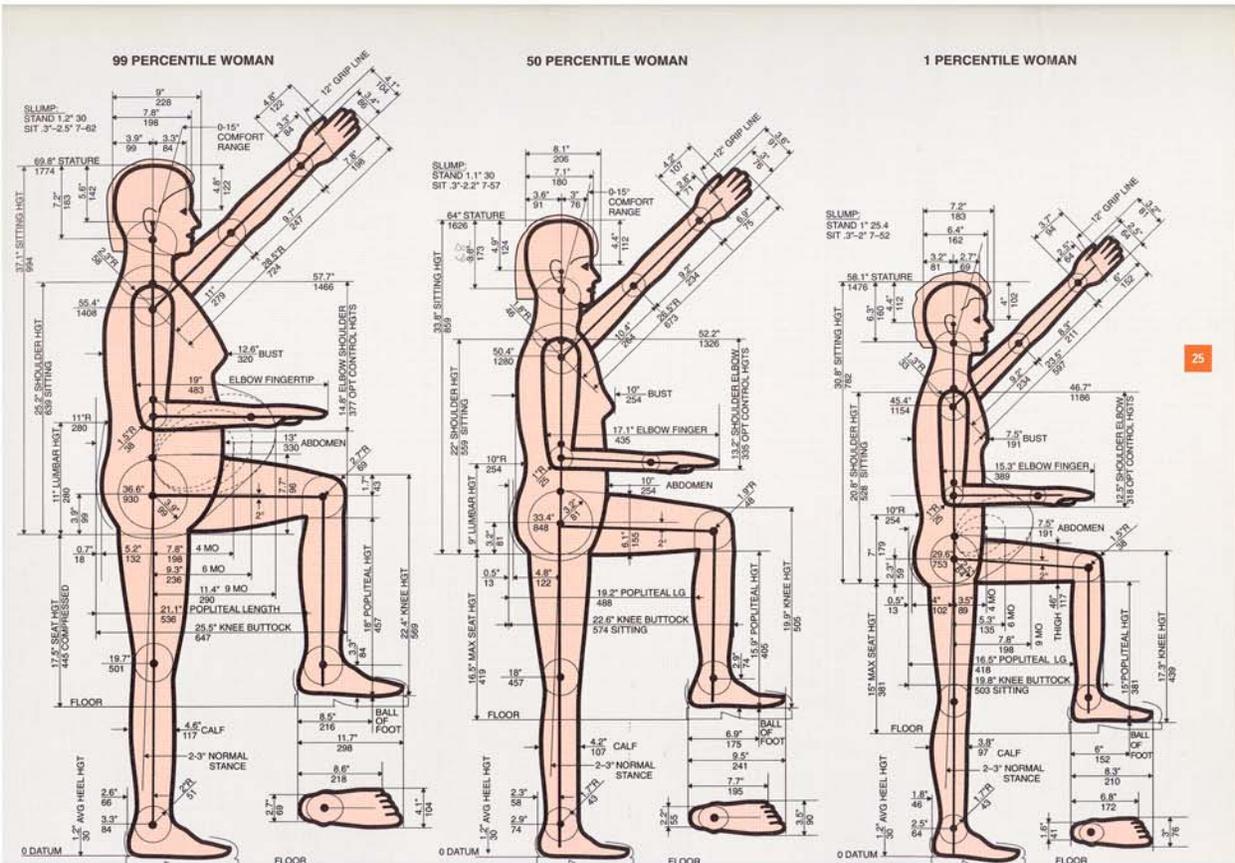
Reach Addition
(arm horizontal)

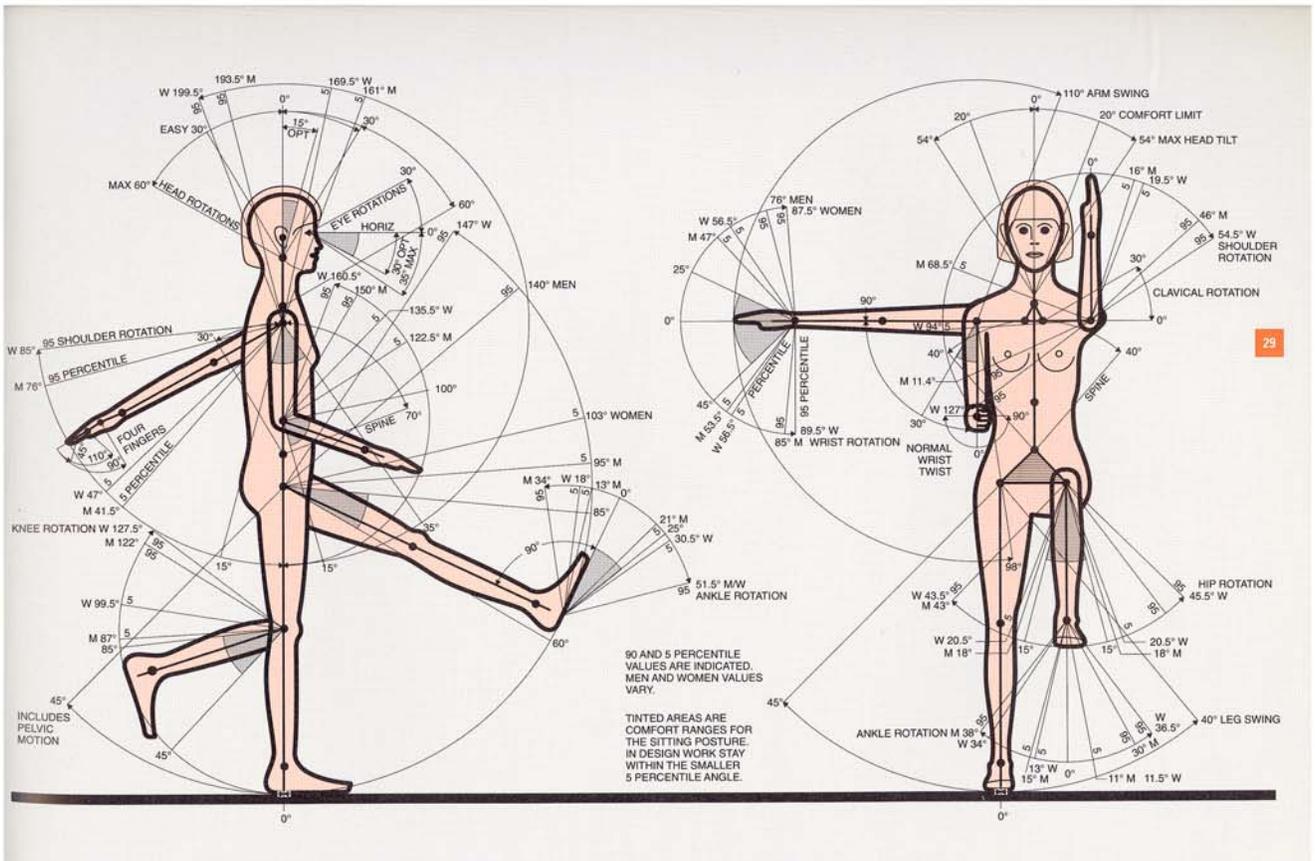
Direction	0°	45°	90°
Extend Shoulder	A 2	3	4
Rotate Trunk	B 0	.9	1.8
Bend Trunk	C 5.6	6.4	8.2
Total	7.6	10.3	14

Reach Subtraction

Hand Grip:	4.5
4.3	
4.3	
Finger Grip:	3.2
2.8	
2.3	

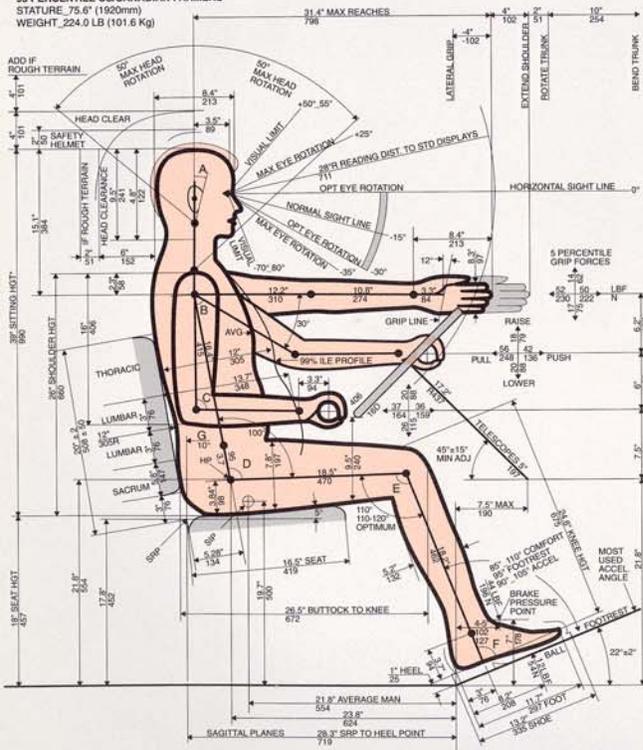






99 PERCENTILE US MAN
 STATURE_75.6" (1920mm)
 WEIGHT_245.2 LB (111.2 Kg)

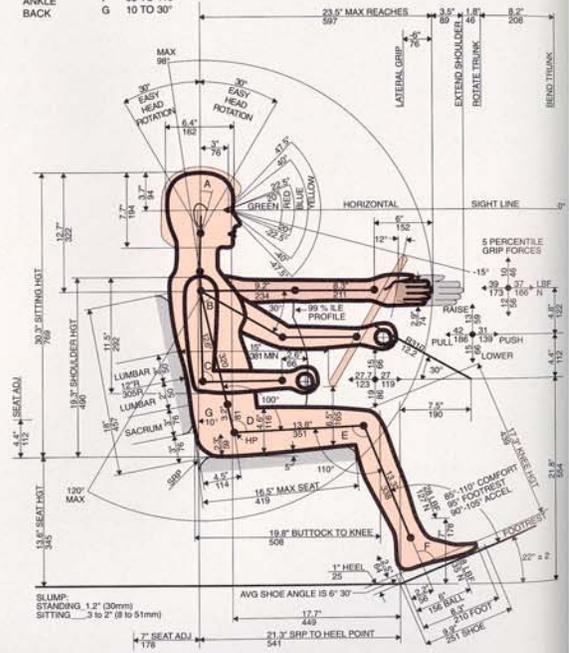
95 PERCENTILE US/CANADIAN FARMERS
 STATURE_75.6" (1920mm)
 WEIGHT_224.0 LB (101.6 Kg)

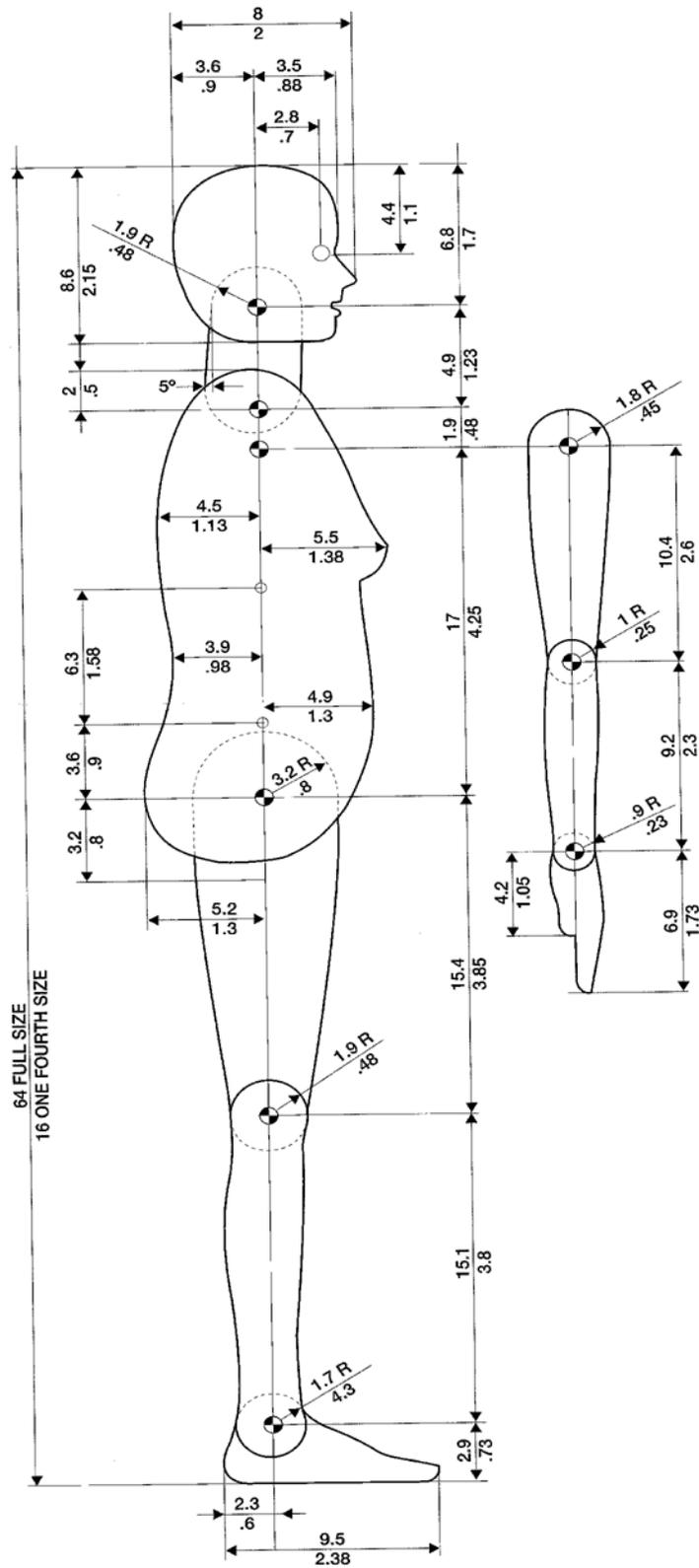


1 PERCENTILE US WOMAN
 WEIGHT_67.3 LB (30.5 Kg)
 STATURE_58.1IN (1476 mm)

ANGLES OF COMFORT

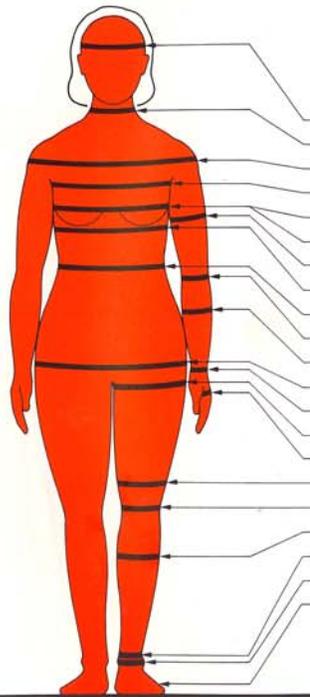
LOCATION	ANGLE	RANGE
HEAD	A	0 TO 15°
UPPER ARM	B	-15 TO 45°
ELBOW	C	80 TO 120°
HIP	D	95 TO 120°
KNEE	E	95 TO 135°
ANKLE	F	85 TO 110°
BACK	G	10 TO 30°





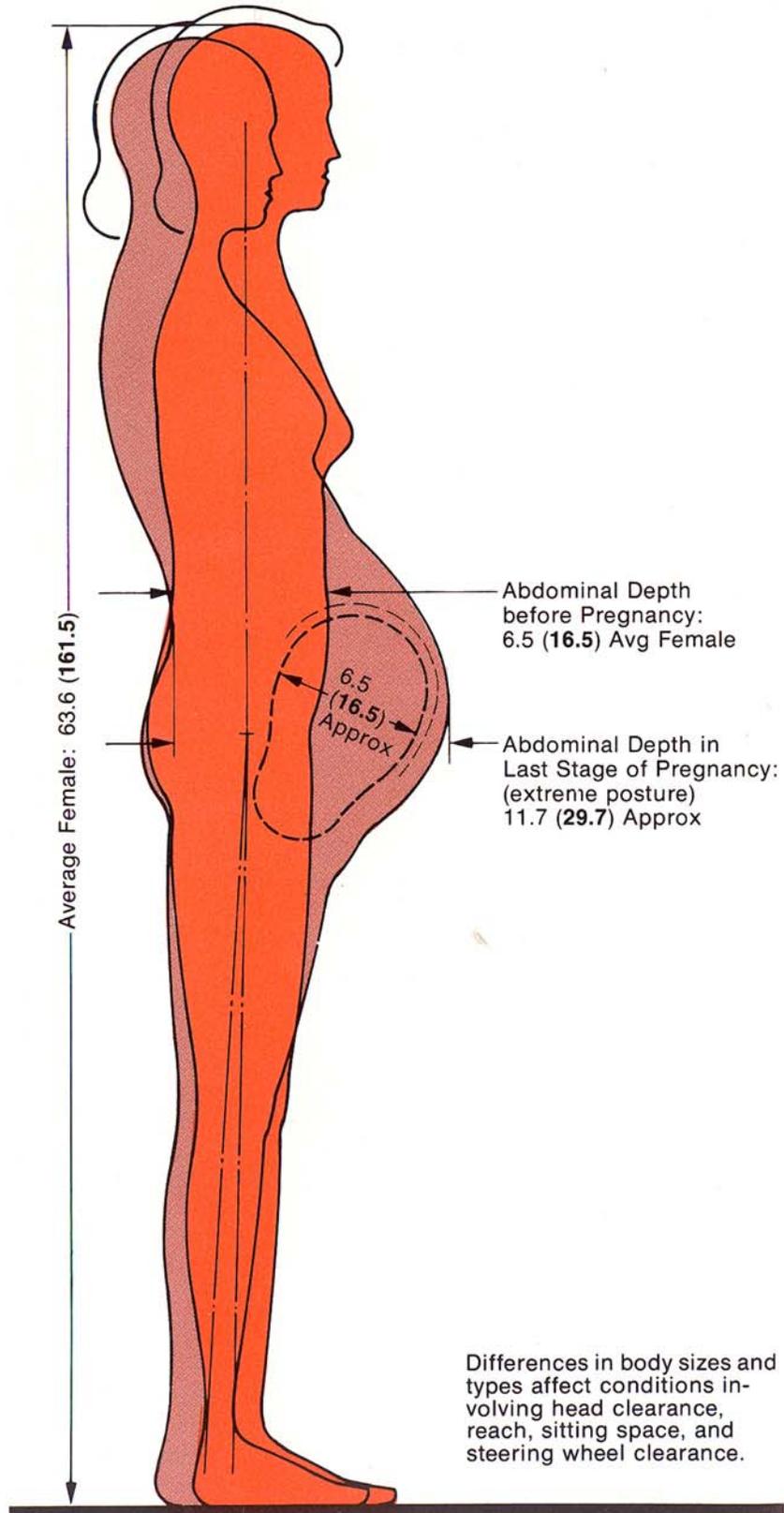
Body Circumferences
Figure 4

Circular dimensions around the body are necessary for making three-dimensional manikins, clothing, and restraining devices.



