

SKIN + BONES

Parallel Practices in Fashion and Architecture

Exhibition guidebook

24 April – 10 August 2008

Embankment Galleries

at Somerset House

www.somersethouse.org.uk

Foreword

In 2000 Somerset House Trust began a long-term project to open its historic building to the public and create a cultural programme unrivalled in London. The opening of Skin + Bones: Parallel Practices in Fashion and Architecture marks the next major step in this project: the launch of the Embankment Galleries. These dramatic and imposing spaces will host an ongoing series of distinctive exhibitions covering a broad spectrum of the arts; including architecture, art, design, fashion, and photography.

The programme will focus on contemporary practice exploring how art forms cross, merge and divide, constantly challenging our understanding of them. The exhibitions will be ideas-based, agenda-setting and have a strong international slant, bringing groundbreaking work direct from wherever it is being created.

This spectacular exhibition, organised by The Museum of Contemporary Art, Los Angeles, and curated by Brooke Hodge its Curator of Architecture & Design, opened to great critical acclaim in Los Angeles in November 2006, before travelling to Tokyo in June 2007. Somerset House is proud to be the final venue on the exhibition's international tour and to have contributed additional London-focused exhibits curated by Claire Catterall and a stunning new installation designed by Eva Jiricna.

This is the beginning of a bold new approach to exhibition making which aims to bring the best of contemporary artistic production to the heart of the city.

Gwyn Miles,
Director

Skin+Bones:
Parallel Practices in Fashion and Architecture
is organised by The Museum of Contemporary Art, Los Angeles (MOCA)

SKIN + BONES

Parallel Practices in Fashion and Architecture

Both fashion and architecture express ideas of personal, social and cultural identity, reflecting the concerns of the user and the ambition of the age. Their relationship is a symbiotic one, and throughout history clothing and buildings have echoed each other in form and appearance. This seems only natural as they not only share the primary function of providing shelter and protection for the body, but also because they both create space and volume out of flat, two-dimensional materials. While they have much in common, they are also intrinsically different. Both address the human scale, but the proportions, sizes and shapes differ enormously. And while fashion is, by its very nature, ephemeral or 'of the moment', architecture traditionally has a more solid, monumental and permanent presence.

In recent years, the connections between fashion and architecture have become even more intriguing. As advances in materials technology and computer software have pushed the frontiers of each discipline, buildings have become more fluid and garments more architectonic. Architects are adopting strategies more usually used in dressmaking, such as printing, pleating, folding, draping and weaving, while fashion designers are looking to architecture for ways to build or engineer garments which present new and provocative ideas about volume and structure, and in many cases also draw on the intellectual principles and concepts inherent in architecture.

This exhibition presents the cutting edge of fashion and architecture, and suggests a cross-contamination which has allowed each discipline to create new and enticing ways for the body to occupy both public arena and private space. In just the last quarter century the interweaving of fashion and architecture has allowed us to find new meaning and possibilities in both creative practices. We can only imagine the promise that lies in those threads yet to be connected.

FERTILE GROUND: THE 1980S

This exhibition takes the early 1980s as its starting point. This was a time marked by significant cultural shifts in both architecture and fashion.

The 1980s was a period of great cultural diversity, energy and enquiry. In London, especially, as well as in other major cities around the world such as New York, Paris, and Tokyo, a spirit of bravura individualism, and a questioning, non-conformist and often D-I-Y ethic was set against a back drop of urban blight and post-punk nihilism. Boundaries between disciplines seemed to merge as creative cultures came together in a dialogue that promoted a rich exchange of ideas and possibilities. This period provided fertile ground for a generation of architects and designers in their formative years.

The Architectural Association of the 1970s was the perfect place for ambitious, independently minded would-be architects to flourish. Under director Alvin Boyarsky, it became the most fertile place for the architectural imagination, home to a precocious generation of students and teachers who are now household names, such as Rem Koolhaas, Daniel Libeskind, Will Alsop and Bernard Tschumi.

Nato—Narrative Architecture Today—was the name of an influential group of former students at The

Architectural Association in London, and their tutor, Nigel Coates. Formed in 1983 Nato unabashedly took inspiration from the cultural context of the times—in art, pop music, fanzines, street fashion, nightclubs and the magazine culture of *The Face* and *i-D*. Although their output was limited to magazines and exhibitions, and relatively brief (they last exhibited together at Boston's Institute of Contemporary Art in 1987), their ideas about architecture tapping into the energy, experience, rhythms and clashes of urban life echoed the creative culture of the times, where young practitioners from a broad range of creative fields had begun to approach their work in just such a responsive, immediate and collaborative manner.

