



Part 4 Theoretical Discourse: Extending the Skin(s)

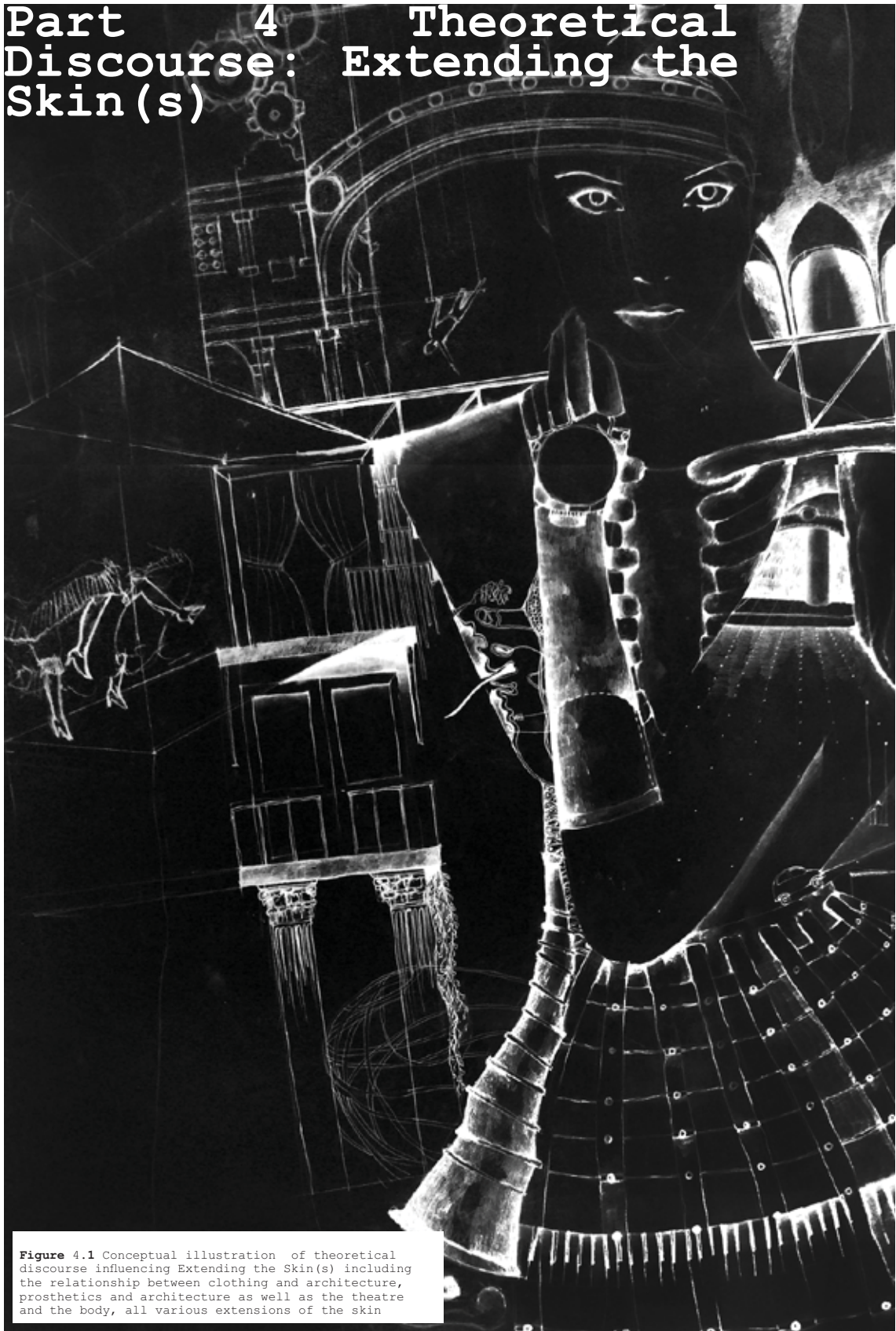


Figure 4.1 Conceptual illustration of theoretical discourse influencing Extending the Skin(s) including the relationship between clothing and architecture, prosthetics and architecture as well as the theatre and the body, all various extensions of the skin

4.1 Architecture and clothing as an extension of the skin

A feature of all human societies the wearing of clothing, in one form or another. Clothing is a category encompassing a wide variety of materials that cover the body. The primary purpose of clothing is functional; it is used as protection from the elements, both natural and artificial. Clothes enhance safety during activity by providing a barrier between the skin and the environment. Outside of their purely functional purpose, clothes often play an important social and cultural role. Most societies develop norms about modesty, religious practices, behavioral appropriateness, social status, and even political affiliations in which clothes play an important role.