Circumference	Sex	2.5 Percentile		50 Percentile		97.5 Percentile	
		in.	cm	in.	cm	in.	cm
Head	M	21.3	54.1	22.2	56.4	23.1	58.7
	F	20.4	51.8	21.6	54.9	22.8	57.9
Neck	M	13.7	34.8	14.8	37.6	16.1	40.9
	F	12.8	32.5	13.8	35.1	14.9	37.8
Shoulder	M	42.3	107.4	45.8	116.3	49.4	125.5
	F	35.6	90.4	38.6	98	42.6	108.2
Chest at Scye	M	33.4	84.8	35.1	89.2	36.8	94.5
	F						
Chest	M	35	88.9	38.7	98.3	42.8	108.7
	F						
Bust	M	36.2	91.9	37.7	95.8	39.4	100.1
	F						
Upper Arm (flexed)	M	11.2	28.4	12.7	32.3	14.1	35.8
	F	10.6	26.9	11.4	29	12.1	30.7
Chest below Bust	M	29.7	75.4	31.1	79	32.8	83.3
	F						
Waist	M	29.7	75.4	34.2	86.9	39.5	100.3
	F	28.5	72.4	29.2	74.2	31.6	80.3
Elbow (flexed)	M	11.2	28.4	12.3	31.2	13.7	34.8
	F	10.1	25.7	11.1	28.2	12.3	31.2
Forearm (flexed)	M	10.5	26.7	11.5	29.2	12.6	32
	F	9.6	24.4	10.3	26.2	10.9	27.7
Hip	M	34.9	88.6	38.5	97.8	42.3	107.4
	F	36.7	93.2	39.7	100.8	41.7	105.9
Wrist	M	6.1	15.5	6.6	16.8	7.3	18.5
	F	5.7	14.5	6.1	15.5	6.4	16.3
Upper Thigh	M	20	50.8	23.1	58.7	26	66
	F	21	53.3	23.3	59.2	24.8	63
Hand	M	7.8	19.8	8.5	21.6	9.2	23.4
	F	6.7	17	7.4	18.8	8	20.3
Lower Thigh	M	13.8	35.1	15.5	39.4	17.3	43.9
	F						
Knee	M (sit)	14.2	36.1	15.5	39.4	17	43.2
	F	14	35.6	15	38.1	16.5	41.9
Calf	M	13.3	33.8	14.7	37.3	16	40.6
	F	12.9	32.8	14.1	35.8	15.5	39.4
Ankle (min)	M	8	20.3	8.7	22.1	9.4	23.9
	F						
Ankle	M	7.7	19.6	8.6	21.8	9.3	23.6
	F						
Ball of Foot	M	9	22.9	9.6	24.4	10.4	26.4
	F						

Pregnancy



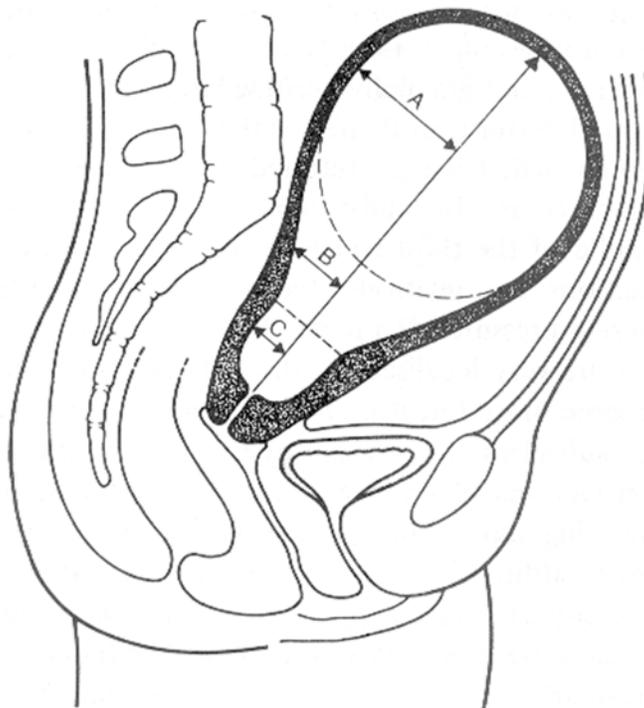


Illustration of the shape and curvatures of the gravid uterus

The Second Trimester:

For All of the World To See

BIG WOMEN: Abridging a Graphic Standard

How, then, might we begin a dialogue that represents inclusiveness as opposed to exclusiveness? Might offering an alternative or addition to these standards present a path that works from within the current construct to subvert the standards and promote a discourse that might address some of the problematic conditions within the profession that are systemic?

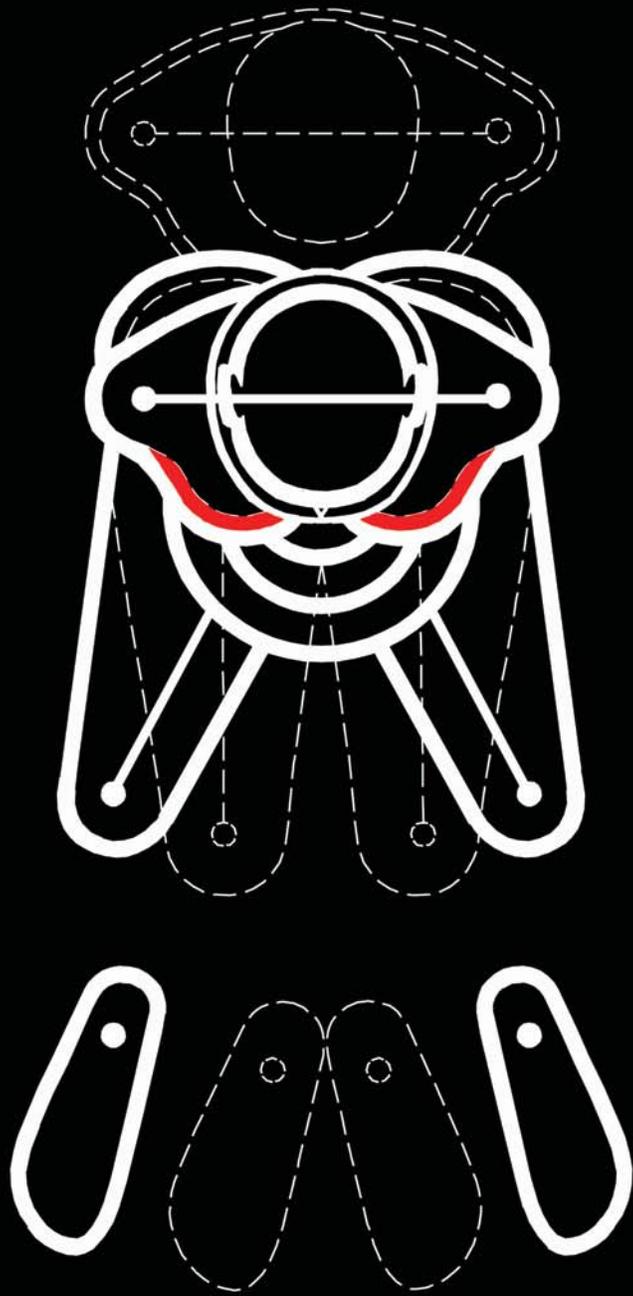
The following work provides just such a tool. It can be used as a means of accessing the ways in which the pregnant female body might begin to mark architecture and seeks to explore the relatively ignored pregnant female experience.

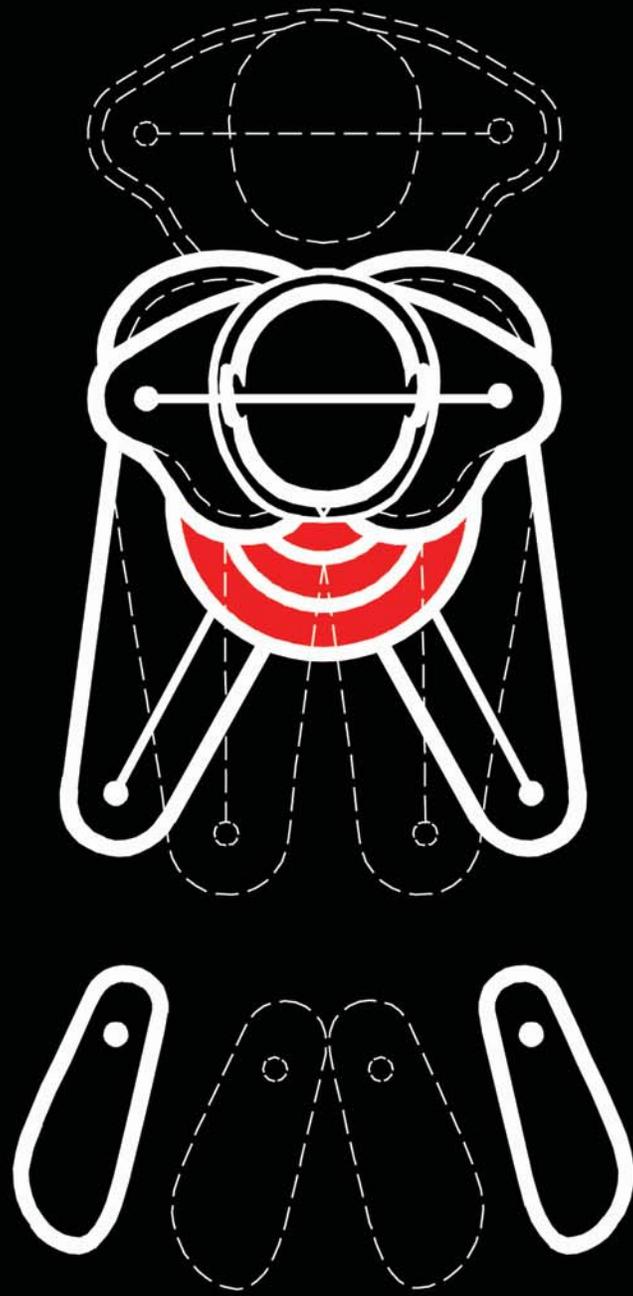
This is my offering of a question and a proposition. These are the revised and edited “standards” based on those created by Henry Dreyfuss.⁵⁹ They have been constructed as a personal exploration and analysis. If successful, they invoke critique and encourage the viewer to re-examine their own perception of the standards themselves, as well as the system that created them, the purpose that they serve, and their relationship to actual bodies and how they inhabit architecture. In general, the images themselves and the multiple ways in which they have been presented and exhibited, serve to spatially and experientially expand upon (no pun intended) the repressive standards from which they come, providing a much more comprehensive platform to understand them. As each exhibition is installed and encountered by differing audiences, their qualities are re-examined and the discourse is broadened. Through exhibit, this work also provides an opportunity for an experiential interpretation that subverts the paradigm which first produced the standards themselves.

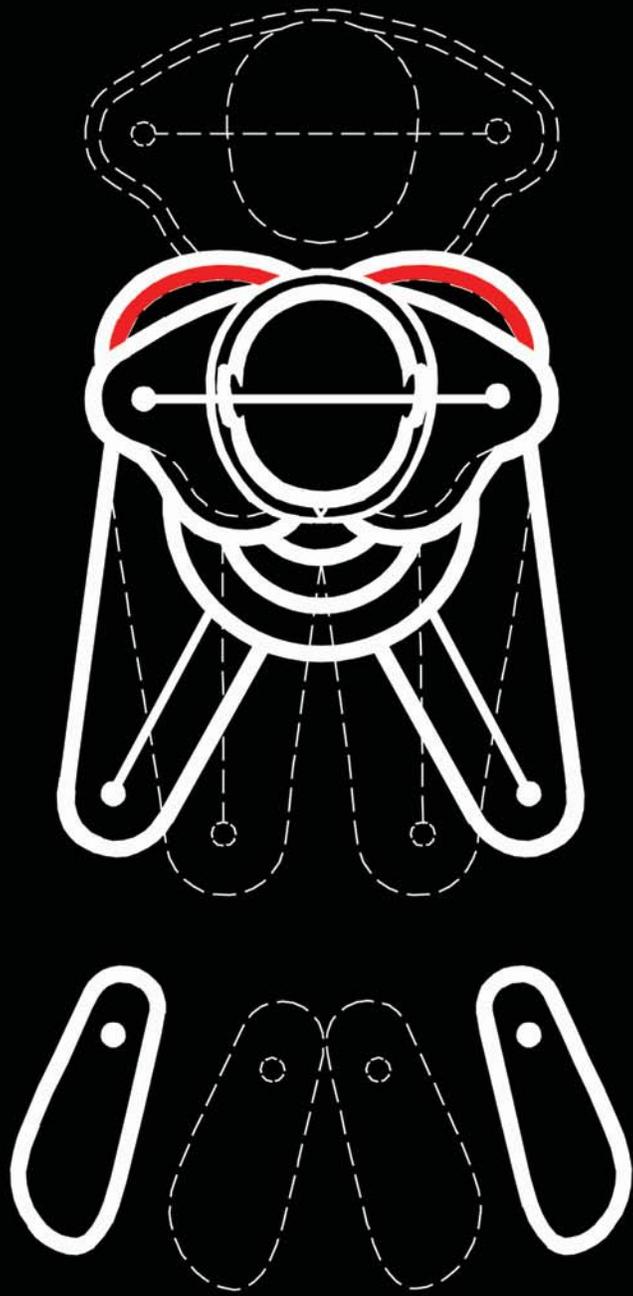
B I G
W O M E N

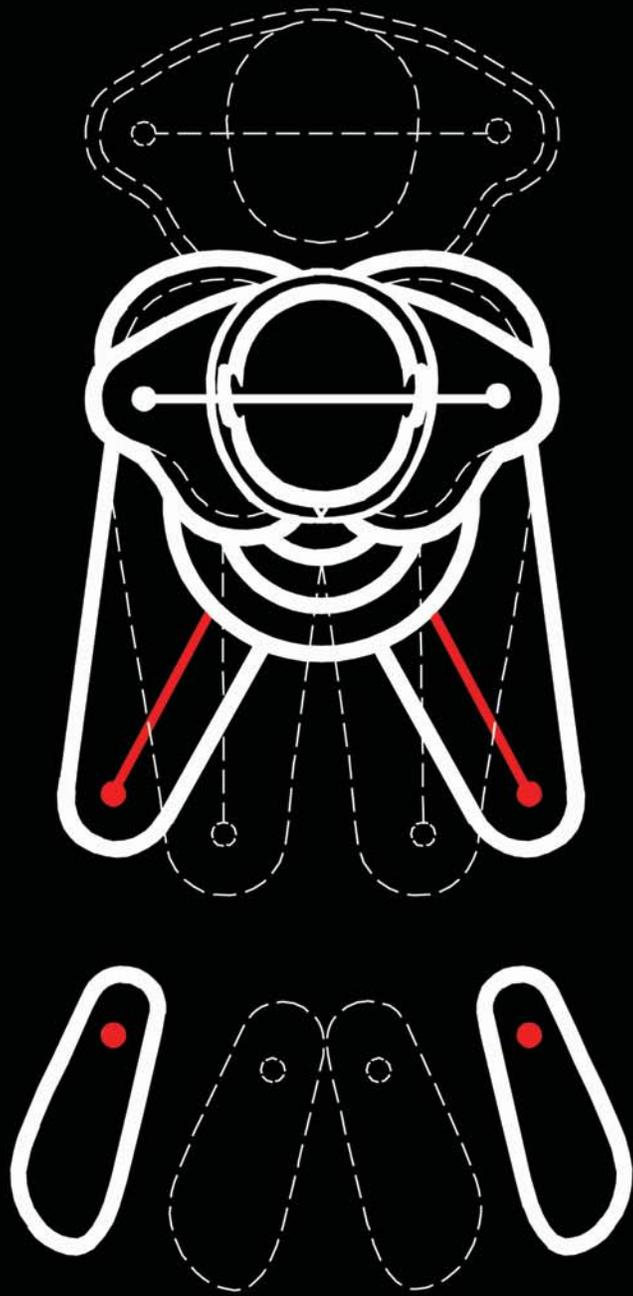
ABRIDGING A GRAPHIC STANDARD

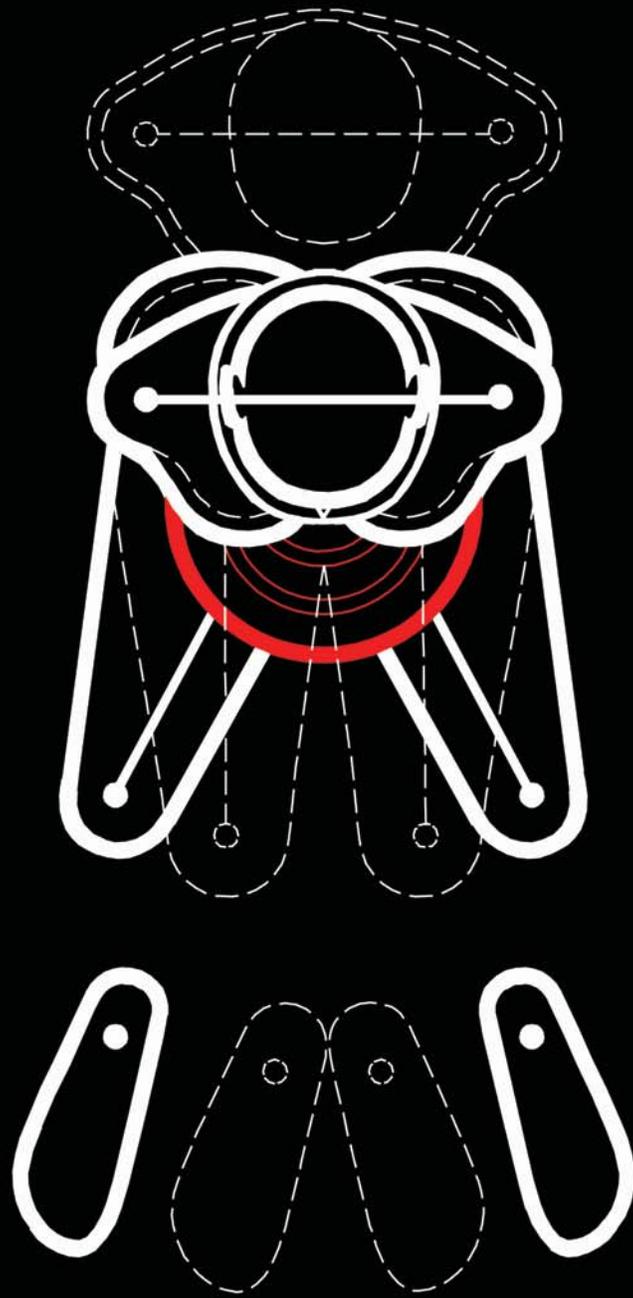
"Standards" are too often accepted as appropriate or correct and are rarely questioned, although their relationship to cultural and spatial conditions is constantly being altered. BIG WOMEN is an analysis of a particular set of standards, those created by Henry Dreyfuss, whose famous anthropometrical studies have served design professionals for decades by providing data on the human form and its range of motion. The investigative images presented here in exhibition are an interpretation of what the standards lack: the presence of a constant and rapidly changing pregnant female body. These diagrammatic drawings articulate the changes occurring in the female form and the range of movements that have an effect on spaces of inhabitation. To engage and comprehend these images, and the state of being they represent, one must place themselves in a position that provides a personal reference to the shifting sizes and postures that the pregnant female body encompasses. Establishing this new perception of design standards and addressing the deficiencies inherent in them provides an opportunity for expanded discourse within the design profession as it adjusts to a growing female presence, and with it, the expanding female body.