In the 1980s the way architecture and fashion was presented in the media changed radically. No longer the reserve of specialist, and rather staid, magazines, architecture and design discourse was integrated into a broader view of visual culture and style. In 1982 *Blueprint* was launched in London. It was among the first magazines to cross the boundaries between fashion and architecture and its broad remit included architecture and interiors, fashion, furniture, and industrial design. The magazine had a slightly irreverent, occasionally satirical edge in a deliberate attempt to make 'serious issues' more accessible.



Taking its cue from American magazines such as *Skyline* and *Metropolis*, it was designed in a tabloid newspaper format with relatively low production values and large photographs. The first issue included an article on Eva Jiricna featuring her designs for the Joseph shop on Sloane Street, with another by Peter York on the meaning of clothing. Later issues included articles on Rei Kawakubo and Yohji Yamamoto, among many other fashion designers.

Japanese fashion designers Rei Kawakubo and Yohji Yamamoto first presented their work during the Paris ready-to-wear shows in April 1981. The oversized, often asymmetrical black clothing they showed featured intentional holes, tatters and unfinished edges that stood in stark contrast to the elegantly decorative, crisply tailored, and formfitting garments being shown by the majority of designers. For the first time, fashion challenged accepted notions of beauty and femininity and introduced conceptual ideas about the body. Although Punk fashions of the late 1970s had already seized the initiative in deconstructing clothing, and introduced a more politicised tendency, the Paris shows of Kawakubo and Yamamoto formalised this element within the lexicon of fashion.

In 1982 the architect Bernard Tschumi won the international competition to design Parc de la Villette in Paris. His project, and the resulting collaboration between architect Peter Eisenman and philosopher Jacques Derrida, introduced ideas of 'Deconstruction' in architecture. In 1988 the seminal exhibition "Deconstructivist Architecture" opened at the Museum of Modern Art, New York (MoMA).

Also in 1982, the museum at the Massachusetts Institute of Technology (MIT) mounted an exhibition called "Intimate Architecture: Contemporary Clothing Design". Curated by Susan Sidlauskas, it examined the formal aspects of the work of eight fashion designers, including Yeohlee Teng, from an architectural point of view. This influential exhibition was the first public presentation of fashion that analysed the architectural aspects of contemporary clothing design and made formal connections between the two practices.

NEW THRESHOLDS: THE 1990S AND BEYOND

The rise to prominence in the 1980s of designers such as Comme des Garçons, Yohji Yamamoto and Miyake Issey challenged accepted boundaries and encouraged a more radical approach to fashion design, directly influencing a new generation of designers in the 1990s such as Martin Margiela, Hussein Chalayan, and Viktor & Rolf.

The 1990s also saw the introduction of sophisticated computer-aided design programmes, which enabled architects to create increasingly complex surfaces and unusual forms. For the generation of independently minded architects who studied or taught during the 1980s, what had previously only been possible on paper finally had the potential to become reality.



Maison Martin Margiela

Tailor's Dummy halter top
Spring/Summer 1997
Linen and cotton

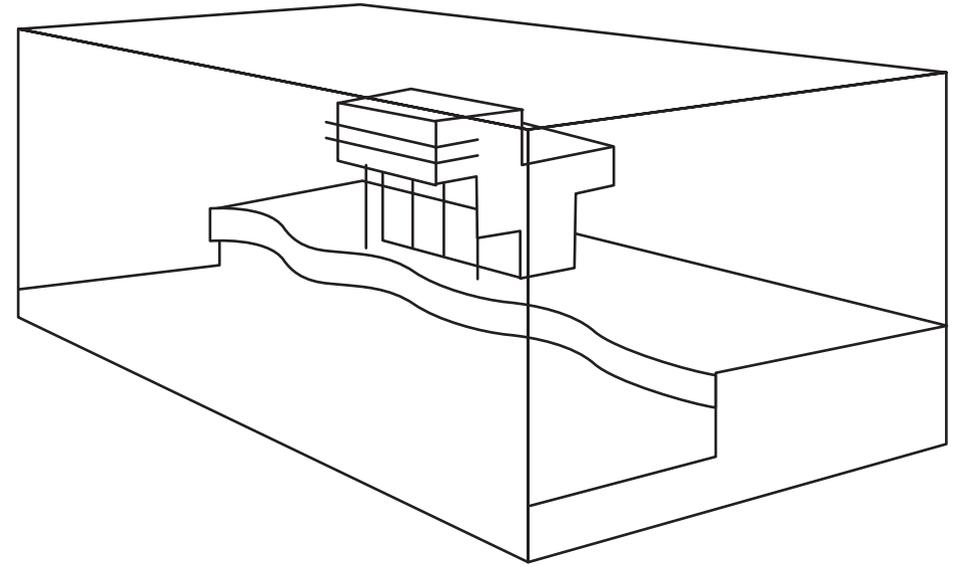
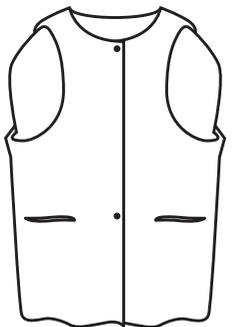
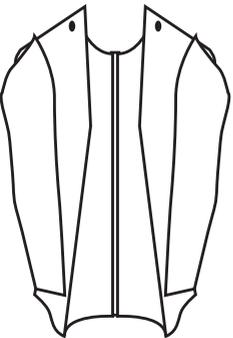
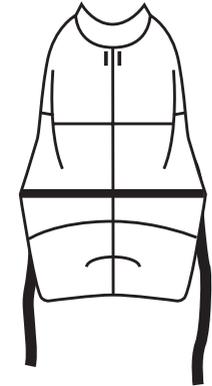
Tailor's Dummy jacket
Autumn/Winter 1997-1998
Linen and cotton