Throughout history clothes have been made of materials ranging from natural grasses and furs to elaborate and exotic synthetic compounds. In addition to clothing, the body is also decorated or manipulated through various means such as:

- Corsetry
- Tattooing
- Scarification
- Foot binding
- Piercing
- Plastic Surgery

Some of these methods are however not in practice today.

As with clothing, the function of architecture has grown from simply supplying shelter which protects us from the elements, to a fashionable addition to a city. Architectural space, the manipulation thereof and how in turn, spaces can manipulate the body are now an integral part of the realm of architecture. The disciplines of clothing design and architecture culminate in the haptic realm. The clothes that we wear on our body, that we feel and move in, that we care for and become attached to, remind us of the possible intimacy of architecture. Whether we are indoors or out, architecture has the ability to imbue certain feelings and sensations which encourage us to move in certain ways and not in others (Franck, 2000: 95).

In 1898 Adolph Loos published 'The Principle of Dressing', acknowledging the primacy of dress as the basic shelter. It encourages architects to take inspiration from garments, textiles and materials. According to Quinn (2003: 2), Loos presented this as a means of understanding the importance and aesthetics of dwelling. Currently, a body of contemporary architects are placing more focus on surface and skin, compressing the illusions of depth of an interior space onto the surface or skin of the building and vice versa. Exterior skin is built up of layers of veiling with figurative imagery, invoking what might lie behind the surface of the skin. From the various disciplines of clothing design and architecture the following questions arise:

- Is clothing an extension of the skin?
- Is architecture an extension of the skin?
- How can a body of architecture be manipulated?

Loos described architecture and clothing as an extension of the body that reflects various layers of skin. If architecture is a skin, and we consider our biological skin to be first, then clothing represents the second skin and architecture the third. Architectural spaces and clothing as extensions of the skin become an enabling prosthetic for the human body.



Figure 4.2
extending the skin



Figure 4.3



Figure 4.4

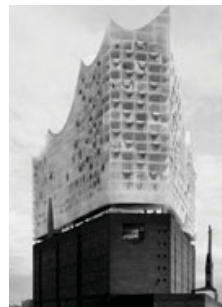


Figure 4.5

Figure 4.2-4.6
Illustrates the relationship between skin and prosthetics. From our own skin and bones, a protective device, clothing as functional object as well as an enabling prosthetic as an addition to a building



Figure 4.6



Figure 4.7



Figure 4.8



Figure 4.9



Figure 4.10



Figure 4.11



Figure 4.12



Figure 4.13



Figure 4.14

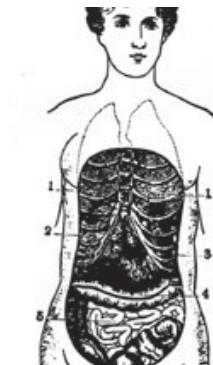


Figure 4.15

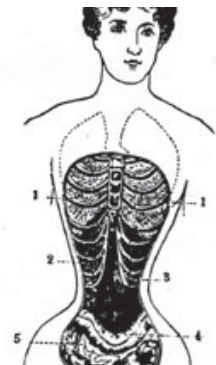


Figure 4.16



Figure 4.17- 4.27 illustrate the various layers of our body and architecture, beginning from the skeleton, bones and structure, through to skin both biological and architectural. A final layer is added to ourselves and often to existing buildings, both clothing the body and allowing it to adapt to a different condition. All layers are vital to functioning of both body and building, and some unable to be manipulated.