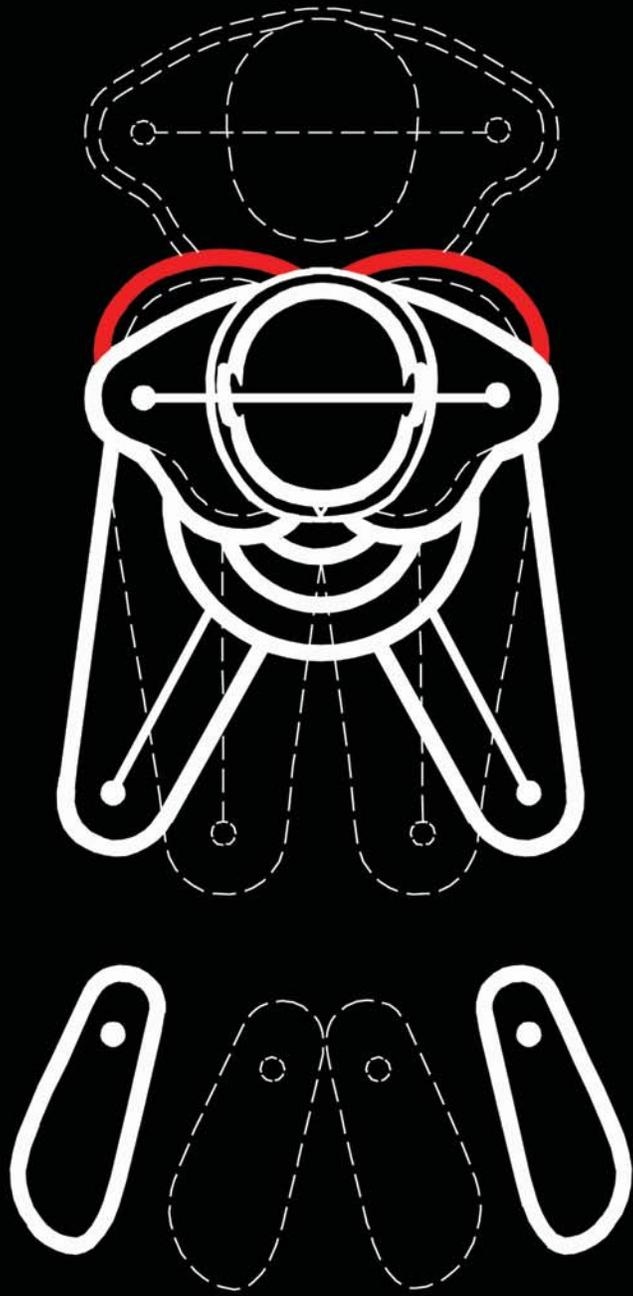


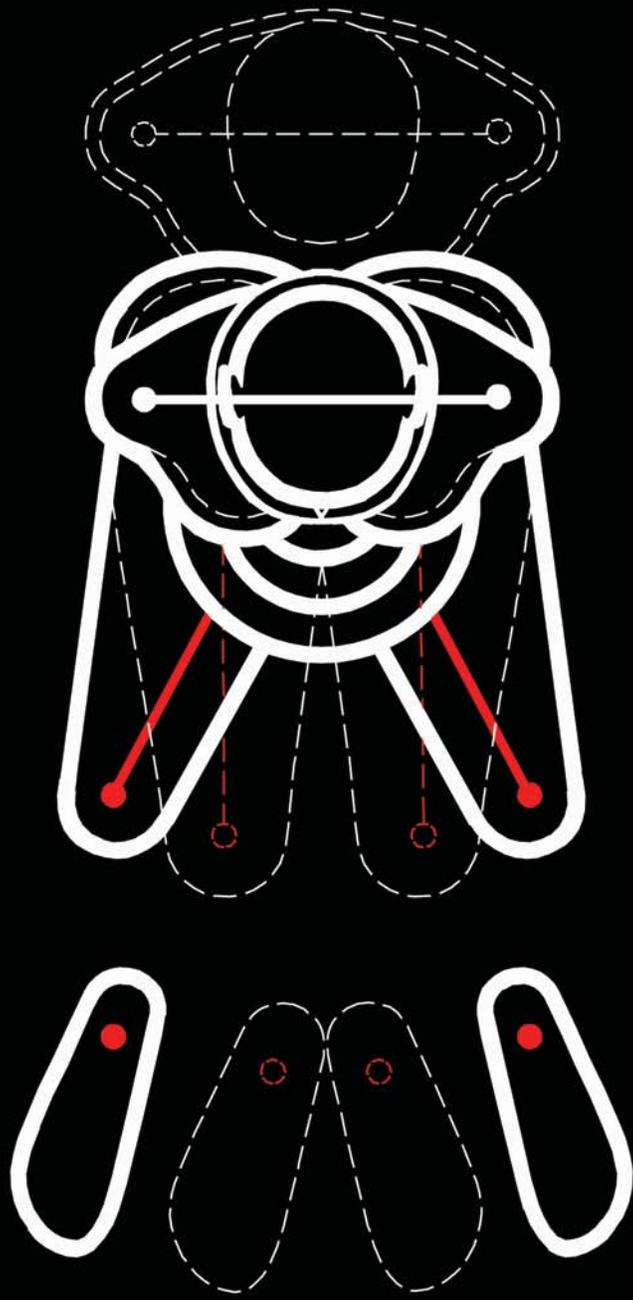


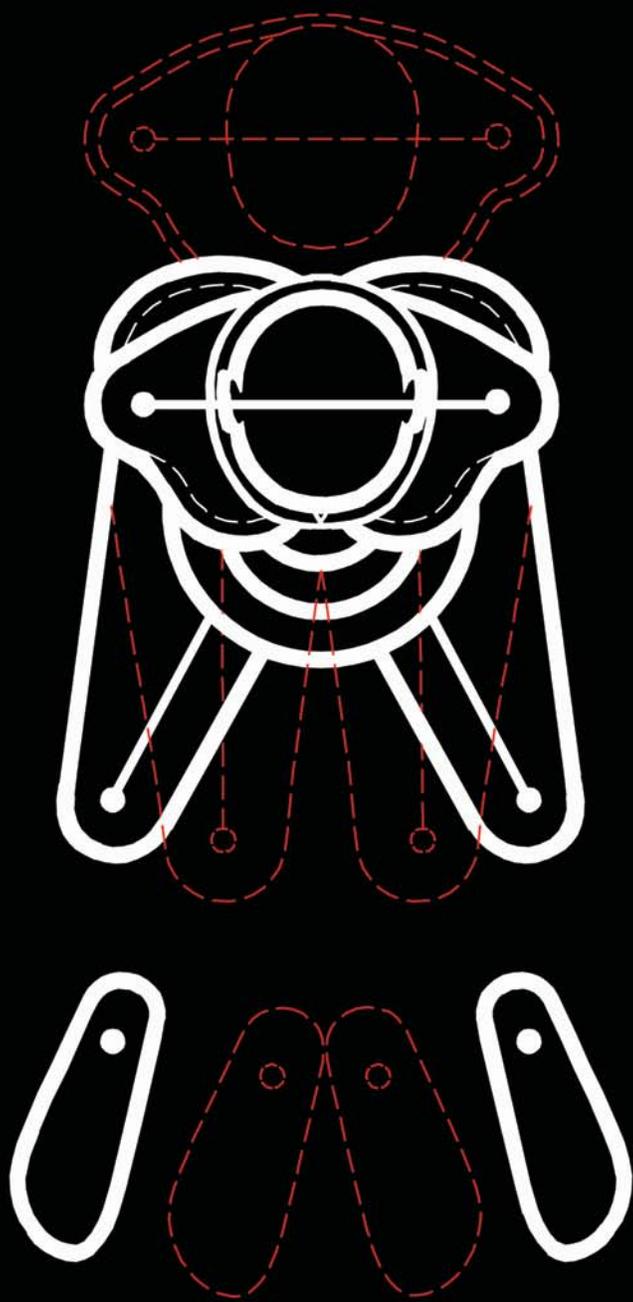


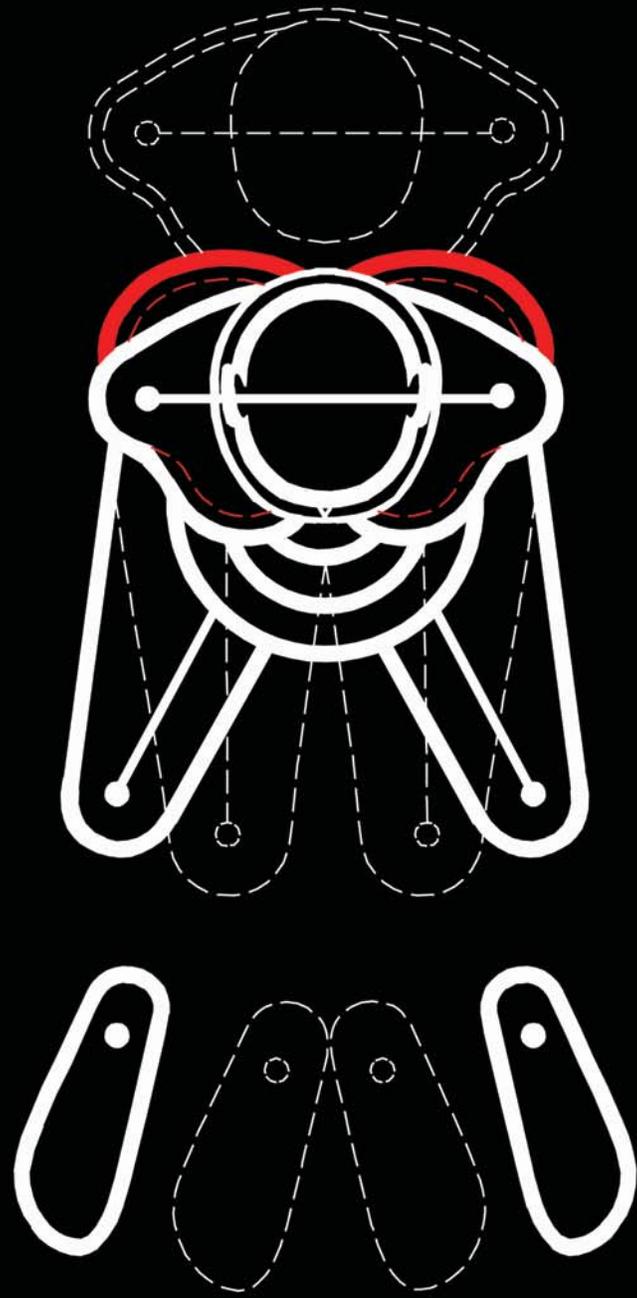












THE FITCH
304 15TH STREET
DES MOINES, IOWA
50309

Alle Hands

(onethreefourfivesixsevenight, to be exact.)

FOUR GRIPPING EPISODES! 5 p.m. - 8 p.m.

January

nora wendt

14 Clean-Living
(an *Invent_ory* laid bare)

carissa gavin

28 Bad Ha'Bits'

February

danielle hermann

04 Big Women

catherine hille

11 One thousand, nine hundred
& eight *spare minutes*



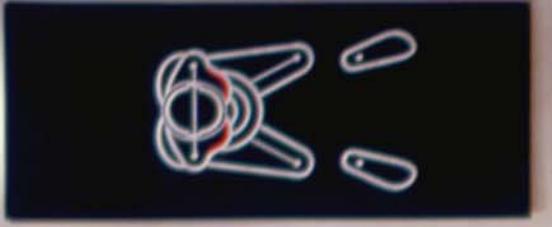
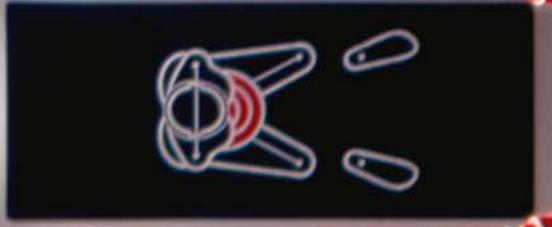
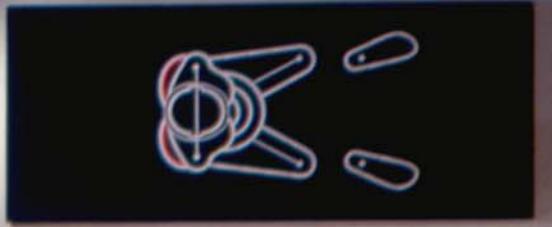
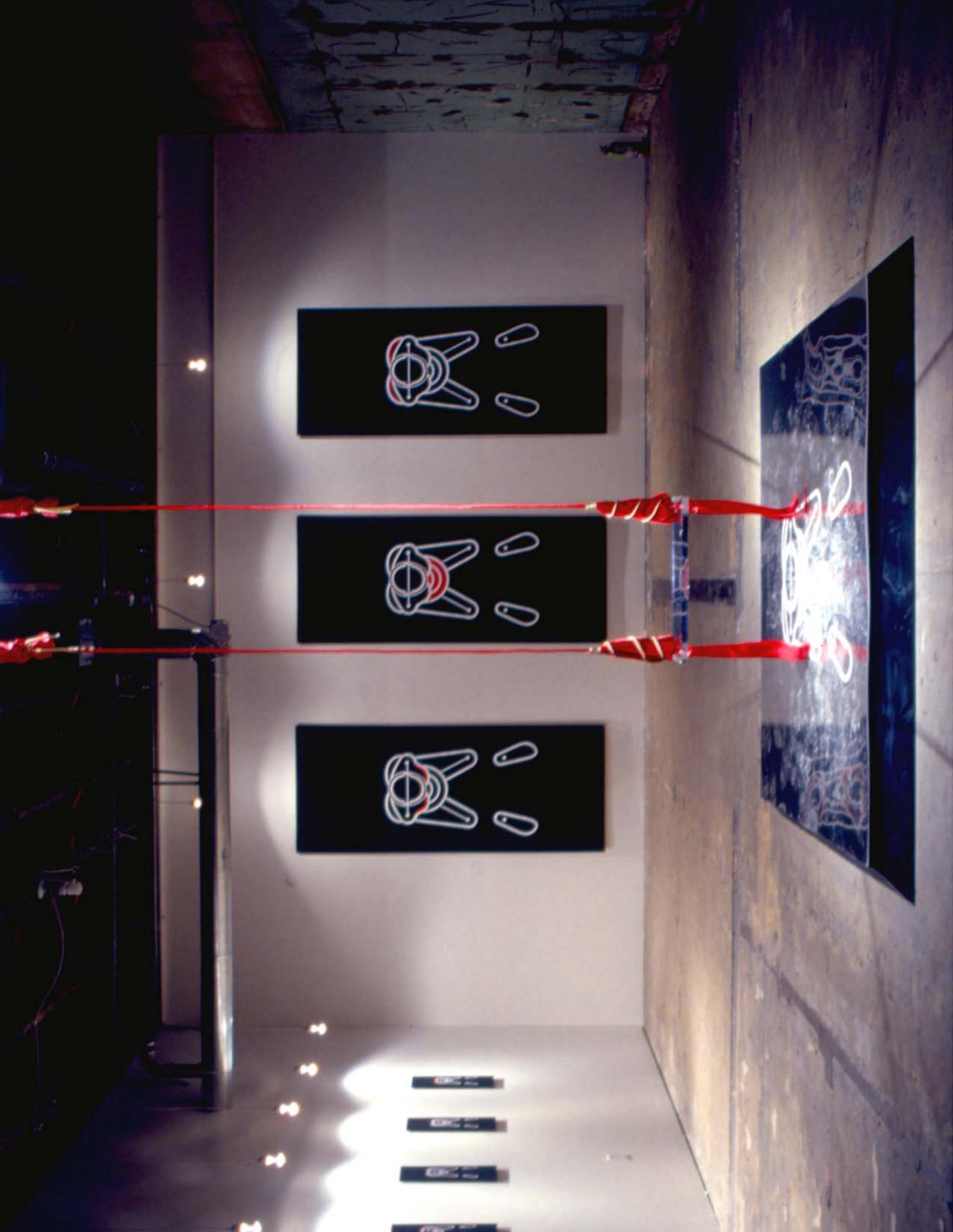
THE FITCH
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DES MOINES, IOWA
50309