Pattern jacket
Autumn/Winter 1998-1999
Leather

Flat jacket
Autumn/Winter 1998-1999
Wool
Courtesy Maison Martin Margiela

Martin Margiela has, since the foundation of Maison Martin Margiela in 1988, produced clothing that calls to question the system of fashion both conceptually and commercially. His designs all bear a discrete white label which is sewn into the garment with four white pick stitches, which are also visible from the back of the garment. These four stitches are the signature of a Margiela garment, but they also signify Margiela's design practice, formed from his interest in making the details of construction visible. It is a form of fashion design that draws from the principles of deconstruction established in literary criticism and architecture, and it is recognised in the work of many Belgian and Japanese fashion designers.

In 1997 Margiela presented a collection with a coarse linen bodice that was cut to resemble the form of a dressmaker's dummy. It parades the dressed body not as a real body, but as a representation of one; and it returns us to the block that the garment is produced on, and to the practice of making. By making us think about the production of the garment through its visual appearance, Margiela returns us to what we might not normally consider, and in doing so produces a discordant poetry about the nature of clothing.



Bernard Tschumi

Project for a Garden, Parc de la Villette,
Paris: Grid of follies superposed on the Parc
de La Villette
1983

Electrostatic print with collaged squares of red-painted paper, adhered at 4 corners to paper, with graphite
Collection Centre Canadien d'Architecture/
Canadian Centre for Architecture, Montréal
DR1986:0076

Folie Sous-Marin, 1992
Parc de la Villette, Paris,
1983-1992

Architectural model: Painted metal, acrylic
Collection FRAC Centre, Orléans, France

Folie P7, 1991
Parc de la Villette, Paris
1983-1992

Architectural model: Painted metal, acrylic
Collection FRAC Centre, Orléans, France

In 1982, Bernard Tschumi won an international competition to design Parc de la Villette in Paris (completed 1998), an urban-renewal project for a vast site in the northeast corner of the city formerly occupied by slaughterhouses. Diverging from traditional notions of the park as an open green space, Tschumi scattered thirty-five freestanding pavilions (twenty-six were eventually built), or "follies," throughout the site and linked them by networks of gardens and walkways. Described as an "Urban Park for the 21st Century," the master plan is an architectural collage in which three ordering systems are superimposed: the discrete positions of the follies, the lines of the paths, and the configuration of the gardens. Tschumi aimed to create disjunction through layering so that the elements of the park mutually distort and clash; he encouraged the physical architecture and non-architecture to collide rather than synthesize into a single coherent outcome. Similarly disjunctive, each folly began as a ten-meter-square cube of red steel, which the architect then fragmented so that its initial form is often indiscernible and no two are alike. Tschumi invited French philosopher Jacques Derrida and American architect Peter Eisenman to collaborate on one of the smaller gardens within the park, bringing Derrida and in particular his work on deconstruction to the attention of a much larger audience.