Figure 4.17



Figure 4.18



Figure 4.19



Figure 4.22

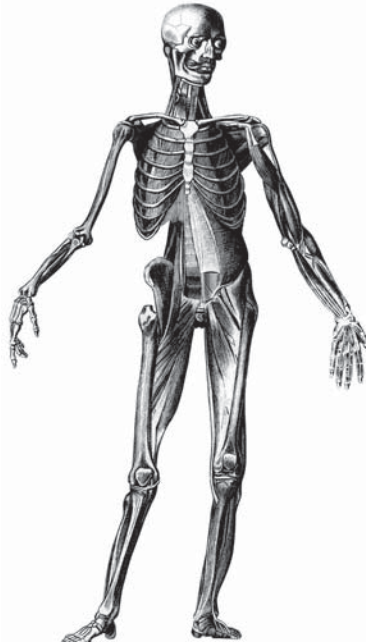


Figure 4.23

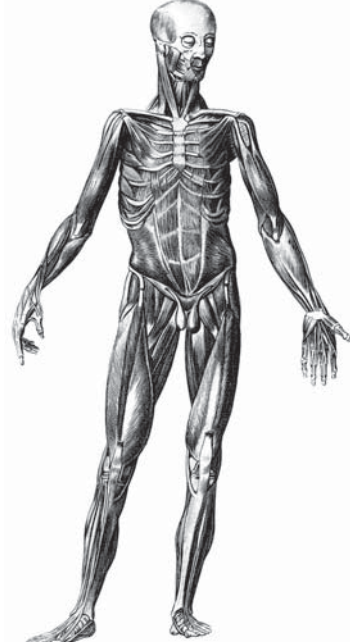


Figure 4.24

"It all comes down to a question of skin. And bones. This question of skin and bones is one of hiding and seeking. Is there anything left to hide? Is there any longer a place to hide? Can anyone continue to hide? Does skin conceal anything or is everything nothing but skin?" (Taylor, 1997: 11).

In order to understand this notion, two forms of skin need are investigated:

Human skin

The human skin covers the entire body and is continuous at the orifices. The skin contains the peripheral terminations of many of the sensory nerves. It is elastic and resistant, acting as a layer of protection for the deeper tissues. The superficial layers of the skin are modified for appendages in the shape of hair and nails. The surface is smooth to the touch and is perforated by hair follicles and gland ducts. The primary function of the skin is to regulate the body's temperature and act as a form of protection (Cunningham, 1920: 856).

extending the skin



Figure 4.20



Figure 4.21

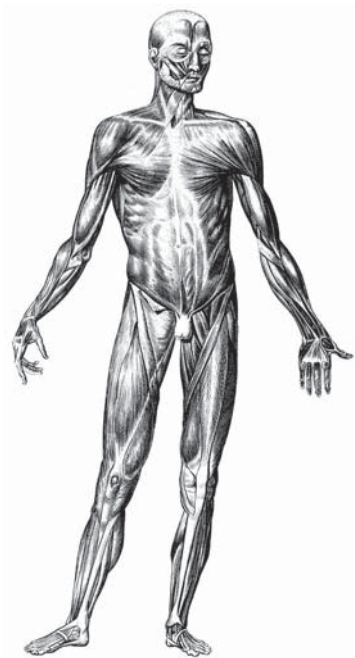


Figure 4.25



Figure 4.26



Figure 4.27

Architectural skin

Generally skin refers to the outer layer of a building. This is the external cloaking of all the layers within the building envelope. Functioning as a separate membrane, the external skin is the interface between the inside and the outside. The interior skin of a building is used to prevent visual and physical contact with the crudity of the hitherto internally exposed structure (Porter, 2004: 71).

Clothing and architecture both remain constructed extended skins, limited initially to two dimensional fabrication. Unlike the skin's continuous curvature upon the body, the extended skins are initially made from two dimensional surfaces that can be sewn, pleated, draped and suspended to produce three dimensional forms. Skin wrapping around the volumes of the body is sometimes taut, clinging tightly to the musculature beneath, and sometimes slack, draping loosely over form.



Figure 4.28 Athean woman, garment similar to that of caryatid.