***Idle Hands*: BIG WOMEN at the Fitch**

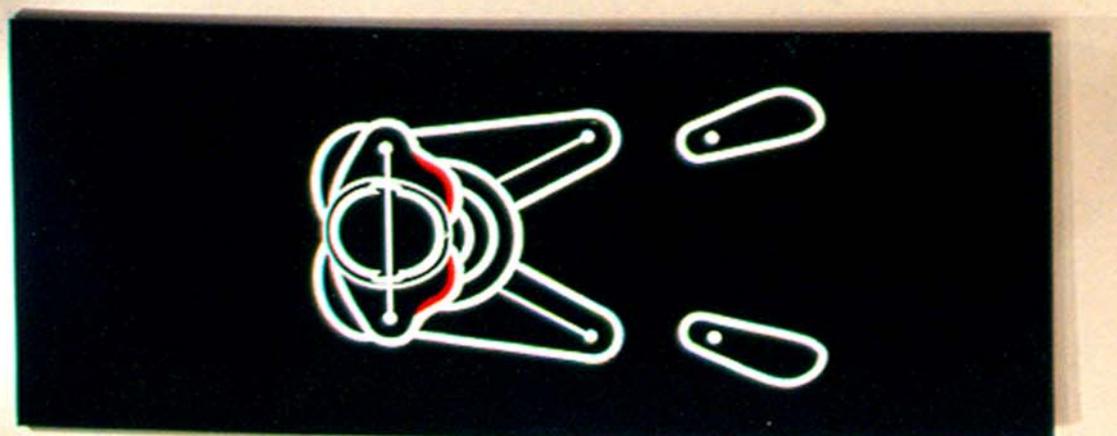
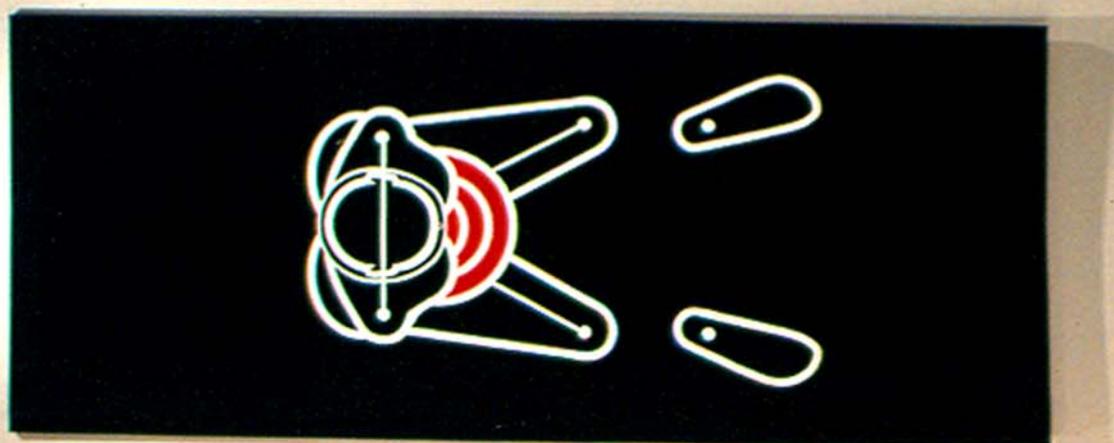
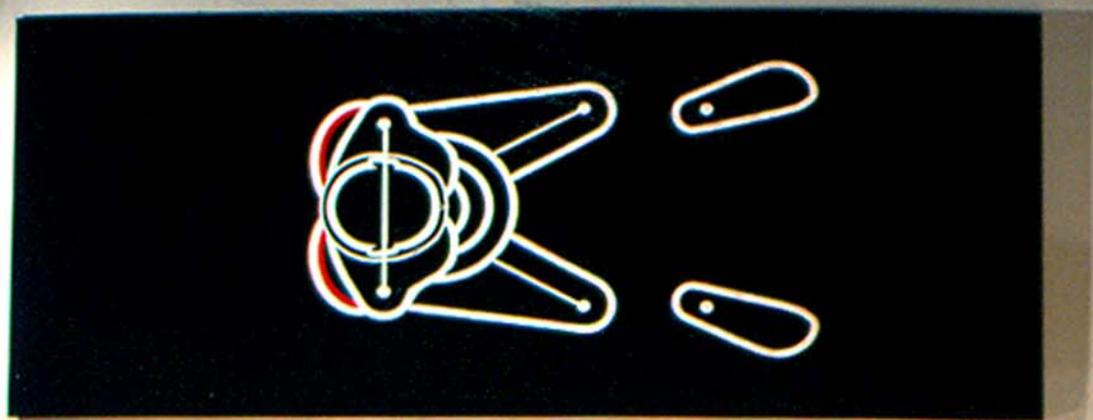
Opening this Friday with the third in a series of four exhibitions under the title ***Idle Hands***, the Fitch Gallery brings you **Big Women**. An analysis of the standards that comprise ‘the measure of woman,’ this work studies just how the pregnant female body *fits* into spatial and architectural realms. Directed and created by Danielle Hermann, **Big Women** is part of a continuing exploration into the spatial conditions of the female and the female body.

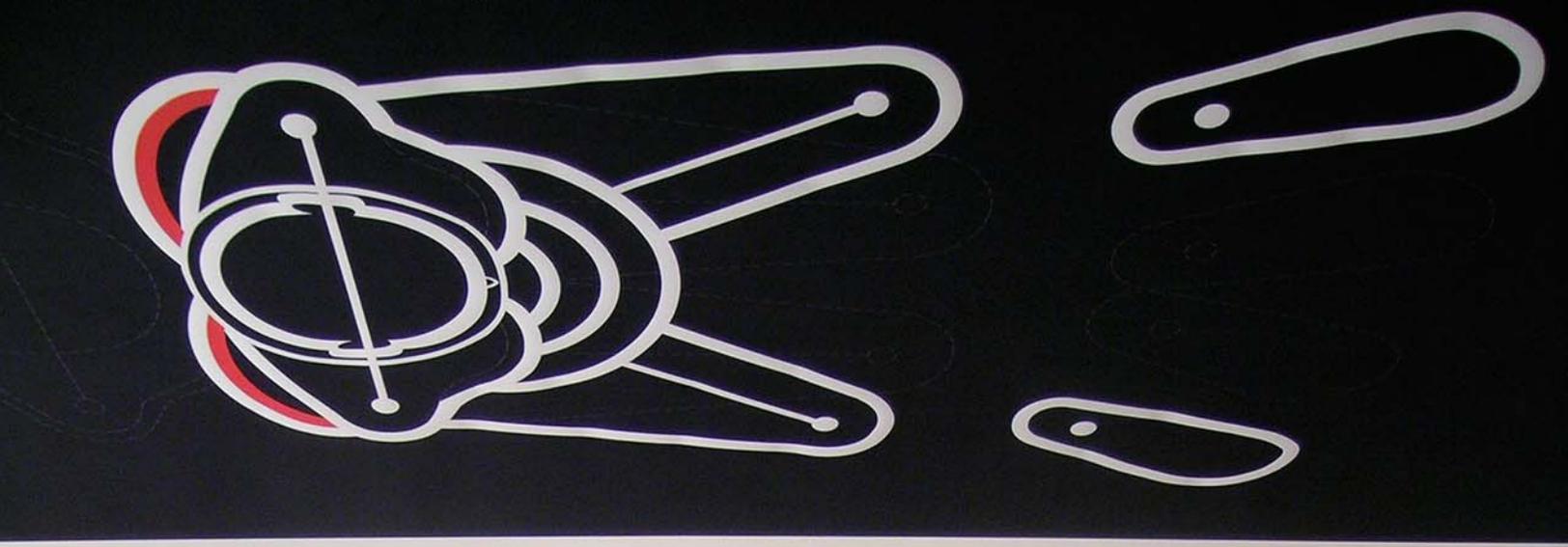
Opening reception and full exhibition will be held Friday, February 4th, from 5pm – 8 pm.

All events at the Fitch are free and open to the public.
Fitch Gallery is located at the corner of 15th & Walnut.











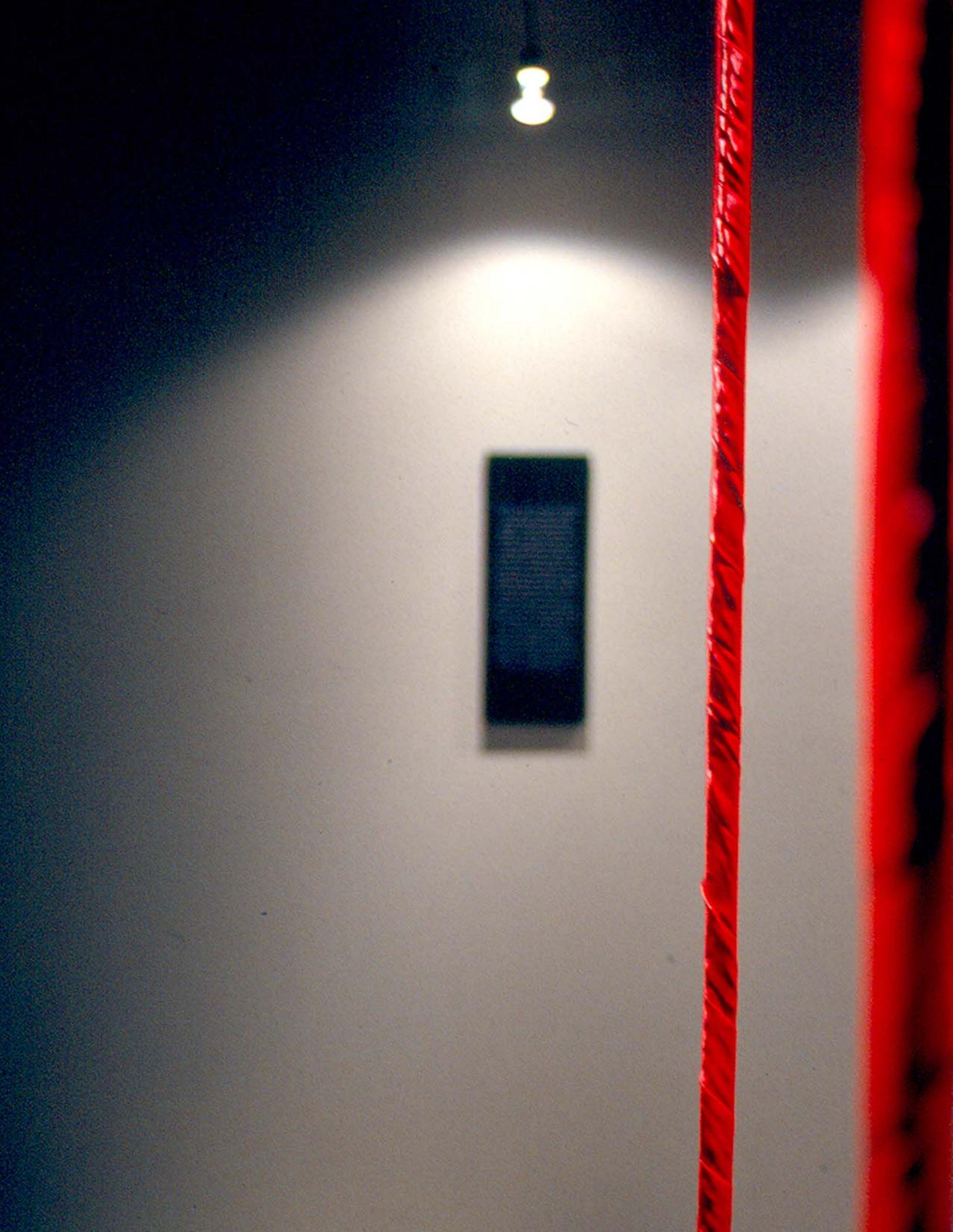
101



























BIG







B I G
W O M E N
 ABRIDGING AN ARCHITECTURAL STANDARD

Big Women is an installation/performance intending proposal of an abridgement to Henry Dreyfuss' "The Measure of Man," from the perspective of a pregnant woman. Questioning the degree to which spatial accommodation of a dynamic adult female body (seated) is a consideration of today's designers, the space is rendered sparsely—emptied-out—for the placement of a series of life-size figure charts which show critical areas of a 'revised' and 'expanded' diagrammatic body. At center stage, literally, one such chart is positioned on the floor for the interactive comparison of bodies in the audience, with a transparent-seat swing-like structure hovering above. "Suitable for Mounting," this playground feature provides levity to an otherwise serious—albeit troubling—attempt by the Dreyfuss office to arrive at a set of essential measurements of the male and female figure.

"Joe" and "Josephine," as the Dreyfuss figures were named, became the yardstick applied to designs, if one desired they be "safe, convenient and comfortable for the people who will use them." As such, this installation/performance suggests that at least one of the icons might better have been made of rubber!



ALTERNATIVES

BIG WOMEN

Danielle Hermann



STANDARDS are too often accepted as appropriate or correct and rarely questioned, although their relationship to cultural and spatial conditions is constantly being altered. *BIG WOMEN* is an analysis of a particular set of standards, those created by Henry Dreyfuss, whose famous anthropometrical studies have served design professionals for decades by providing data on the human form and its range of motion. The investigative images exhibited are an interpretation of what the standards lack: the presence of a constant and rapidly changing pregnant female body.

As a female working within the profession of architecture and experiencing the ever-changing state of pregnancy for the first time (currently 8 months), I am keenly aware of my own shifting positions within space. Conversely, when the examination of these standards was undertaken,

a method for considering the phenomenon of a swelling body was much less clear. The Dreyfuss standards provide a classic format used by designers to comprehend the implications of the body within specific contexts.

The exhibit consists of a series of images that study the

standards themselves. Each modifies the definitive pose depicted by the standard figure in a way that reflects the amended posture and shape of the pregnant female, while also indicating the movement required to accommodate the enlarged form.

A repetitive march of small scale body plans defines the first series of illustrations. These explorations individually consider a component of the altered pregnant female form and highlight the respective features to indicate the multiple facets of change that are encompassed in pregnancy. These characteristics range



from the increased size of specific elements of the body to the physical movement or repositioning that the growth requires. The dimension of motion that is added to these images rectifies the implied stationary state that is communicated in the classic standards.

Larger than life, almost giant in scale, a set of three images form the second series which also serve as the focal point of the exhibit. Dramatically confronting the viewer with the three most prominent or evident physical changes that affect female bodies during pregnancy, these diagrams boldly announce their relevant attributes: Boobs, Belly, and Butt. They are arranged in this specific order as a representation of the succession of pregnancy through three stages, or trimesters, and serve to identify the sequenced development of sections of the body, beginning with blossoming of

the breasts at an early point in development, moving on to the burgeoning of the belly and culminating in the expansion of the butt as birth nears.

A method of engaging the graphics, and the state of being they represent, is the final factor that is absent from the Dreyfuss standards. Positioning that provides a personal reference to the shifting sizes and postures of the pregnant female body is required. To accomplish this, a one to one scale diagram is situated at the center of the exhibit floor and raised slightly on a platform. Mediating between occupant and drawing, a swing hovers over the elevated image. Articulated with a glass seat for maximum visibility of the image below, the swing allows its occupant to adjust and maneuver their own body effortlessly above the physical and spatial relationships depicted below. This offers an opportunity to fully

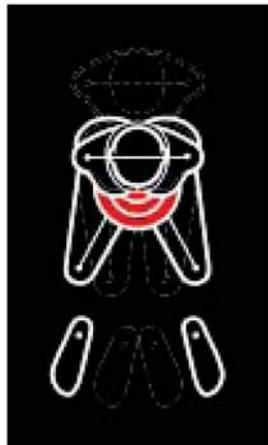
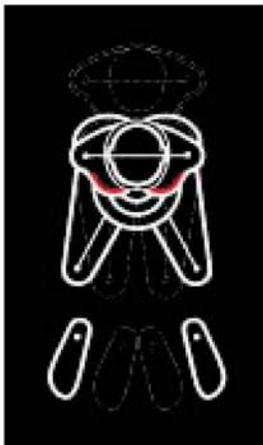
interact with and understand the requirements of the pregnant body in a context that is uninhibited by gender restrictions.

BIG WOMEN is exhibited in an effort to bring to the forefront an ongoing need to more closely scrutinize the standards that have become accepted too readily and questioned rarely, as well as the implications they have on our spaces of inhabitation and our movements within them. By addressing the deficiencies inherent in these diagrams, a new perception of design standards can begin to be established. This imparts an opportunity for expanded discourse within the design profession as it adjusts to a growing female presence, and with it, the expanding female body.



Caption here

Special thanks must be extended to Mitchell Squire, Iowa State University assistant professor of architecture, who not only supervised this work, but also provided support and guidance throughout the execution of this exhibit. I am also appreciative of the M30 Idle Hands for contributing a forum for reflection. I must acknowledge my husband, Joe, for his encouragement and assistance, Brent Hoffman for photography, and Herbert Lewis Kruse Blunck for allowing me the freedom to pursue my goals.