Zaha Hadid Architects

Confetti, from The Peak, Hong Kong
1982-1983

Acrylic on canvas

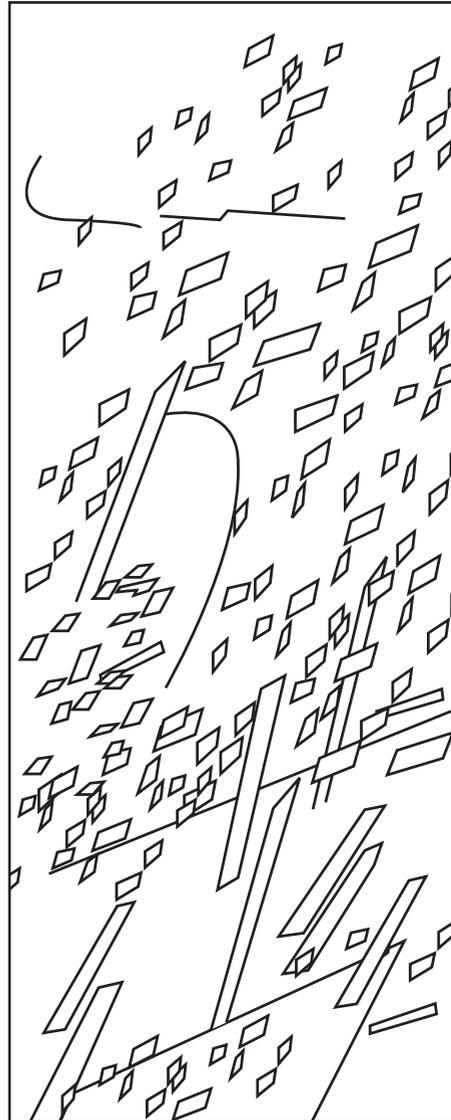
Metal model

Steel

Courtesy of Zaha Hadid

Zaha Hadid's major breakthrough came in 1983 when her competition entry to design a private club to be located in the hills of Kowloon, overlooking Hong Kong, took first place. Hadid proposed a transformation of the site itself by excavating the hills and using the excavated rock to build artificial cliffs. Into this new topography, she interjected cantilevered beams, shard-like fragments, and other elements that seemed to splinter the structure into its myriad constituent parts.

The project was chosen as Hadid's contribution to the exhibition "Deconstructivist Architecture" at the Museum of Modern Art, New York (MoMA), in 1988, which also included the work of Coop Himmelb(l)au, Peter Eisenman, Frank Gehry, Rem Koolhaas, Daniel Libeskind and Bernard Tschumi. The exhibition was a major event in the architecture world. Not since the museum's seminal 1932 "Modern Architecture" exhibition introduced the term "International Style" into the design lexicon had MoMA signalled a new stylistic tendency by grouping current architectural projects under a single title. However, other than Tschumi and Eisenman, who openly acknowledged their debt to the French deconstructivist philosopher Jacques Derrida, the architects in "Deconstructivist Architecture" for the most part denied a direct connection to Derrida's theories and even to one another. Nevertheless, the exhibition served to highlight a radical new departure in architecture that was characterised, in the words of the exhibition's curator Mark Wigley, as "...an architecture of disruption, dislocation, deflection, deviation, and distortion."