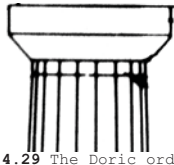


Figure 4.29 The Doric order



Figure 4.30 The Ionic order



Figure 4.31 The Corinthian order



Figure 4.32 Woman dressed in Byzantine clothing. Dress similar to Brunaleschi dome in structure and form. extending the skin

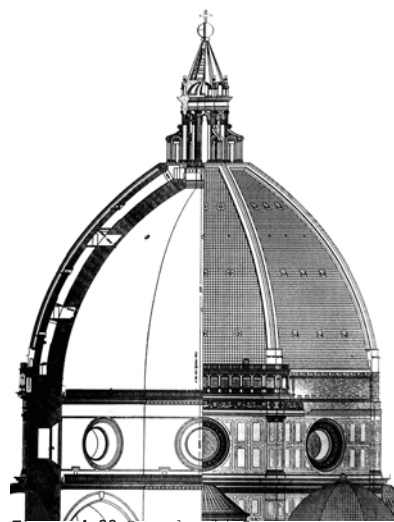


Figure 4.33 Brunaleschi Dome



Figure 4.34 Woman headdress resembling Tudor Arch

"Clothing often celebrates excess material, finding beauty in wrinkles and creases. In architecture, flat materials are folded or warped to create structures and objects that are all surface. Skins are woven through space, from inside to outside, ceiling to floor" (Lupton, 2002: 208).

Contemporary architecture brings together the complex worlds of clothing design, interior design and spatial planning, becoming an extension of the urban framework and a hybrid of all four (Quinn, 2003: 224). The integration of these different design disciplines will allow for a host of new applications in design.

The reference to architecture as clothing may date back to the time of Vitruvius, who was the first Architectural theorist. Vitruvius instils the idea that architecture should be a symbol of both power and communal values, an element of social standing (Figure 4.28 and 4.31).

"These aspects are also equal to the clothing industry, which too, is often a portrayal of societal hierarchies. Historic costumes reveal the axis of clothing and architecture in a period dress, in many garments that were ornamented and constructed according to architectonic references" (Quinn, 2003: 2).

The tectonic influence of architecture has been extended to the realm of clothing for centuries in the form of corsets, hoop skirts and hats. The ladies of Henry VIII's court wore headdresses in the form of a Tudor arch (Figure 2.34), whilst male courtiers wore expressions of Gothic architecture in their hats, capes and padded court attire. Paxton's Crystal Palace, built for the Great Exhibition of 1851 influenced woman's dresses of the period. The designs were voluminous devices that dominated the fashion industry for the subsequent two decades.



"Wrap, suspension, dynamic, smooth, shelter, tectonic, volume, drape, pleating, geometry, cantilever, printing, fold, fluid, layered, material, border, sleeve, exposed, translucent, texture, textile, ornament, fluted, fastened, patch, stiff, cosmetic, worn, reveal, covered ..."
(Miles, 2008)

{Figure 4.35 to 4.38}

The influence of architecture on clothing can be seen in the pliable metals, membrane structures, lightweight glasses and flexible plastics usually standard in building construction, becoming part of garment construction. At the same time, architects and interior designers are borrowing the techniques of pleating, draping and pattern construction from traditional garment construction, to design buildings that are interactive, inflatable, and even portable (Dexigner, 2006).

Fashion designers, akin to architects, interpret clothing according to spatial limitations. Architectural rules have developed over the centuries, the earliest such set of rules being those published in Vitruvius' *Ten Books of Architecture*. Clothing and architecture revolve around existing form and therefore require an understanding of both mass and space. Dwellings and garments rely on the human form to signify their dimensions more than they do other structures, but typically existing precedents and paradigms in design, determine their result (Quinn, 2003: 205). Clothing throughout history has had certain transience about it; historical models of clothing are mostly portrayed in the arts, though few garments have actually survived. This is unlike architecture, which has many historical precedents, giving it certain immortality.

The questions about skin are profound, not superficial. Where are its boundaries? What is its status? Is it surface, depth or both? Skin is the space of flux, of oscillating conditions. Skin is a surface of maximum interface and intensity (Imperial, 2002: 55). These extended skins that link our bodies to our surroundings, whether they be clothing, a table or a chair, can be described as a form of prosthesis that enables the human form.