Caption here



Embodiment: Gender + Culture + Action

2006 Women's Studies Biennial

Juried Art Exhibition

Loranger Architecture and Art Gallery
School of Architecture
University of Detroit Mercy
4001 W. McNichols Rd. Detroit 48221

exhibition

March 13 – 18, 2006

opening reception

March 13, 5 – 7 pm

Twenty-one artists explore the body as subject, interrogate female and male bodies in society, depict the multiple cultural meanings of embodied gender, and examine the relation between body [corporeality] and power [agency]. The work on display is intended to create discourse around issues of the body.

artists

madrid sp Kristoffer Ardeña	Andrea Eis rochester mi
windsor on Alana Bartol	Danielle Hermann des moines ia
lakeland mi Peggy Brewer	Jessica Lawless los angeles ca
eugene or Colleen Choquette-Raphael	Ryan Sarah Murphy new york ny
nashville tn Amanda Dillingham	Jennifer McCandless st clair shores mi
minneapolis mn Liz Dodson	Mari Ogihara philadelphia pa
columbia mo Claudia Drake	Kelly Phillips vancouver bc
franklin tn Jason Driskill	Glynnis Reed los angeles
san francisco ca Denise Duffy	Cigdem Slankard huntington, wv
des moines ia Carissa Gavin	Margaret Ware mt pleasant mi
	Vagner M. Whitehead ferndale mi

co-curators Amy Green Deines architecture + Libby Balter Blume psychology

jurors Allegra Pitera electronic critique + Julie Kim architecture

Iowa Exhibited 21 Artist List
Heritage Art Gallery
June – July, 2006

First Name	Last Name	Title	Media	Price
Vicki	Adams	Ancient Dig	Relief Print	400
Vicki	Adams	Blue Grey and Red	Collagraph Print	450
Steve	Aitchison	Untitled	Porcelain/Stoneware	NFS
Steve	Aitchison	Untitled	Porcelain/Stoneware	NFS
Linda	Andeberg	Dead End Road	Oil on Canvas	265
Kernlyn Tan	Bappe	Owl Study	Intaglio	2000
Mary Snyder	Behrens	Trammel Box (Home II)	Mixed Media	NFS
Mary Snyder	Behrens	Trammel Box (Reparation Box)	Mixed Media	NFS
Mary Snyder	Behrens	Tammel Box (White Wish III)	Mixed Media	NFS
Roy	Behrens	Indigenous Nativity	Montage Print on Paper	500
Roy	Behrens	Vision of Grace	Montage Print on Paper	500
Laurine	Briden	Maine Event	Shells Glass Zinc	225
Garneta	Brunk	Nude Behind Colored Glass III	Acrylic	500
Jennifer	Dierdorf	Residue	Book pages, Steel Pins, Table	700
Jennifer	Dierdorf	Reforming	Book pages, paint, thread	900
Jennifer	Dierdorf	Mark Making #6	Graphite on Paper	300
Mark	Gates	Mummy	Polymer Clay/Steel/Wood	140
Michael	Glaser	Inside the Box	Furniture (White Oak)	NFS
Michael	Glaser	Live For Your Art	Furniture (Maple, Acrylic)	NFS
Kathy	Glenn	S'mores	Water Color	500
Stan	Greenwood	Red Amaryllis	Photograph (Pigment Inkjet)	150
Stan	Greenwood	White Violets	Photograph (Pigment Inkjet)	150
Stan	Greenwood	Tulip Interior	Photograph (Pigment Inkjet)	150
Larry	Gregson	Threshold	Oil on Canvas	NFS
Larry	Gregson	N.A. 2006	Oil on Linen	800
Lary	Gregson	In the Kingdom of Regret	Oil on Linen	NFS
Margaret	Gurau	Cassies Dream	Acrylic	NFS
Margaret	Gurau	Shiny Bright	Collage/Acrylic	800
Cat	Hall	Ubu	Integlia	75
Charlotte	Harnity	Central City	Transparent Water Color	225
Shelly	Hansen	Schwinn	Photography	200
Shelly	Hansen	Francesca's Dress	Photography	NFS
Janet	Heinicke	Untitled Print	Intaglio	300
Danielle	Hermann	Series: Big Women: Image: Before	Matte Graphic on Bond	200
Danielle	Hermann	Series: Big Women: Image: Behind	Matte Graphic on Bond	200
Danielle	Hermann	Series: Big Women: Image Between	Matte Graphic on Bond	200
Kevin	House	Your Four	Mixed Media	600
Kevin	House	We Flew PanAM to Paris	Mixed Media	350
Kevin	House	Untitled #11 - Introduction	Digital Collage	100
Lucia	Hwang	Allemande	Water Color	NFS
Peggy	Johnston	Column Number Three	Mixed Media	250
Ariss	Kelsey	Up North	Oil on Canvas	NFS
Susan	Kopecky	In the Key of... Whimsey	Silver Gelatin Photograph	300
Guy	Kyar	White Relief	Mixed Media	40
Guy	Kyar	Cousteau In Composition	Acrylic	75
Leslie	Leavenworth	Greenwood Pond	Acrylic	200
Leslie	Leavenworth	Waterworks Park	Acrylic	200

Awards for Iowa Exhibited XX1 (June 11, 2006)

Comments of Juror Tilly Woodward

Honorable Mentions:

"The pieces chosen for 'honorable mention' are works I was strongly drawn to. I love the mystery of the moving horse in the HOLY DOG by Barbara Walton and the exploration of theme in BIG WOMAN by Danielle Hermann, and the subtle play of color in Dennis Peterka's ABSTRACTSCAPE #2."

Merit Awards:

"the Merit Awards include one graphic work of Roy Behrens--INDIGENOUS NATIVITY--a wonderful repetition and variance of color with delicately continuing text, content and formal elements.

The dot painting, METAMORPHOSIS by Elinor Noteboom creates an interesting play of scale and rhythm that results in both a sense of calm and tension.

Both Shelly Hansen's photograph, FRANCESCA'S DRESS and Lee Nyquist's INTERIOR struck me with their visual thoroughness and the overwhelming sense of mood that each evoked. I was particularly impressed with the technical excellence of Nyquist's handling of graphite and charcoal."

Best in Show:

"This award goes to the work of Mary Snyder Behrens for her TRAMMEL BOXES. These pieces are beautifully presented and delicately created. Often art expresses what we most need to express, and these works get at what remains hidden and concealed. Their sense of mystery combined with the nature of the aged and frayed fabric, the stitching, binding and wrapping give a moving sense of the history of living."

Congratulations to one and all, and thank you all for the work you submitted to this Iowa Exhibited XX1 show.

Mary Brubaker
Board of Directors
The Heritage Gallery

The Third Trimester:
“What the Hell are you Doing?”

Why Can't We Hear the Real Story?

Because "...objectivity is simply a form of male subjectivity."⁶⁰

Have you ever been pregnant? Had a wife or partner experience pregnancy? Maybe a mother...a sister...a friend? If so, you have undoubtedly witnessed the frantic and hysterical nature of a woman in the latest stage of pregnancy. Nesting. The nervousness that accompanies an impending labor and delivery. Not to mention the anticipation and fear that is imparted by the knowledge that your life will forever be tied to that of the child you are about to bear and the responsibility that entails. Add to that an unbearable level of discomfort and you have the makings of a virtual time-bomb! How does the profession of architecture respond to this? In short - - it doesn't. It's possible that no profession could. But in the macho environment of an architectural office or a construction site this state-of-mind, and the affect it has on circumstances that present themselves, may be amplified considerably.

This trimesters work differs dramatically from that of the first two trimesters. It is a journal or diary of a singular experience [my own]. As such, it may not fit everyone's understandings, but it is offered as a means of sharing a lived experience in a form that has interpretive value. The images provided work with the entries as a form of visual punctuation. Though the narratives tend to be fragmented or random in their thoughts, the graphics that follow each are presented in a loosely chronological order. They illustrate topics and a certain progression that is reflective of thoughts presented earlier in this thesis, so common threads will be recognizable to the reader. Images may seem regressive in their

historical nature, but because of their metaphorical significance to an institution which may mirror architecture, they should communicate on several levels about the current [and possibly future] state of the profession of architecture.

I am providing the following quote describing the pitfalls facing women who try to describe their own experiences in conventional [male] terms through the more predominant means of research in hopes that the reader will understand what it is I am trying to avoid by providing this section of work in this manner:

“...the expression of women’s unique experience as women is often muted, particularly in any situation where women’s interests and experiences are at variance with those of men. A woman’s discussion of her life may combine two separate, often conflicting, perspectives: one framed in concepts and values that reflect men’s dominant position in the culture, and one informed by the more immediate realities of a woman’s personal experience. Where experience does not “fit” dominant meanings, alternative concepts may not readily be available. Hence, inadvertently, women often mute their own thoughts and feelings when they try to describe their lives in the familiar and publicly acceptable terms of prevailing concepts and conventions.”⁶¹

The following - - a conflict of epic proportions [the un-CUT version].

F e m i n i n e F r a g i l i t y : D A N G E R ! D A N G E R !

What is different about the profession of architecture? In this case, is it what's missing or, possibly, what's added? How is it that women have made great strides in other professional settings, such as medicine and law, and yet females in the architectural profession are, as yet, still in such a minority (with no immediate hope or foreseeable changes occurring that would reverse the current situation)? I propose that what's different (ONE difference, not the only one) is 'danger.' Women are fragile. Everyone knows that. And pregnant women are downright fraile! A construction site is no place for them.

How could any self-respecting delicate creature in the grips of such a demanding physical state as 'with-child' bring herself to set foot in such a place? Why, construction sites are practically oozing with the possibility of mishap. One wrong step. One misplaced hand. And then, to be so ostentatious and brazen as to navigate such a place with a pair of high heeled shoes on – whatever could she be thinking!?! Of course, you'll have to disregard the fact that she's been so conditioned to dress in just such a certain way as to communicate a demeanor of intellect and professionalism, balanced with the expected 'stylishness' of a designer, but not too stylish because this might betray a youth that just wouldn't gain you the kind of respect that

you'll need to wade through a sea of bullish, stubborn, entrenched male contractors, who, in reality, are skeptical of architects to begin with, let alone a woman. And don't forget modesty, girls; this is a construction site after all. So what does this all mean? For the typical man – FEAR. In the office setting, though a bit more guised, the same predilections exist. One male coworker, who shall remain unnamed, jokingly commented that, "cute pregnant girls shouldn't be doing this." And this was a friend. As my mother used to say, with friends like these...I'm sure you know the rest of this old adage. The moral of the story is, this friend had never viewed me as 'cute' or 'sweet' before, or at least he hadn't vocalized it. But now that I was

expecting I had gone from a status of "one of the guys" who could hang out, be in on the jokes, and grab a beer after work, to a fragile 'girl' in need of protection and looking after. And upon my return as a new mother, the general attitude was still similar. It was a good 6 months before I was back in on the jokes and going to lunch with the guys again. Pregnancy infers a state of objectification that turns normally respected women into the subject of a delicate sort of hovering. And though it is less overt in the professional setting, on the construction site you'll be downright swarmed with protection (if the construction crew/foreman happen to be older, perhaps even to a full generational point, you will undoubtedly get a 'fatherly' sense or

presence from them). I will grant that this appeared worse to me from men who remained unmarried and/or without children. Those who had not yet had the opportunity to witness someone close to them experience pregnancy. To these men, and even to those who have been 'around the block,' a pregnant woman in the professional and construction setting is a frightening and un-welcomed addition that is unnerving and mystifying all at the same time. What once was, and for many women still is, considered a natural and everyday occurrence, is viewed from the male standpoint as difficult and dangerous; a condition requiring special care. What's missing? Knowledge. Knowledge for men. Knowledge of the female experience as a woman

and a mother. This unique experience is unavailable to men and unable to be fully understood by them. Therefore it is feared and female knowledge of events is disregarded. Men, presented with a situation such as this, typically and historically find ways of knowing. And because the male inclination is towards logic as opposed to emotion, those ways of knowing manifest themselves as a form of control (the inherent logic of domination: classifying and categorizing). Yet the reality remains that no matter how surveillanced and dictated by male medicine pregnancy and birth become, men still have no real way of perceiving the experience of bearing a child. It is an unattainable place for them. So how does this impact the practice (and/

or making) of architecture? The answer is that it doesn't. Or it has not as of yet. The female experience of ourselves as women and, specifically as pregnant beings, cannot be used to situate oneself architecturally because that would mean that the possibility might exist that men would never be able to understand it or fully inhabit it, and in the architectural profession, where the white male paradigm has ruled supreme and unchallenged, this is unacceptable. It is not allowed. Put simply, it is well known that architecture must be for everyone. Or is it?



Designed by Eloise Glover for Lord and Taylor

YOU CAN REALLY
LOOK SMART WHEN
YOU ARE PREGNANT.



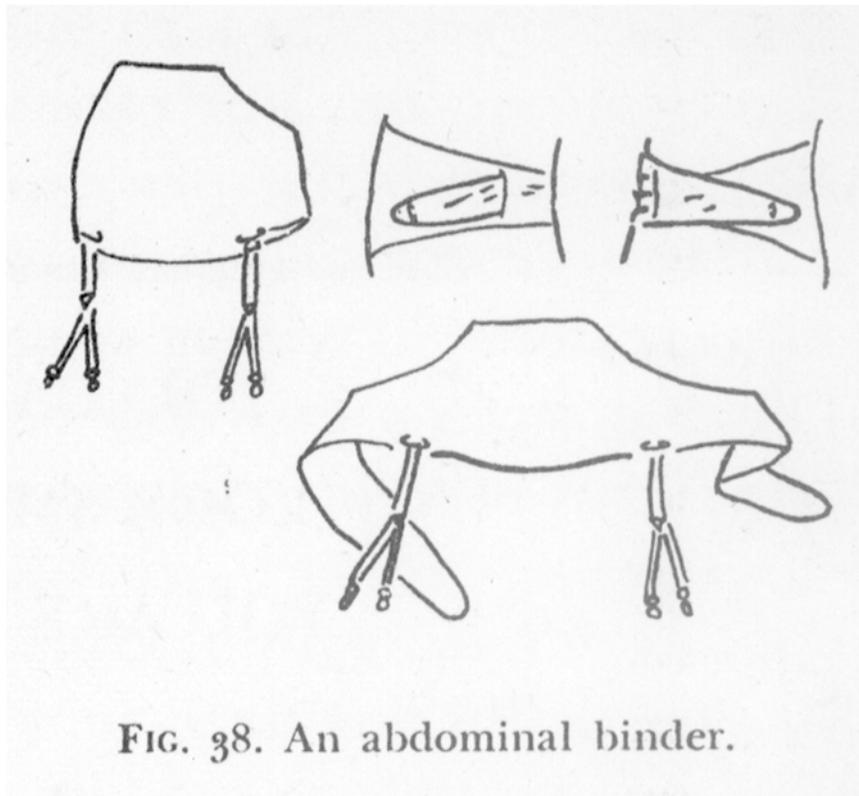
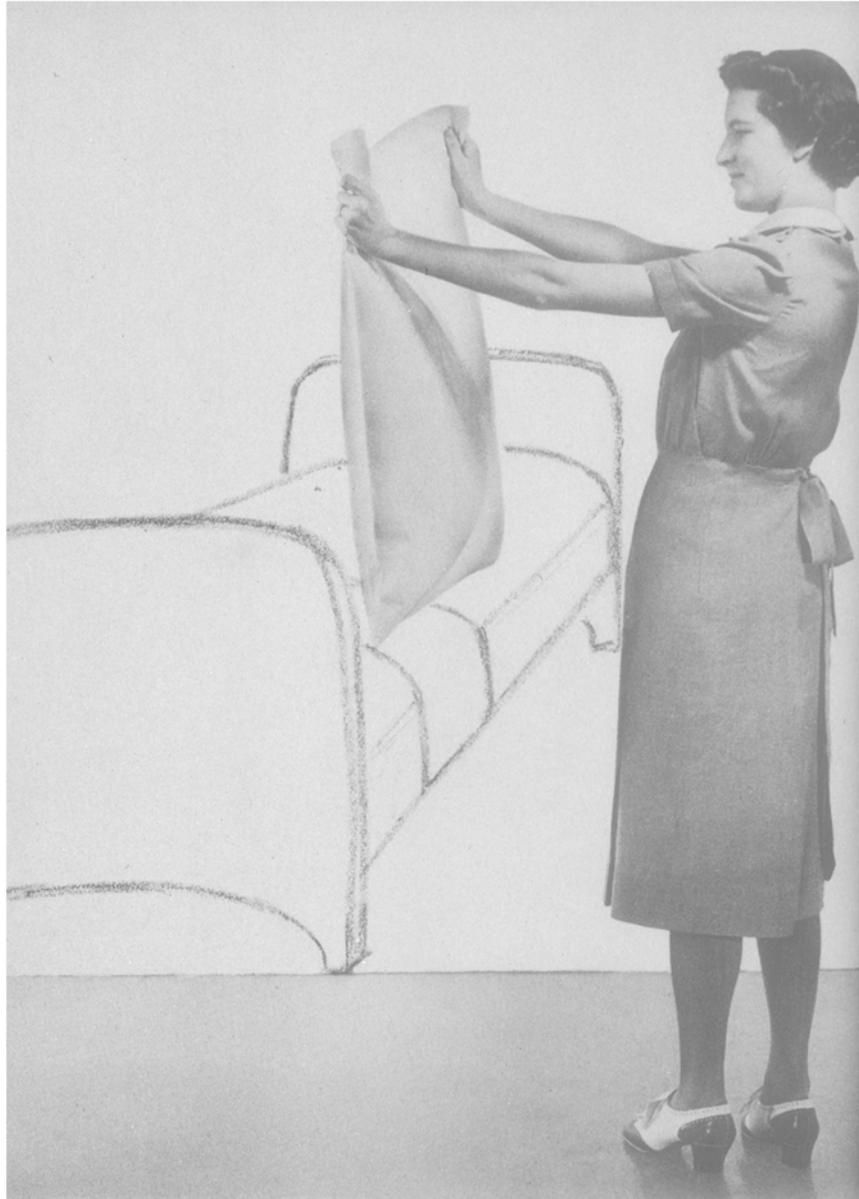


FIG. 38. An abdominal binder.



Courtesy of Maternity Center Association

FIG. 7. Dr. Jones says to keep on with the light housework; it's good exercise.
I really enjoy every bit of it.

Delicate and Precious: Embrace It!
(Against Physical and Drastic)

These are terms I have heard used to describe women, their work,
and, more often,

o b j e c t s - u s u a l l y b e a u t i f u l o b j e c t s

(and, truthfully, used to negatively describe my own work). These
are clearly not **m a s c u l i n e** words in nature or meaning.