Hussein Chalayan

Remote Control Dress

1999

Painted styrene with metal fasteners

Courtesy of Judith Clark

Hussein Chalayan and Marcus Tomlinson
Echoform

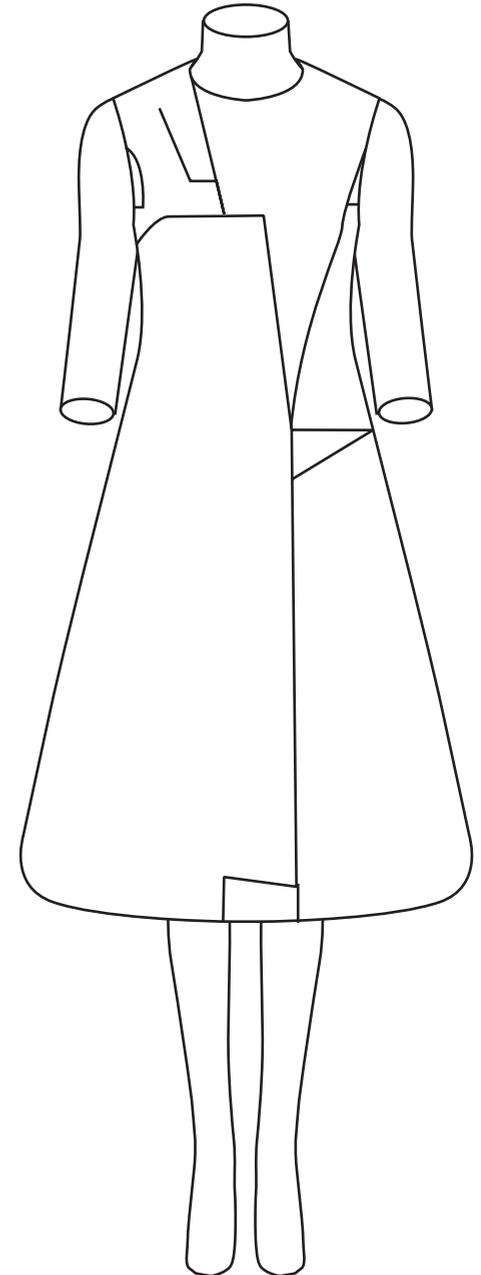
1999

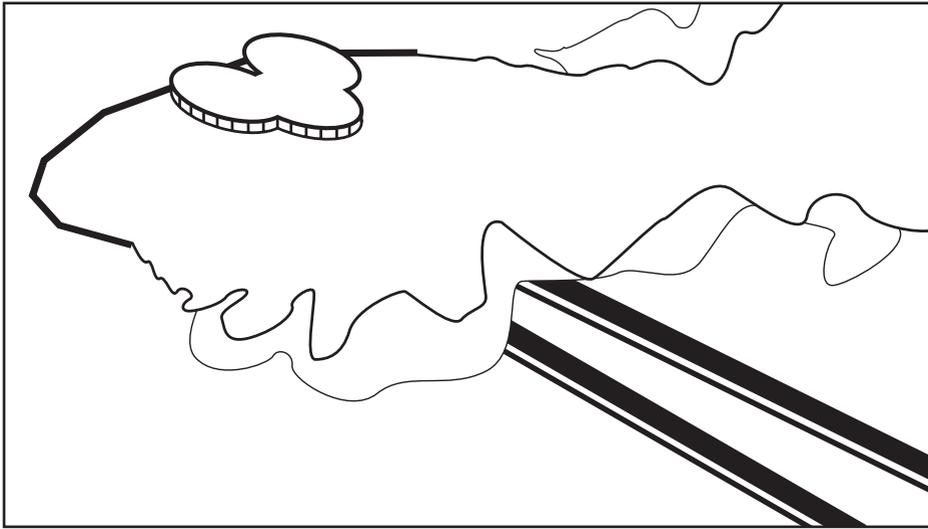
Film

Courtesy of Marcus Tomlinson

Hussein Chalayan is motivated by ideas drawn from disciplines that are not readily associated with fashion. Since graduating from Central Saint Martins in 1993, Chalayan has produced a rigorous and visionary series of collections that have been inspired by science and technology, the body and architecture, for the way they can radicalise an understanding of a dressed figure of human scale.

Chalayan has been preoccupied with aviation and the possibility of taking flight since an early age. This dress is made from the same material used in aircraft construction and changes shape by remote control. The dress was first commissioned by Judith Clark Costume Gallery for Zaha Hadid's Mind Zone at the Millennium Dome. Clark, a fashion curator who trained as an architect first, evidences how an appreciation of this kind of dress design is informed by the language of architecture. The dress is independent of the body but is made to fit the body; Chalayan's use of exact body scale for a garment which is not necessarily to be worn is interesting. A later version of this dress made for the Before Minus Now collection (S/S 2000) incorporated a back panel which lifts to reveal a froth of pink tulle.

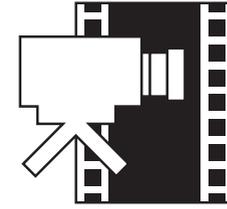




Diller Scofidio + Renfro

Dirk Hebel, photographer
 Blur Building, Yverdon-les-Bains, Switzerland
 2002
 Digital print
 Courtesy of Dirk Hebel

The Blur Building, built for Swiss Expo 2000, confounds traditional notions of what constitutes enclosure. The building was essentially a “tensegrity” structural system that rests on piles on Lake Neuchâtel in Yverdon-les-Bains. 31,500 nozzles placed through the framework sprayed a fine mist of water pumped from the lake, creating an enormous cloud that both “enclosed” and was the building. Through a computer that monitored the weather, the Blur Building continuously changed form in response to climatic variations. The architects originally envisioned that visitors would wear Brain-Coats, or “smart” raincoats that would be programmed with each wearer’s personality profile. A central computer would then compare profiles, changing coat colours to indicate potential affinity or antipathy as visitors encountered one another, thereby fostering impromptu meetings and connections in the building’s foggy environment.