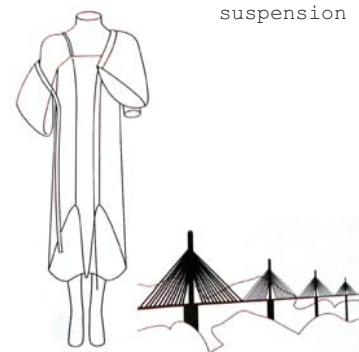


Figure 4.35

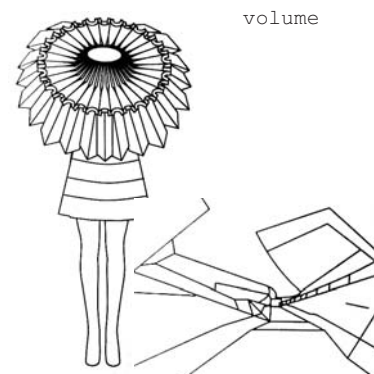


Figure 4.36

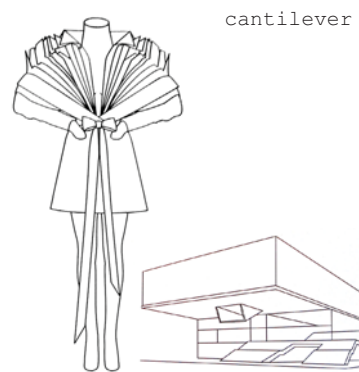


Figure 4.37

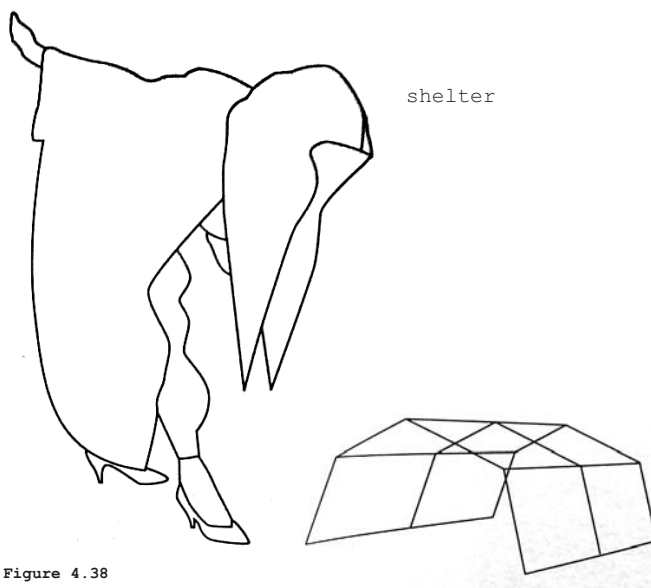


Figure 4.38

4.2 Architecture as Prosthesis

The term prosthesis was coined in 1553 in a grammatical sense as the addition of a syllable to the beginning of a word. In the 1700's it was used in the medical realm as the 'replacement of a missing part of the body with an artificial one'. In its more contemporary definition, a prosthetic is something that enables the body (**Figure 4.41**), whether it is clothing or architectural space (Smith & Morra, 2006: 2).

The borders between fashion and architecture may blur so much that they can no longer exist without one another; each having a prosthetic dependency on the other. Like a building, clothing may become an architectural entity in its own right, but will remain reliant on other forms of skin. Designers such as Lucy Orta create habitable garments in an attempt to address societal issues, such as homelessness. Current society sees the building as a protective space, whereby various forms of prosthetic skin may develop into a protective node such as that imagined by Virginia Woolf. "Woolf speculates whether someday people might carry with them portable homes, like "snail shells" (**Figure 4.42**). She speculated that they could "flit out houses like fans: and go on" (Hodge, 2006: 47).



Figure 4.41

This nomadic type of existence, where your shelter travels with you, can be likened to travelling circuses. In the 19th century, European and American Circuses would function according to the seasons. They would travel around the country during the summer months, performing in canvas tents, and establish themselves in circus buildings during the winter. The contemporary circus tent is erected in a time span of approximately three hours, establishing a platform for performance in almost any location.