So why not?

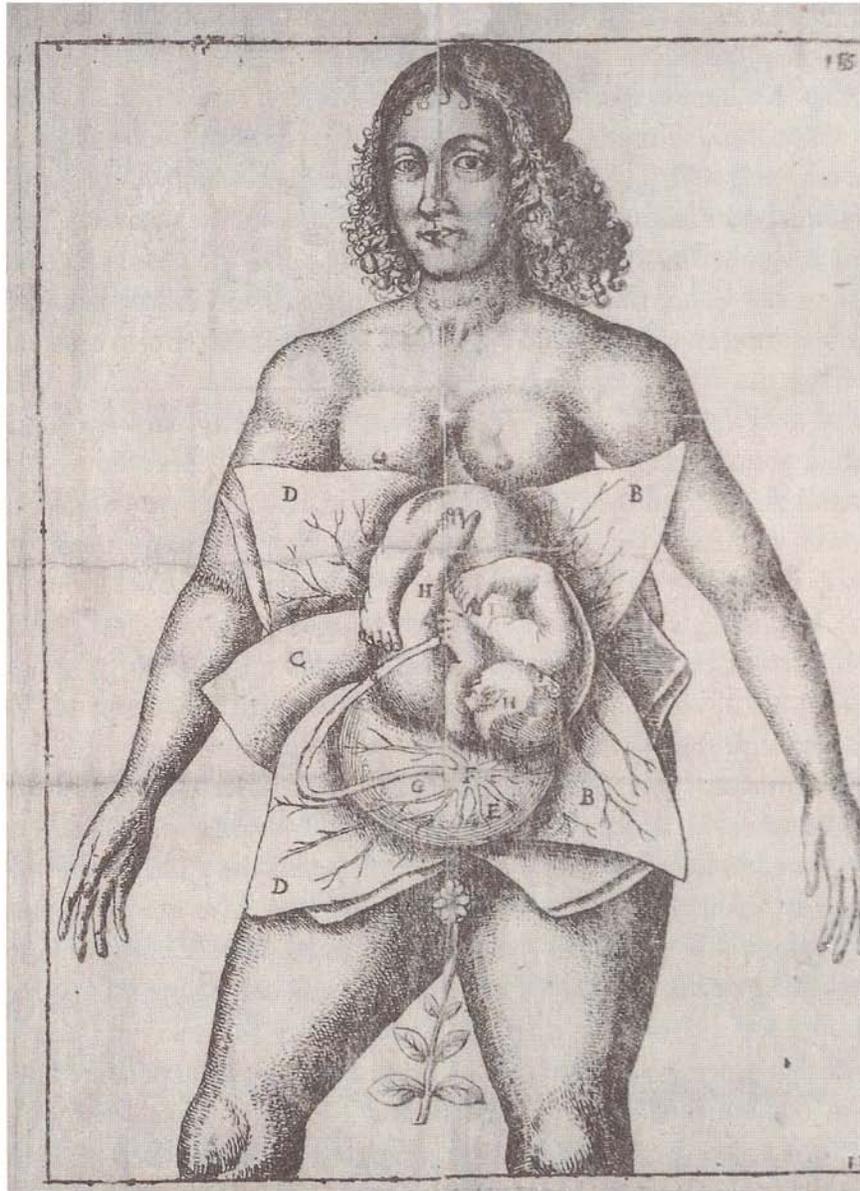
Why not Architecture?

What about why not an **Architecture**
FOR WOMEN, BY WOMEN?

Who says so?

Why must our voices, thoughts, ideas, and expressions of architecture be
Stifled, if not silenced
all together.

Shall we express our *d i f f e r e n t n e s s . . .*
or accept the limitations *they* [the WM paradigm] impose on us?



The Figure Explained:

Being a Dissection of the *WOMB*, with the usual manner how the *CHILD* lies therein near the time of its Birth.

B B. The inner parts of the *Chorion* extended and branched out.

C. The *Amnios* extended.

D D. The Membrane of the *Womb* extended and branched.

E. The Fleshy substance call'd the *Cake* or *Placenta*, which nourishes the Infant, it is full of *Vessels*.

F. The *Vessels* appointed for the *Navel string*.

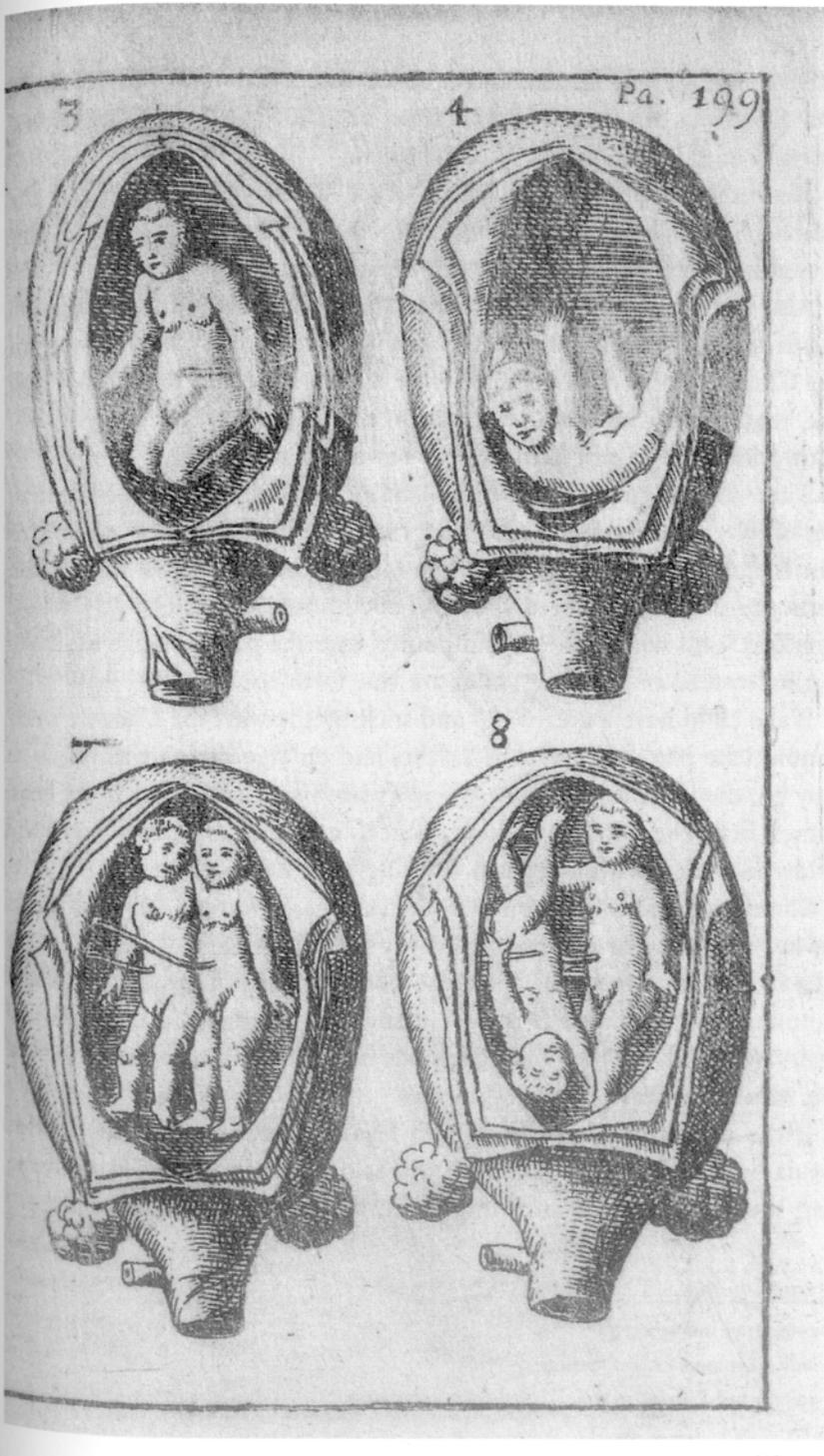
G. The *Navel string* carrying nourishment from the *Placenta* to the *Navel*.

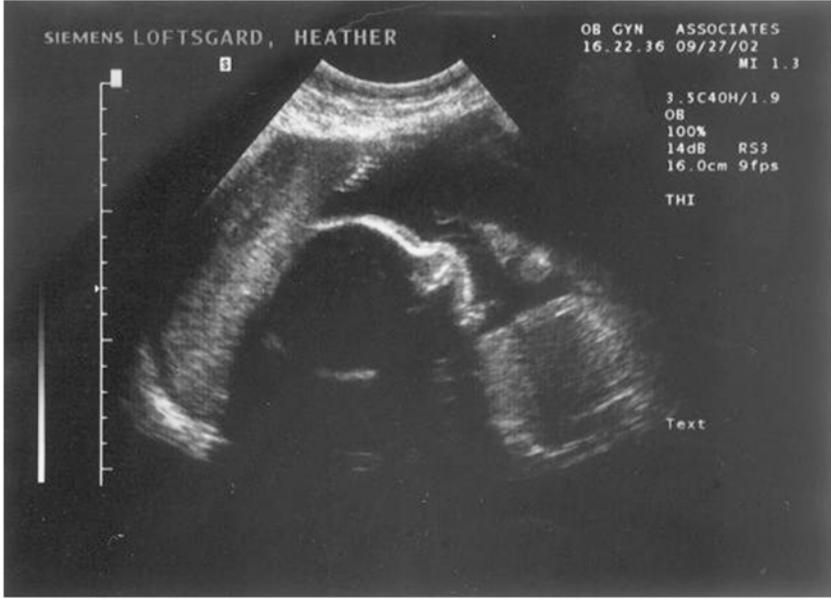
H H H. The manner how the *Infant* lieth in the *Womb* near the time of its Birth.

I. The *Navel string* how it enters into the *Navel*.



J.D. fe.





BIRTHING an *Arche*-type

Now, for a new discussion -
or really to build on a topic that I mentioned in passing earlier.

This is separate from discussions about the body itself as an entity.

This is more involved with *HOW*
the **female pregnant body**
experiences

the world,
and how that experience is regarded
as a *knowledge base*.

So how did we get where we are now?
How did experiential knowledge,
always more closely associated with the feminine perspective,
become so

UNDervalued?

I propose that it began initially
(at least in part)

as a shift that occurred in *birthing rituals*.

The once **natural** process of childbirth that relied on the experiential knowledge of the birthing woman has been **appropriated** over time by *PATRIARCHAL INSTITUTIONS*,

namely **medicine**,

which privilege technical knowledge

[as a means of control].

The **birth process** has evolved as a construction of culture and has shifted with those cultures and their **attitudes and beliefs**.
FEMALE KNOWLEDGE historically

(or in the time period before medicine,
when birthing was a female activity or event
with female midwives, family, and friends)

was gained through.....

experience
participation
gesture
ritual and
tradition

passed on through repetition and memory.

The system changed and evolved with lifestyle and participants and could only **continue and thrive** as long as the women within it **supported and believed** in the **relationships and customs**.

Over time, *the persistent portrayal of females as less qualified and even ignorant* coincides with the general *declining status of women* (through history, not really a start and a stop.....), and with it the beginnings of the **war** between men and women for the 'OWNERSHIP' *of pregnancy and the female body*.

Ultimately, the **result** has been an

UNBALANCED AND DISPROPORTIONATE

location of knowledge that

DISADVANTAGES the ascertained or experienced

knowledge of women,

further

robbing us of our claim to *ownership* of **our own bodies**

[**space**]

and *relegating* us to a

marginalized and subservient position.

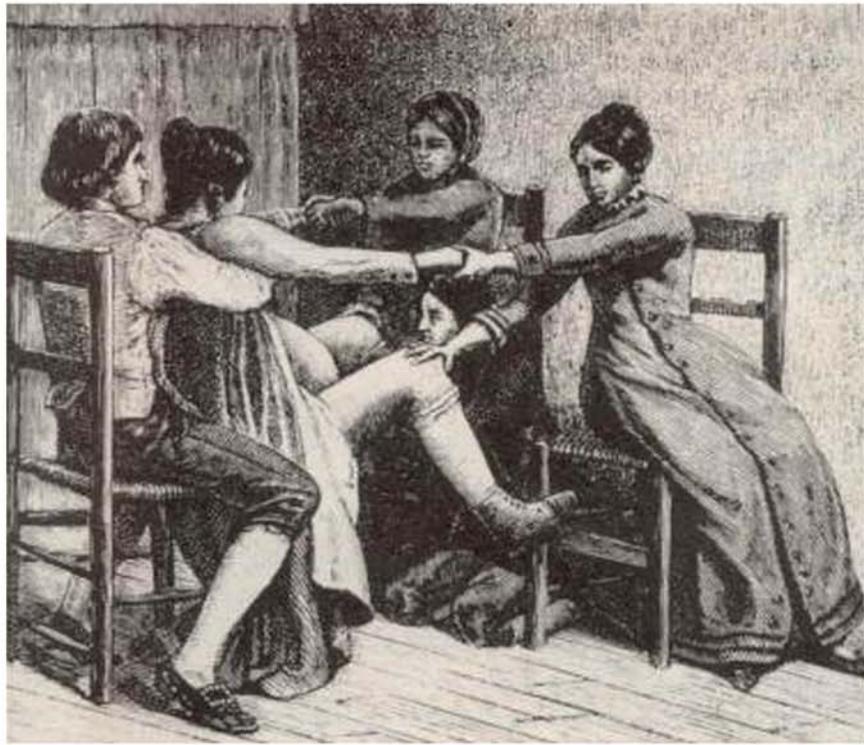


Figure 1.4. The style of a “Y” stool is clearly seen in this sketch taken from Giovanni Savonarola’s *Practica major*, first published in the fifteenth century.



Woodcut, c. 1500s







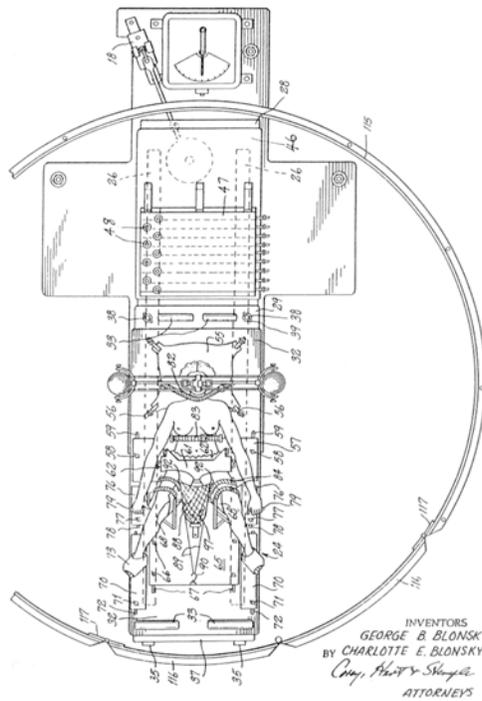


Figure 3.5. Perhaps the greatest evidence of the perception of delivering women as malfunctioning machines and the advocacy of the use of mechanized tools of birth is captured in an American invention from the early 1960s. Although never widely used, the inventors advocated strapping down the “under-equipped woman” and spinning her to propel the infant through the birth canal. George B. Blonsky et al., “Apparatus for Facilitating the Birth of a Child by Centrifugal Force,” U.S. patent number 3,216,423, granted 9 November 1965.

Medical Metaphors: Birth

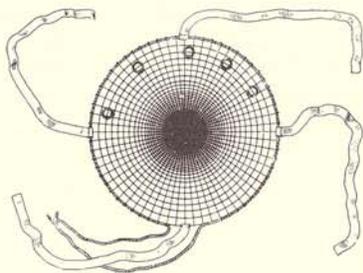


Fig. 10 Pierre Amand's sling for extracting the fetal head, introduced in the early eighteenth century. (Witkowski 1891, fig. 87, p. 139. Institute of the History of Medicine, the Johns Hopkins University.)

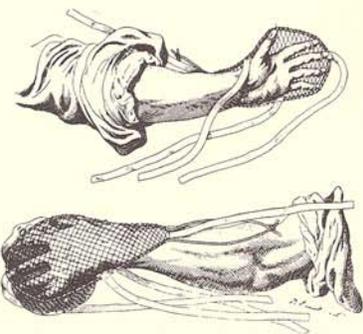


Fig. 11 The manner in which Amand's sling was applied. (Witkowski 1891, figs. 88, 89, p. 140. Institute of the History of Medicine, the Johns Hopkins University.)

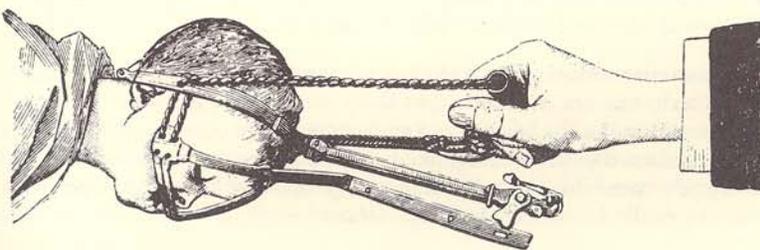


Fig. 12 The mid-nineteenth-century fetal extractor of Jules Poulet. (Witkowski 1891, fig. 129, p. 272. Institute of the History of Medicine, the Johns Hopkins University.)

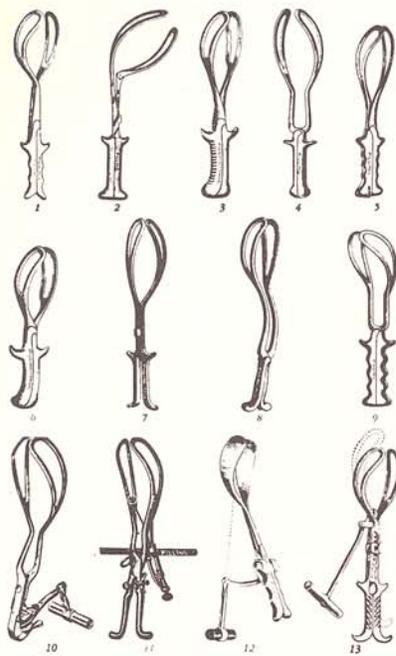


Fig. 13 A variety of obstetric forceps in use in the twentieth century. (Ullery and Castallo 1957, fig. 9-47. Reprinted by permission of F. A. Davis.)