Viktor & Rolf

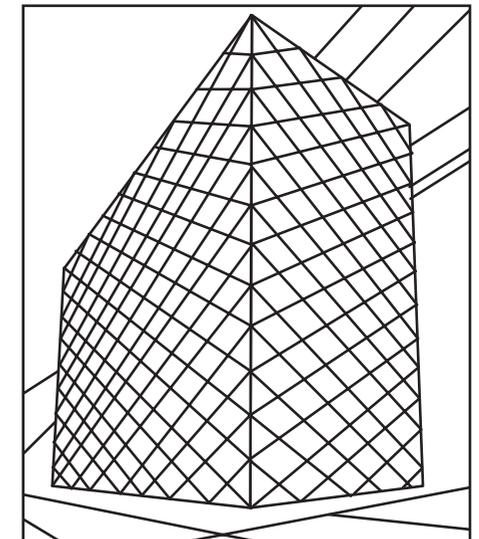
Long Live the Immaterial
 (or Bluescreen) collection
 Autumn/Winter 2002-2003
 Projection of runway presentation
 Courtesy of Viktor & Rolf

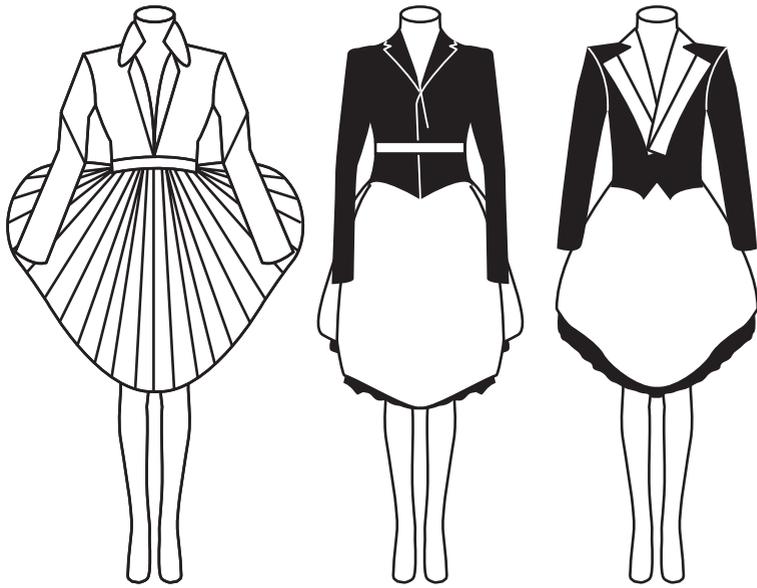
In the presentation of this collection, the models on the catwalk became moving special-effects screens. An intense shade of cerulean blue that could be read as a bluescreen—the technique of shooting foreground action against a monochromatic background for the purpose of removing the background and replacing it with a different image—was featured in the trim and patterns of some garments and was the sole colour of others. On screens flanking the catwalk, live feed of the models was filtered so that the blue elements of their outfits were replaced with moving images of sea, sky, desert, cities, helicopters, and busy freeways.

Herzog & de Meuron

Todd Eberle, photographer
 Prada Aoyama Epicenter, Tokyo
 2005
 Project 2000-2001, realisation 2001-2003
 Photographs
 Courtesy of Todd Eberle and Gagosian Gallery

Herzog & de Meuron’s six-level five-sided epicenter building for the Italian luxury goods company Prada is the firm’s first building in which structure, space, and façade form a single unit. The skin and the bones of the building are inseparable. The façade is a complex faceted skin of rhomboid-shaped glass panes set in a steel frame. The panes alternate between flat, concave, and convex, enabling viewers—both inside and out—to see constantly changing views and almost cinematographic perspectives of Prada products, the city, and themselves. The gridded skin is actively incorporated in the building’s structural engineering. Connected to the vertical cores of the building, it supports the ceilings. The horizontal tubes stiffen the structure and also provide private areas for dressing and sales on the otherwise open floors of the building. The interior space of the building is fluid, with connections between each of the floors so that visitors perceive the building as a continuous space.





Boudicca

Black Lowry ensemble
from Invisible City collection
Autumn/Winter 1994-1995

Hyper-nylon, corsetry cotton; silk, striped with a polyester lurex; jersey; leather; mirror, grosgrain ribbon

Half Rendered ensemble
from Invisible City collection
Autumn/Winter 1994-1995

Italian wool, hyper-nylon; silk; corsetry cotton; leather; mirror, grosgrain ribbon

In Flux ensemble
from Invisible City collection
Autumn/Winter 1994-1995

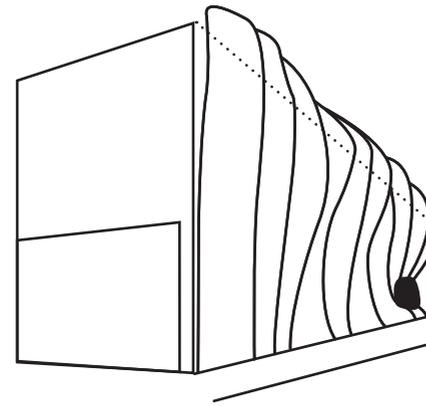
Italian wool, hyper-nylon; silk; corsetry cotton; mirror, grosgrain ribbon
courtesy of Boudicca

Boudicca are Brian Kirkby and Zowie Broach, a British fashion design duo who are motivated by literary allusion and historical referencing. The collections they produce are “stories, short scenes from films, that at times are simple and reference the obvious, at others

become complex and ill fitting.”