The example of the circus architecture as a flexible system is akin to the practical nature of architecture and other designed objects which the natural human form cannot actualize, thus transfiguring the body becomes the quest. The first instance where the human body was transfigured was through the development of the dwelling. Human beings cannot face the elements without the necessary protection. Just as a prosthetic limb enables a disabled person, architectural space acts as a prosthesis that enables human beings. '...the body has the capacity for prosthetic extension, a capacity to link to objects in ways never conceived before, to incorporate objects into its daily operations, to become social and historical in the most fundamental sense' (Grosz, 2003: 97).

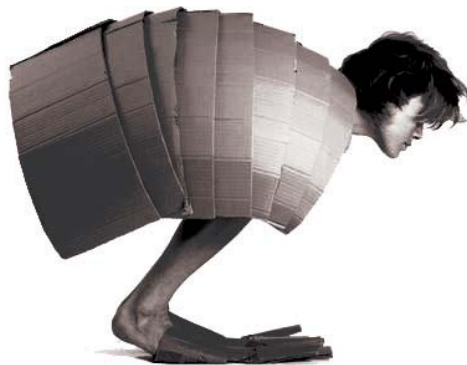


Figure 4.42 Architecture as clothing as shelter for the human form, extending the skin

Hussein Chalayan expresses his fascination with architecture and spatial dynamics in his garments, creating garments with completely new forms, shapes and materials. These garments, not unlike a building, define their own space but also transfigure the body. Clothing reflects many contemporary architectural construction principles. Clothing has connotations with the prosthetic realm. A dress can be unclipped from the body and transformed into a fully utilizable table (Figure 4.41). Soft coverings for a chair may be unzipped and adorned as a garment. Chalayan's vision is to integrate clothing with their surroundings, thereby rendering a diverse understanding of the different environments and factors that create these garments (Quinn, 2003: 122).

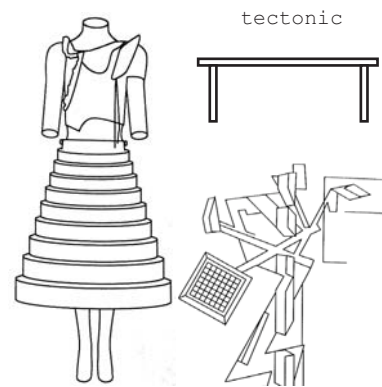


Figure 4.43

Chalayan is inspired not only by architectural proportions but also by the architectural principles of shelter, protection and social structuring, while at the same time maintaining the mobility and flexibility that architecture lacks. According to Chalayan, clothes are like small parts of an interior, the interiors form part of architecture, which is then a part of the urban environment (Quinn, 2003: 122). It is within this urban environment that architecture is notably beginning to draw inspiration from the clothing industry; researching textiles, their properties, and how they can be incorporated into a building. It is within this urban environment that society is coming to terms with the realisation that man lives in a prosthetic realm with prosthetic objects that enable us (Figure 4.44).

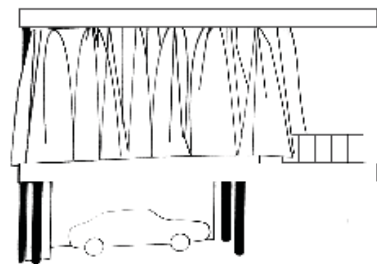


Figure 4.44

Shigeru Ban is one of the prolific architects who is exploring the integration of textiles into his architecture on a residential scale. Just as a garment is a prosthetic addition to a body giving it a dynamic sense of life as a person moves, architecture is beginning to achieve the same through the use of textiles. Walls are replaced by fabric, allowing one to draw them open as one would curtains, increasing the architecture's permeability and translucency, and giving it a sense of life through continual movement (Figure 4.45). "By drawing back a wall, another is exposed, liberating a void that was previously disguised. By doing this the visual perception of architecture is inverted, mediating a new experience for those that inhabit it" (Quinn, 2003: 80).