W h a t ' s M i s s i n g ?
C h a n g e ?

At a time when women are themselves in such a state of flux, experiencing their own bodies and spaces in such different ways from their 'normal' existence, change becomes a part of the everyday experience. At a point like this, experiential perception becomes totally new. I posit that for most women this leads to new perspectives on almost everything in life, and for female architects, this includes how design, space, and inhabitation might all unfold. This is a critical period in a woman's life when change is so important, and when, likely, she might also affect such great change.

CONCLUSION

An Attempt at the RIGHT Question(s)

This thesis is an analysis of the current status of the pregnant female *in* architecture. It refers both to how this specific body is understood in architectural spaces, in the more typical sense, as well as how the pregnant woman is situated in the *space* of the architectural profession as a whole.

Standards have been used as a way to begin to access and address the ways in which, historically, the female body has marked architectural space, as well as how it is understood from within the current accepted construct of architectural practice. Their alteration to include the pregnant female form has been used to promote discourse, provide a tool to communicate the relatively unexplored or ignored pregnant body in architecture, subvert the accepted paradigm from within, and provide an experiential reference point [essentially feminist in its intent] from which to structure a new understanding and methodology.

The metaphor of the medicalization of the birthing process as a representation of the architectural profession and its paradigm becomes another tool for understanding and questioning. It also provides a prospect on a way to move beyond the current situation using the lens of feminism.

To be clear, feminism essentially combats the WM paradigm by providing a platform for continued discourse that is based on the value of feminine/female knowledge – more tied to experience – hence, its methodology is experience based. It values women's experiences and strives to communicate and share them in ways that don't (intentionally or unintentionally) undermine their individual uniqueness and worth. This thesis makes use of and abides by that tenant. The way in which this document is

constructed and presented is a conscious effort to provide an experientially based alternative. A way to begin.

Ultimately, what can be concluded with one-hundred percent certainty is that we don't know enough about the female experience, especially the pregnant female experience, in the architectural profession. Without a more complete knowledge base it is difficult, if not impossible, to propose a solution to the issue of gender diversity. So what we can do is to continue working, this thesis is provided in that effort.

I suspect that the questions currently being asked are a start, but I'm not convinced that they are the right questions or that they are being asked in the right way. Anyone with experience in surveys or interviews can tell you immediately that it's not just the questions themselves, but it's also *how* you ask them. How architecture has constructed the question(s) thus far doesn't seem to be getting at the answers that will help in any solution, yet we keep going down the same path. Have you ever heard the definition of insanity? Doing the same thing over and over and expecting a different outcome. Is that where the profession of architecture is at? Continuing to approach the problem through the typical methods established by the paradigm that created the obstacle to begin with will not work. Tabulating numbers and reporting figures just isn't cutting it

Truth be told, the profession is really at the early stages of coming to grips with this problem of change. Although the topic of women in architecture, or more appropriately the lack of, has been discussed in depth and analyzed from many angles, we are still searching for answers. Two major feminist movements and 100 years later we find ourselves, sadly, not much further advanced in the discussion, the questions, or the profession itself

than we were when we started and with no real hope in sight. Pessimistic as this may sound, to those of us dedicated to the effort just keeping the conversation going is an important step. Simply put, there is much more to it than the current understanding or the current discussions. The problem is bigger than most might imagine and it has long-term affects.

That said, I do not wish to ignore or exclude the efforts of the women who have come before me. Clearly there have been successful women in the profession of architecture who have navigated pregnancy and had families. But perhaps we don't know enough about their experience to be able to capitalize on their successes? I often hear the question asked, "Why are there still so few women at the very top of the profession?" when in reality, the larger question of *why there are so few women in the profession to start with* is neglected.⁶² Sexism and chauvinism are easy answers, as is the harsh demand placed on women in a profession that ignores the uneven burden on women when it comes to family responsibilities. But reaching these conclusions has done little to improve the situation. This leaves one wondering whether the problem starts even earlier in a woman's career. Since it's well known that the student ratio's in architectural schools are virtually balanced, and that those who make it to professional standing (qualified here as registration or licensure) is significantly less, it leads me to question *WHEN* most women leave architecture. Even before 'family' obligations, implying child rearing, become an issue, is the state of pregnancy such a liability in the profession of architecture...more so than in any other profession where balance seems more attainable (such as medicine or law?)...that we might find that departure starts here? Assuming that women are able to overcome the male bias that is inherent in the profession, personal

experience tells me that this is possibly a valid starting point. But realistically, women will continue to have babies, so the profession of architecture needs to come to terms with it if there is any hope of success with regard to diversity.

I realize that I am still in the relatively early stages of practice, but being a full generation apart from other women who were tackling these same issues in the 1970's and 80's, one would think that the time passed might mean that we wouldn't still be looking for answers (let alone, the questions)...that I wouldn't be fighting the same battles...but I am.

So my contribution seeks mostly to shake things up a bit. This thesis proposes a NEW way. An intentionally unconventional perspective and method that is less focused on the rational and is far more inclusive of the non-empirical modes of thinking and learning. This approach offers more. This thesis, in thought, concept, and execution, provides an alternative (topic, question, and method). It asks contemporary and innovative questions in a way that is atypical to the established architectural [male] paradigm. It presents information in an experiential manner that uses the lens of feminism, its methodology and epistemology, to communicate about the pregnant female body and the circumstances that surround it *in* architecture, referring to how the pregnant woman is situated spatially and experientially within the profession. Feminism allows this work to be framed in a way that can open a broader dialogue and may provide a means of moving beyond the current rut that we seem to be stuck in. It offers a relevant model of how to combat the pervasively male paradigm in architecture that continues to perpetuate itself and defeat any goal of diversity.

Appendix

Preparatory Sketches

Pregnant 'Pieces'

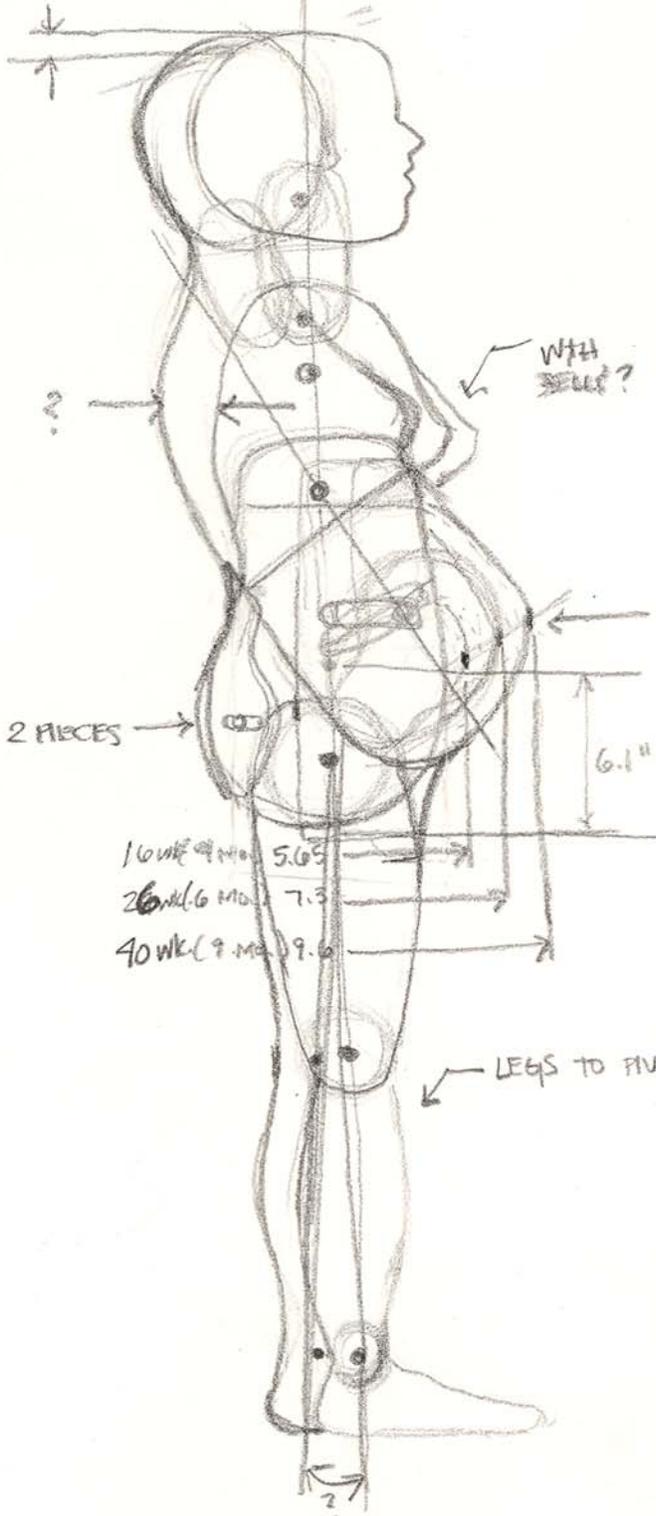
Pregnant Postures

Pregnant Plans

Document(s)

"Gentlemen"

HEIGHT LOSS



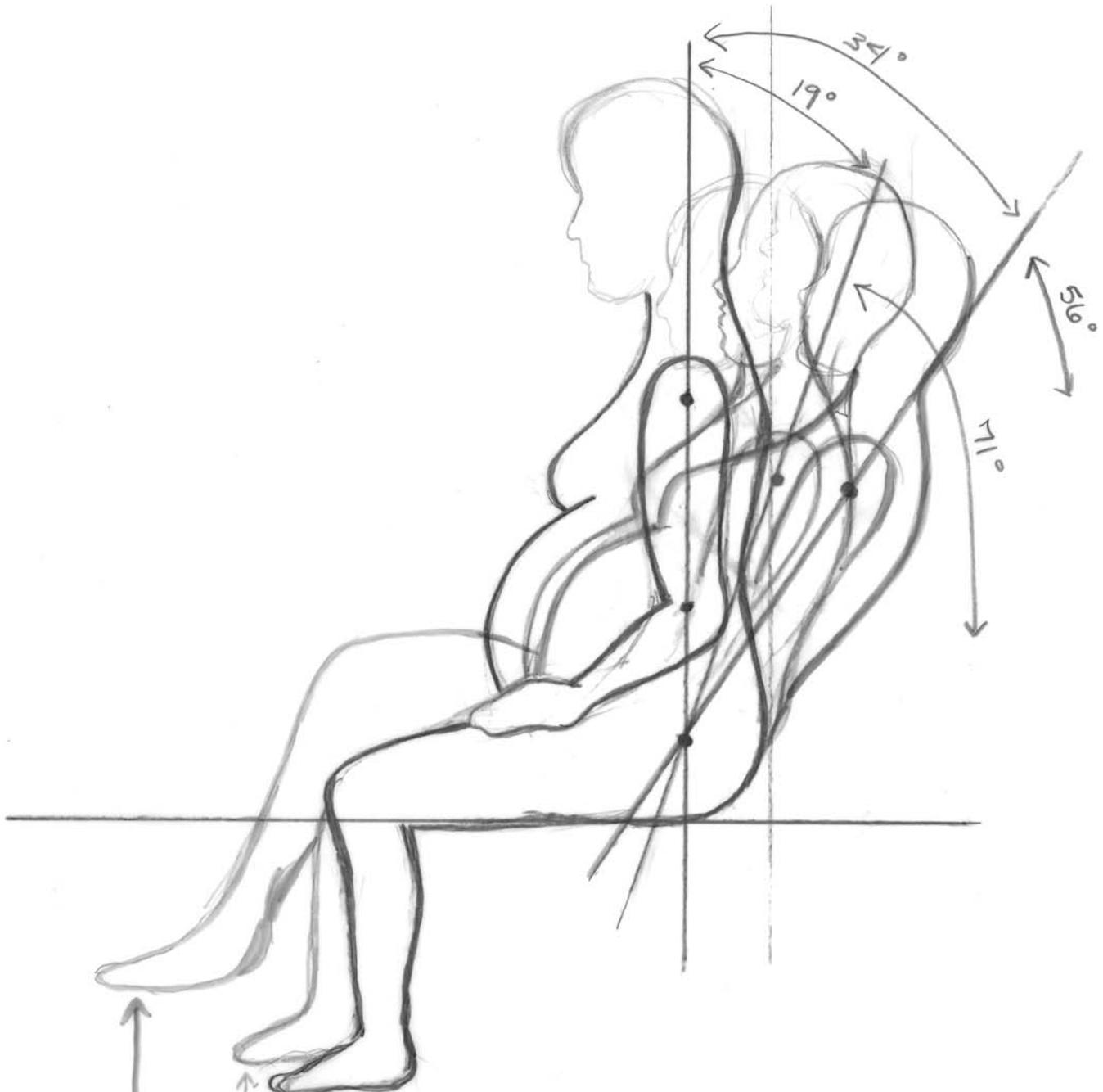
BODY PIECES :

- ADDITIONAL PIVOT
- ADD SLIDE FOR BELLY?

16WK (4 Mo.)	5.65
26WK (6 Mo.)	7.3
40WK (9 Mo.)	9.6

LEGS TO PIVOT @ ANGLE (NO NECESSARY ADAPTATION)

- 137.5 lb. (average)
- 6'4" HEIGHT = ME
- 50% WOMAN
- 1993
- 20-63 yrs.



↑ SITTING UPRIGHT - LEGS SPREAD

↑ SITTING RECLINED SO LEGS ARE TOGETHER

↑ SITTING FURTHER RECLINED TO CROSS LEGS

8 mo. pregnant

40 MO. - WH (16 WEEKS = FUNDAL HEIGHTS)

99%

4 MO. - 7.8"

6 MO. - 9.3"

9 MO. - 11.4"

50%

4 MO. - 5.65"

6 MO. - 7.3"

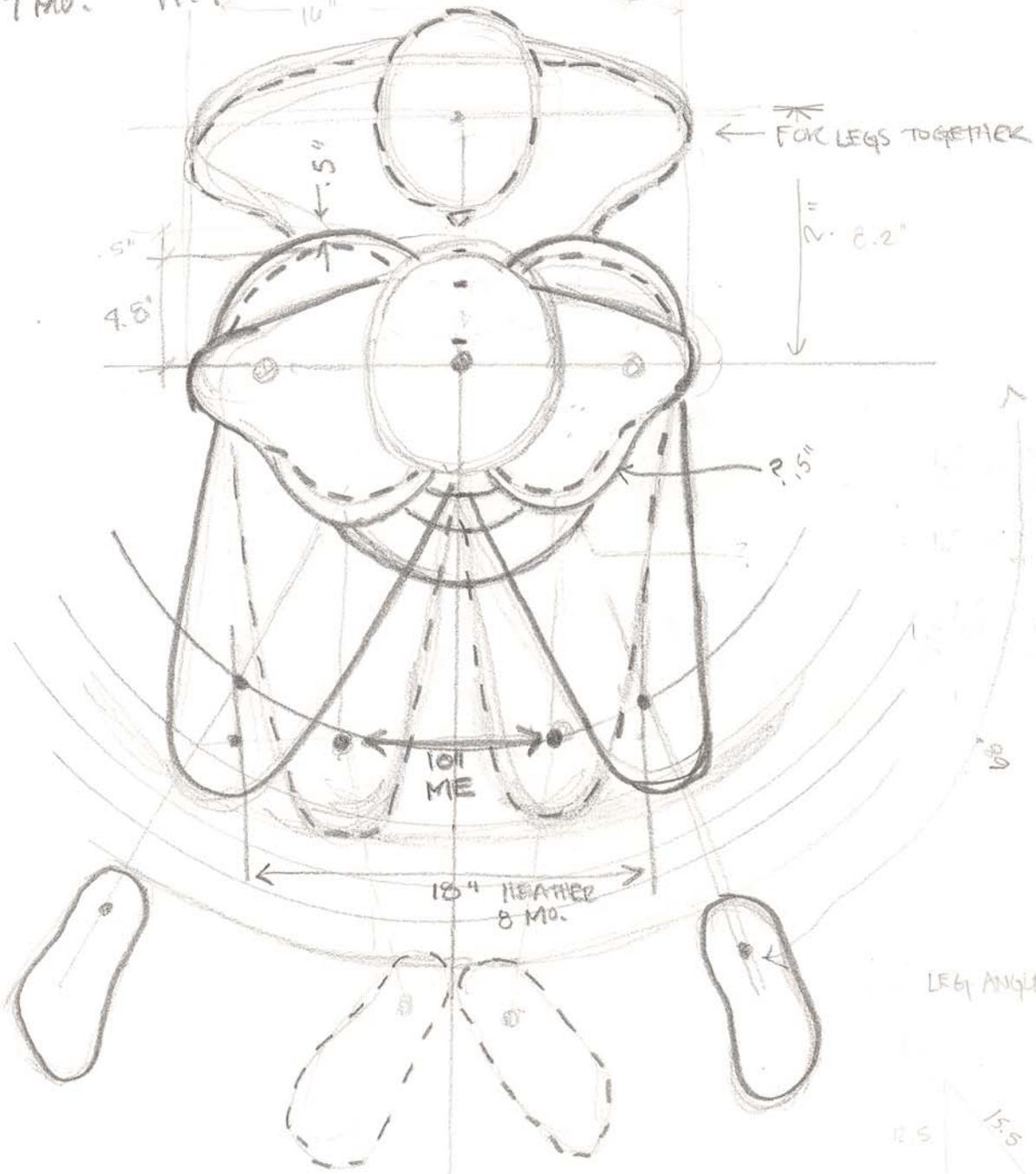
9 MO. - 9.6"

1%

4 MO. - 3.5"

6 MO. - 5.3"

9 MO. - 7.8"



LEG ANGLE





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Re: DES MOINES, IOWA

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ARCHITECTURE, LTD.

Gentlemen:

Enclosed please find 3 copies each of our **A.S. BUILT** shop drawings, () preliminary drawings, () descriptive literature, () test report, () hydraulic claculation sheets, No. _____ on the sprinkler system for the above captioned job.