Inspired by Italo Calvino’s 1972 novel, *Le città invisibili*, Boudicca produced a collection in response to the idea of building a structure from the power of the imagination. Calvino’s magic realism novel is an imagined conversation between Marco Polo and Kublai Khan, who receives regular reports from his dispatch officers about the state of the cities in his kingdom. The novel contains numerous accounts of cities never seen, but the power of each description builds them in the mind of the reader. Boudicca applied this principle to the building of their own collection, creating an invisible city for the clothes before they were made.

The clothes themselves are suggestive of a *Brave New World*, but they also reference the past—a mix of Edwardian style brooches worn at the neck, formal jackets that are part tail coat, part tuxedo and military overcoats. These were teamed with elaborately stiffened skirts, armour of sculptural proportion that produced an almost cinematic vision of a futuristic runway of women populating a city without referents. The show had the quality of a doomed utopian project, where the glamour lies in the knowledge that all will fail. Yet the collection was one of the most important for Boudicca to date, garnering them an international profile and an invitation to show as part of the couture schedule in Paris.



Lars Spuybroek/NOX

Maison Folie, Lille, France
2004

Architectural model: wood, rubber, paper
Courtesy FRAC Centre, Orléans, France

Maison Folie, Lille, France
2004

Digital print
Courtesy Lars Spuybroek/Nox

Rotterdam-based architect Lars Spuybroek and his studio NOX have been at the forefront of research into digital design and of architecture’s use of new and powerful computing-tools to create a completely a new kind of architecture. He has, he says, a ‘textile way of thinking’, where the use of textile tectonics intervenes at both an aesthetic level—undulating, draped surfaces: and at a structural level—weaving, interlacing, braiding, knitting and knotting. This approach has been facilitated by Spuybroek’s revolutionary work with computer technology, which, combined with using the latest hi-tech materials, has allowed him to push the boundaries of both form and structure in building.

The Maison Folie arts and cultural complex at the heart of a derelict area in Lille is a cluster of buildings centring around a renovated textiles factory. The building’s spectacular glimmering and undulating façade is created by the stainless steel Escal textile, the interlocking metal components of which appear to have been knotted together.

Future Systems

Richard Davies, Photographer
Norbert Schoerner, Photographer
Selfridges Department Store,
Birmingham, England

2003

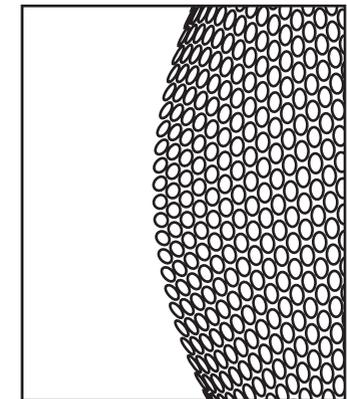
Digital prints

Courtesy of Future Systems,
Richard Davies and Norbert Schoerner

Architectural model

Courtesy of Selfridges

Future Systems’ building for Selfridges Department Store in Birmingham is a four-storey organic form clad in a blue stucco skin studded with fifteen thousand shimmering anodised-aluminium discs. The shape and the skin of the building are so unusual that it seems almost alien next to its neighbour, a nineteenth-century church although it is now a much loved part of the city scape. Future Systems’ principals Jan Kaplicky and Amanda Levete compare the undulating curves of the building to those of a waistline and the fluidity of its billowing shape to the drape of a fabric. The architects cite snakeskin and the 1960s paillette dresses of Paco Rabanne, as well as the voluminous forms of Baroque churches, as inspirations. They designed the discs to wrap all surfaces of the building, including the roof, in one continuous movement, confounding notions of front, back and side façades. The building has been a catalyst for the urban regeneration of Birmingham, while providing a fresh and contemporary identity for Selfridges.



SHELTER

The primary function of both clothing and buildings has always been to provide the body with shelter and protection. In recent years fashion designers and architects have begun to reinvent this fundamental aspect of their practice to reflect changes in our environment and our society. Fashion designers are reassessing clothing's potential to address the needs of the modern 'urban nomad', using high performance fabrics, and incorporating ideas of protection, mobility and identity. At the same time, architects are questioning the role of traditional 'bricks and mortar' structures, using new materials and techniques to create more versatile, adaptable and ecological structures that can respond to humanitarian need.