Figure 4.45



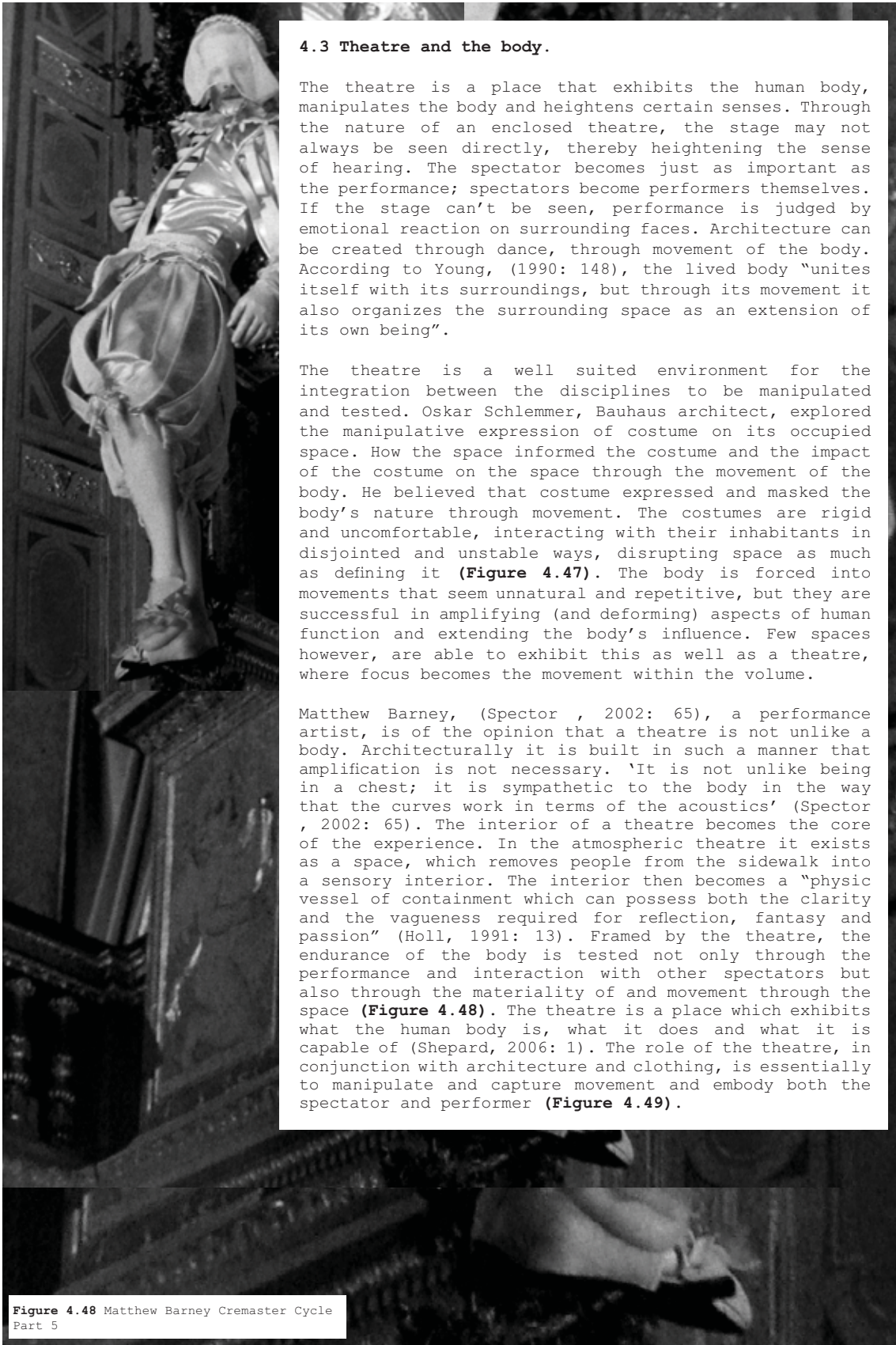
Figure 4.46

A garment can be described as a piece of architecture itself, occupying and affecting space within the built environment (Figure 4.46). As architecture delves into the prosthetic realm, the layering of 'skin' becomes integral to how environments are experienced and essentially worn. These skins need to be understood and explored, and a calling back to the various structures of skin, as well as an understanding of the human form. Depicted only as a form of scale in architectural drawings, the human form is misunderstood and perhaps misrepresented within the prosthetic realm. These are matters of aesthetics, ergonomics and sentience' (Smith & Morra, 2006: 49. As a place that often defies reality, the theatre is testing-ground for the prosthetization of the body, testing its limits within a space. Bodies can fly, bodies can vanish and bodies can distort, within a theatre:

"There are appearances
 Only appearances
 How to believe
 How to call
 Them
 Anything?"
 (Auster, 1985: 48)



Figure 4.47 Slat Dance by Oskar Schlemmer, 1927. Slats were strapped to the performer to demarcate the space occupied by the dancer's body as well as emphasizing perspective to the viewers



4.3 Theatre and the body.

The theatre is a place that exhibits the human body, manipulates the body and heightens certain senses. Through the nature of an enclosed theatre, the stage may not always be seen directly, thereby heightening the sense of hearing. The spectator becomes just as important as the performance; spectators become performers themselves. If the stage can't be seen, performance is judged by emotional reaction on surrounding faces. Architecture can be created through dance, through movement of the body. According to Young, (1990: 148), the lived body "unites itself with its surroundings, but through its movement it also organizes the surrounding space as an extension of its own being".

The theatre is a well suited environment for the integration between the disciplines to be manipulated and tested. Oskar Schlemmer, Bauhaus architect, explored the manipulative expression of costume on its occupied space. How the space informed the costume and the impact of the costume on the space through the movement of the body. He believed that costume expressed and masked the body's nature through movement. The costumes are rigid and uncomfortable, interacting with their inhabitants in disjointed and unstable ways, disrupting space as much as defining it (Figure 4.47). The body is forced into movements that seem unnatural and repetitive, but they are successful in amplifying (and deforming) aspects of human function and extending the body's influence. Few spaces however, are able to exhibit this as well as a theatre, where focus becomes the movement within the volume.

Matthew Barney, (Spector , 2002: 65), a performance artist, is of the opinion that a theatre is not unlike a body. Architecturally it is built in such a manner that amplification is not necessary. 'It is not unlike being in a chest; it is sympathetic to the body in the way that the curves work in terms of the acoustics' (Spector , 2002: 65). The interior of a theatre becomes the core of the experience. In the atmospheric theatre it exists as a space, which removes people from the sidewalk into a sensory interior. The interior then becomes a "physic vessel of containment which can possess both the clarity and the vagueness required for reflection, fantasy and passion" (Holl, 1991: 13). Framed by the theatre, the endurance of the body is tested not only through the performance and interaction with other spectators but also through the materiality of and movement through the space (Figure 4.48). The theatre is a place which exhibits what the human body is, what it does and what it is capable of (Shepard, 2006: 1). The role of the theatre, in conjunction with architecture and clothing, is essentially to manipulate and capture movement and embody both the spectator and performer (Figure 4.49).

Figure 4.48 Matthew Barney Cremaster Cycle Part 5

extending the skin



The Architectural body

Human beings are born into architecture and then conditioned by it

The body as architecturally motivated

Replaces mind - "what's on your mind?" can be more accurately posed as "what's your architectural body?"

Dispersed but reunifiable consciousness or extended, far-flung, and reworkable bodiness

The body inextricably linked with architectural surrounds that are activated by it and activate it

Multiply initiated bodily articulation

Body Proper + Architectural Surround = Architectural Body

(Virilio, 1998: 33)

Within the haptic realm of a theatrical space, one can transform the unfamiliar into the familiar by exploring the various skins in design, ranging from our own to the architectural. This allows users to question the space, their movement through it, and the sensations created by their body interacting with the architectural skins through the manipulation of surface, temperature, tactility and confinement. According to Franck (2000: 94) approaching architecture as a manipulation of our own skin can reintroduce embodiment and lived, sensory experience into architectural discourse.

Figure 4.49 Matthew Barney Cremaster Cycle Part 2