These drawings () are for your approval.
() have been approved.
() have been approved as noted.
 have been revised.
 are for your file and reference.

Remarks: _____

() Please return _____ copies each with your approval and/or comments at your earliest convenience.

If further information is required, please feel free to contact us.

With best regards, we remain,

Very truly yours, **GARY BUFFUM**
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Gary Buffum

List of Nomenclature

Words, Words. What do they mean?

No, really. What do they mean?

Architectural versus maternal:

Creation (of a child or a building?)

To give birth (to a child or an idea?)

To be spoon fed (food by a mother or thoughts and
ideas by a superior?)

Nurturing (a child or a project?)

“My Baby” (a child or a building project/design?)

Female (fe-MALE)

Mentor (MEN-tor)

Human (Hu-MAN)

In infancy (a child or a project? AND/OR the stage
of development [child or project?])

Images

EXPECTING...on MY TERM(s)

The First Trimester: "Honey! Guess What?"

Standards: Definitions

- 31-33 Graphic excerpted from *Humanscale 1/2/3*, page 17.
 Authors: Niels Diffrient, Alvin R. Tilley, Joan C. Bardagjy. Designers: Henry Dreyfuss Associates.
- 34-39 Graphics excerpted from *The Measure of Man and Woman*, pages 24, 25, 29, 70, 30, and 71, by Henry Dreyfuss Associates.
- 40 One Fourth size Template for 50th Percentile Woman, insert from *The Measure of Man and Woman* by Henry Dreyfuss Associates.
- 41-42 Graphics excerpted from *Humanscale 1/2/3*, pages 9 and 6.
 Authors: Niels Diffrient, Alvin R. Tilley, Joan C. Bardagjy. Designers: Henry Dreyfuss Associates.
- 43 Graphic excerpted from a Medical Text.
- The Second Trimester: For All of the World to See*
 BIG WOMEN: Abridging a Graphic Standard
- 46-56 Graphics created by author.
 Idle Hands: The Fitch Installation
- 57-58 Graphics and text created for marketing by Nora Wendl.
- 59 Photograph by Brent Hoffman, *February 2005*.
- 60 Photograph by Mitchell Squire, *February 2005*.
- 61 Photograph by Brent Hoffman, *February 2005*.
- 62 Photograph by Mitchell Squire, *February 2005*.
- 63 Photograph by Brent Hoffman, *February 2005*.
- 64 Photograph by Mitchell Squire, *February 2005*.
- 65-68 Photograph by Brent Hoffman, *February 2005*.
- 69-76 Photograph by Mitchell Squire, *February 2005*.

- 77-78 Photograph by Brent Hoffman, *February 2005*.
Idle Hands: The ACSA Poster Presentation
- 79 Poster created by Mitchell Squire, *December 2005*.
ALTERNATIVES: The AIA Iowa Article
- 80-81 Article reprinted with permission of *Iowa Architect Magazine*, pages 8 and 9, Issue No. 05:254.
Big Women: Embodiment Exhibition
- 82 Exhibit Flyer, *March 2006*.
Iowa Exhibited: The Heritage Art Gallery Exhibition
- 83-84 Iowa Exhibited artifacts, *June 2006*.
The Third Trimester: "What the Hell are you doing?"
Why Can't we Hear the Real Story?
- 90-92 Images excerpted from *Getting Ready to be a Mother*, pages 53, 54, and 8, by Carolyn Conant Van Blarcom and revised by Hazel Corbin.
- 94-97 Images excerpted from *The Midwives Book*, pages 121, 120, 154, and 155, by Jane Sharp.
- 98 Ultrasound images from Heather Loftsgard.
- 100-1 Images excerpted from *Birth Chairs, Midwives, and Medicine*, pages 6 and 13, by Amanda Carson Banks.
- 102 Source unknown
- 103 Image excerpted from *Birth Chairs, Midwives, and Medicine*, page 2, by Amanda Carson Banks.
- 104 Image excerpted from *Getting Ready to be a Mother*, page 84, by Carolyn Conant Van Blarcom and revised by Hazel Corbin.
- 105 Image excerpted from *Birth Chairs, Midwives, and Medicine*, page 91, by Amanda Carson Banks.
- 106-7 Images excerpted from *The Woman in the Body*, pages 55 and 56, by Emily Martin.

End Notes

Preface

1. Barata, P., Hunjan, S., & Leggatt, J. "Ivory Tower? Feminist women's experiences of graduate school." In *Women's Studies International Forum*, 28 (2-3), 233. 2005.
2. Iris Young, a socialist-feminist philosopher, discusses the embodied experience of pregnancy, focusing on the mind/body dualism. She also references the work of two other women who have written about experienced pregnancy from a feminist perspective; Adrienne Rich and Julia Kristeva. See Iris Young, "Pregnant Embodiment: Subjectivity and Alienation." In *Throwing Like a Girl and Other Essays in Feminist Philosophy and Social Theory*. Bloomington and Indianapolis: Indiana University Press, 1990.

Preface:

A Thesis Defined

3. Bloom, Leslie Rebecca. *Under the Sign of Hope: Feminist Methodology and Narrative Interpretation*. Albany, New York: State University of New York Press, 1998. pg. 63.

SITE-ing the Work:

Walking Wombs

4. Pregnancy presents a complex issue for feminism. "On the one hand, it might well be argued that such pictures [referring to a nude image of a pregnant Demi Moore on a magazine cover] should be increasingly circulated to demystify the pregnant body and keep it legitimately within the public arena and thus empower it. On the other hand, through publication it enters a nexus of representations of

female bodies and could be seen to reinforce the conventional notion that *all* female bodies are fundamentally determined by their reproductive potential.”

Brook, Barbara. *Feminist Perspectives on the Body*. New York: Pearson Education Inc., 1999. pg 38.

5. Brook, Barbara. *Feminist Perspectives on the Body*. New York: Pearson Education Inc., 1999. pg 24.

SITE-ing the Work:

Constructing the ‘Event’

6. Sharp, Jane. *The Midwives Book Or the Whole Art of Midwifry Discovered*. Elaine Hobby, ed. New York: Oxford University Press, Inc., 1999. See also Banks, Amanda Carson. *Birth Chairs, Midwives, and Medicine*. Jackson: University Press of Mississippi, 1999.
7. Reference Introduction. Banks, Amanda Carson. *Birth Chairs, Midwives, and Medicine*. Jackson: University Press of Mississippi, 1999.
8. Reference Introduction. Sharp, Jane. *The Midwives Book Or the Whole Art of Midwifry Discovered*. Elaine Hobby, ed. New York: Oxford University Press, Inc., 1999.
9. Reference Introduction. Banks, Amanda Carson. *Birth Chairs, Midwives, and Medicine*. Jackson: University Press of Mississippi, 1999.
10. de Certeau specifically addresses gesture, ritual, tradition, memory and repetition, but not necessarily with relation to birthing. de Certeau, Michel. *The Practice of Everyday Life, Volume 2: Living and Cooking*. Minneapolis: University of Minnesota Press, unknown.
11. de Certeau, Michel. *The Practice of Everyday Life, Volume 2: Living and Cooking*. Minneapolis: University of Minnesota Press, unknown. pg 209.

12. Banks, Amanda Carson. *Birth Chairs, Midwives, and Medicine*. Jackson: University Press of Mississippi, 1999. pgs 5-9.
13. Banks, Amanda Carson. *Birth Chairs, Midwives, and Medicine*. Jackson: University Press of Mississippi, 1999. pg 20.
14. Reference Introduction. Sharp, Jane. *The Midwives Book Or the Whole Art of Midwifry Discovered*. Elaine Hobby, ed. New York: Oxford University Press, Inc., 1999.
15. Banks, Amanda Carson. *Birth Chairs, Midwives, and Medicine*. Jackson: University Press of Mississippi, 1999. pgs 26-27.
16. Reference Introduction. Sharp, Jane. *The Midwives Book Or the Whole Art of Midwifry Discovered*. Elaine Hobby, ed. New York: Oxford University Press, Inc., 1999.
17. Banks, Amanda Carson. *Birth Chairs, Midwives, and Medicine*. Jackson: University Press of Mississippi, 1999.
18. Banks, Amanda Carson. *Birth Chairs, Midwives, and Medicine*. Jackson: University Press of Mississippi, 1999.
19. de Certeau specifically addresses gesture, ritual, tradition, memory and repetition, but not necessarily with relation to birthing. de Certeau, Michel. *The Practice of Everyday Life, Volume 2: Living and Cooking*. Minneapolis: University of Minnesota Press, unknown.
20. Corbin, Hazel, Carolyn Conant Van Blarcom. *Getting Ready to be a Mother*. New York: The Macmillan Company, 1922, 1929, 1937, 1940, 1942. pg 5.
21. Corbin, Hazel, Carolyn Conant Van Blarcom. *Getting Ready to be a Mother*. New York: The Macmillan Company, 1922, 1929, 1937, 1940, 1942. pg 11.

22. Corbin, Hazel, Carolyn Conant Van Blarcom. *Getting Ready to be a Mother*. New York: The Macmillan Company, 1922, 1929, 1937, 1940, 1942. pg 21.
23. Corbin, Hazel, Carolyn Conant Van Blarcom. *Getting Ready to be a Mother*. New York: The Macmillan Company, 1922, 1929, 1937, 1940, 1942. pgs 43-44.
24. Corbin, Hazel, Carolyn Conant Van Blarcom. *Getting Ready to be a Mother*. New York: The Macmillan Company, 1922, 1929, 1937, 1940, 1942. pgs 68-69.
25. Dick-Read, Grantly. *Childbirth Without Fear: the principles and practice of natural childbirth*. New York: Harper & Row, Publishers, 1953. pgs 7-13.
26. Dick-Read, Grantly. *Childbirth Without Fear: the principles and practice of natural childbirth*. New York: Harper & Row, Publishers, 1953. pg 14.
27. Dick-Read, Grantly. *Childbirth Without Fear: the principles and practice of natural childbirth*. New York: Harper & Row, Publishers, 1953. pg 14.
28. de Certeau, Michel. *The Practice of Everyday Life, Volume 2: Living and Cooking*. Minneapolis: University of Minnesota Press, unknown. pg 211.
29. de Certeau, Michel. *The Practice of Everyday Life, Volume 2: Living and Cooking*. Minneapolis: University of Minnesota Press, unknown. pg 209.
30. de Certeau, Michel. *The Practice of Everyday Life, Volume 2: Living and Cooking*. Minneapolis: University of Minnesota Press, unknown. pg 212.
31. Ingelman-Sundberg, Axel. *A Child is Born*. New York: Delacorte Press, 1965. pgs 73-74.

32. Ingelman-Sundberg, Axel. *A Child is Born*. New York: Delacorte Press, 1965. pg 141.
33. Furuhjelm, Mirjam, Axel Ingelman-Sundberg, and Clae Wirsen. *A Child is Born: Completely Revised Edition*. New York: Delacorte Press, 1977. pg 107.
34. Furuhjelm, Mirjam, Axel Ingelman-Sundberg, and Clae Wirsen. *A Child is Born: Completely Revised Edition*. New York: Delacorte Press, 1977. pg 112.
35. Furuhjelm, Mirjam, Axel Ingelman-Sundberg, and Clae Wirsen. *A Child is Born: Completely Revised Edition*. New York: Delacorte Press, 1977. pg 139.
36. Furuhjelm, Mirjam, Axel Ingelman-Sundberg, and Clae Wirsen. *A Child is Born: Completely Revised Edition*. New York: Delacorte Press, 1977. pg 152.
37. Turkel, Kathleen Doherty. *Women, power, and childbirth: a case study of a free-standing birth center*. Westport, Connecticut: Bergin & Garvey, 1995. pgs 2, 26.
38. Turkel, Kathleen Doherty. *Women, power, and childbirth: a case study of a free-standing birth center*. Westport, Connecticut: Bergin & Garvey, 1995. pg 24.
39. Turkel, Kathleen Doherty. *Women, power, and childbirth: a case study of a free-standing birth center*. Westport, Connecticut: Bergin & Garvey, 1995. pg 29.
40. Turkel, Kathleen Doherty. *Women, power, and childbirth: a case study of a free-standing birth center*. Westport, Connecticut: Bergin & Garvey, 1995. pg 28.
An End and a Beginning
41. Chira, Susan. *A Mother's Place: Taking the Debate about Working Mothers Beyond Guilt and Blame*. New York: Harper Collins Publishers, 1998.

42. In her preface, Daphne de Marneffe poignantly describes the complicated emotions and social messages that are wrapped up in personal and professional identities. She confesses to “aching to be with her children.” de Marneffe, Daphne. *Maternal Desire: On Children, Love, and the Inner Life*. New York: Little, Brown and Company, 2004.
43. Few working mothers admit to the “joys” of work for fear of what that might imply about their role as mothers. These roles have become a lightning rod for debate. In *Not Guilty!* these roles are examined and the choices that women are forced to make are called into question, as is the constant message of guilt that is absorbed by working mothers. Betty Holcomb also points out Freud’s observation that people need both work and love – and women do not want to (and should not) have to choose. Holcomb, Betty. *Not Guilty!: the good news about working mothers*. New York: Scribner, 1998.
44. Here referring to the “third shift;” the time left over after the first shift that is work, and the second shift that is the responsibilities at home. The third shift is when we, as women, question ourselves, playing back the events and decisions of the day. Bolton, Michele Kremen. *The Third Shift: Managing Hard Choices in our Careers, Homes, and Lives as Women*. San Francisco: Jossey-Bass, 2000.
45. Holcomb, Betty. *Not Guilty!: the good news about working mothers*. New York: Scribner, 1998. pg 26.
46. An unattainable image of perfect mothers is incessantly thrust upon women by every media source. Typically, this image of perfection coincides with the mother who stays home with her children. Douglas, Susan J. and Meredith

W. Michaels. *The Mommy Myth: The Idealization of Motherhood and How it has Undermined Women*. New York: Free Press, 2004.

47. Certain specific ideas about what constitutes “work” in a defined occupation contradict and undermine the idea of a flexible work schedule that has often proven to be a successful way for mothers to achieve a more fulfilling and successful balance between life and work. Garey, Anita Ilt. *Weaving Work and Motherhood*. Philadelphia: Temple University Press, 1999.
- An End and a Beginning:*
AIA 2005 Demographic Diversity Audit Report
48. The American Institute of Architects. *Summary and Review 2005 Demographic Diversity Audit Report*. Washington D.C.: December 2005.
- An End and a Beginning:*
Australian Research – Going Places
49. Whitman, Paula. *Going Places: The Career Progression of Women in the Architectural Profession*. Australia: 2005.
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RIBA Report – Why do Women Leave Architecture?
50. de Graft, Ann, Sandra Manley, and Clara Greed. *Why do women leave architecture?* England: RIBA and the University of the West of England, 2003.
- The Reasons: Because We Said So, That’s Why!*
51. “NCARB’s 2007 Survey of Registered Architects.”
ncarb.org. 7 December 2007
<http://www.ncarb.org/NewsClips/may0507_arch_survey.html>
Who Should I Be Like?

52. This quotation is taken from research that is specifically geared towards the challenges facing female doctoral students and recent graduates, however, I believe the psychological needs are virtually the same for women seeking role models in architecture. A correlation can also be drawn between the internship process in the profession of architecture and graduate work, both being forms of continuing education. Again, much of the same psychology would apply. Moyer, A., Salovey, P., and Casey-Cannon, S. "Challenges Facing Female Doctoral Students and Recent Graduates." In *Psychology of Women Quarterly*, 23, 607-630. 1999.
53. Quotation referencing mentors is with regard to gender and doctoral students, similar to the correlation noted above. Kurtz-Costes, B., Helmke, L.A., & Ulku-Steiner, B. "Gender and doctoral studies: the perceptions of Ph.D. students in an American university." In *Gender and Education*, 18(2), 137-155. 2006.
54. As seen through conditions at Iowa State University. See Bloom, Leslie R., Meg Brinkman, Erica Carnes, Erin Chapman, Janet Fitzpatrick, Sarah Hart, Danielle Hermann, Zayira Jordan, Anna King, Jamie Scott, Alissa Stoehr, Keila Tyner, Amanda Van Hooser, Jessica Santillan, Holly Williams. *Female Doctoral Students and Work-Life Balance*. Ames, Iowa: Iowa State University, Office of the Provost, July 2006.
55. Bloom, Leslie R., Meg Brinkman, Erica Carnes, Erin Chapman, Janet Fitzpatrick, Sarah Hart, Danielle Hermann, Zayira Jordan, Anna King, Jamie Scott, Alissa Stoehr, Keila Tyner, Amanda Van Hooser, Jessica Santillan, Holly

Williams. *Female Doctoral Students and Work-Life Balance*. Ames, Iowa: Iowa State University, Office of the Provost, July 2006.

The First Trimester: "Honey! Guess What?"

Standards: Definitions

56. Diffrient, Niels, Alvin R. Tilley, Joan C. Bardagjy, & Henry Dreyfuss Associates. *Humanscale 1/2/3*. Cambridge, Massachusetts: The MIT Press, 1974. And Tilley, Alvin, & Henry Dreyfuss Associates. *The Measure of Man and Woman: Human Factors in Design*. New York: Whitney Library of Design, 1993.
57. Agrest, Diana. "Architecture from Without: Body, Logic and Sex." In *Assemblage 7*, pgs 29, 33. 1988.
58. Depending on which edition of the original *Graphic Standards* is referenced, or which other versions of standards and their respective revisions might be applicable, one of the conditions noted will apply to how the female form is excluded or objectified. See Hosey, Lance. "Hidden Lines: Gender, Race, and the Body in *Graphic Standards*." In *Journal of Architectural Education*, 101-112. Cambridge, Massachusetts: The MIT Press, November 2001.
- The Second Trimester: For All of the World to See*
BIG WOMEN: Abridging a Graphic Standard
59. Diffrient, Niels, Alvin R. Tilley, Joan C. Bardagjy, & Henry Dreyfuss Associates. *Humanscale 1/2/3*. Cambridge, Massachusetts: The MIT Press, 1974.
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