Vexed Generation

Vexed Parka

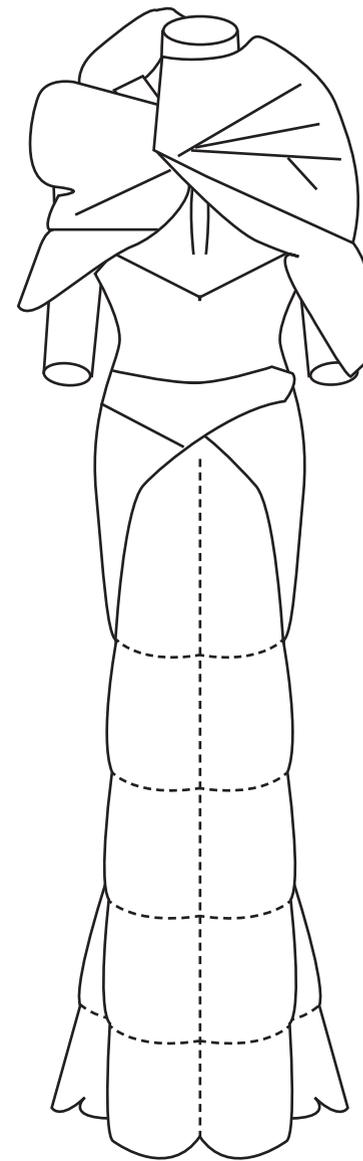
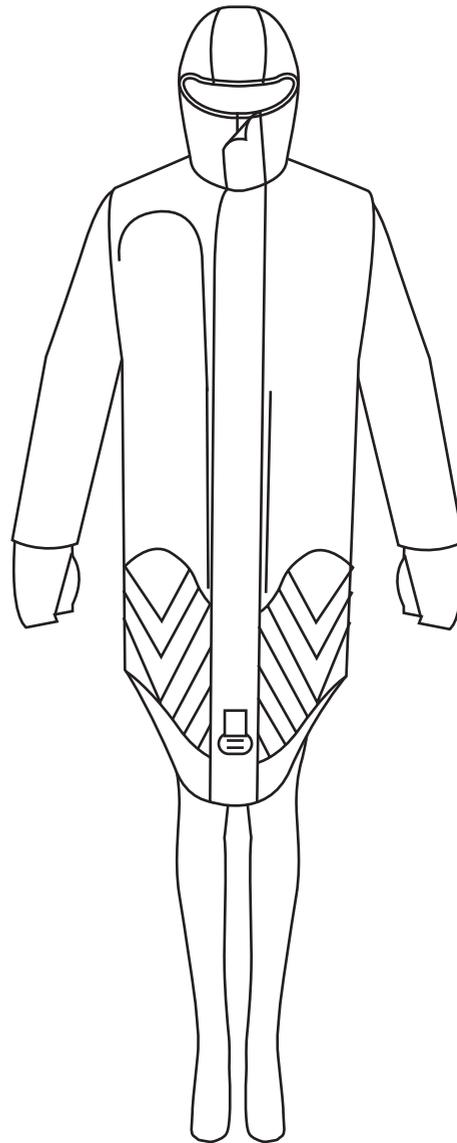
1994

High tenacity ballistic nylon; polyurethane laminate
Courtesy of Vexed Design

Vexed Generation are a design partnership who produce clothing and accessories informed by the urban environment. Adam Thorpe and Joe Hunter met in the early 1990s at a time when the Criminal Justice and Public Order Act was introduced in the UK, restricting the movement and massing of large groups of people. Although Vexed were initially galvanized by the impact the Act had on the 'illegal' rave scene, they broadened their enquiry to consider the infringement of civil liberties on an urban scale, designing objects that could harness a form of resistance.

This is typified by the Vexed Parka, a garment designed for cycling in the city. It addresses personal safety and practical protection when riding, by incorporating strategic padding to protect vital organs, a cowl hood to cover the wearer's head, and a respirator mask for the face. The garment is the product of research into urban mobility, so as much as it promotes the use of the bicycle over the car, it also offers protection against air pollution and armour for the battle that is commuting. But beyond these functional concerns, the parka offers the wearer the ability to resist identification by CCTV surveillance, underlining Vexed's belief in a form of design that they have termed 'stealth utility'.

Vexed Generation address the practical needs and political concerns of a generation keen to reclaim the streets of their cities as their own. This has recently led them to consider design as a potentially powerful anti-crime strategy and their range of crime-resistant products include bags which protect against the criminal techniques of dipping, grabbing, lifting and slashing.

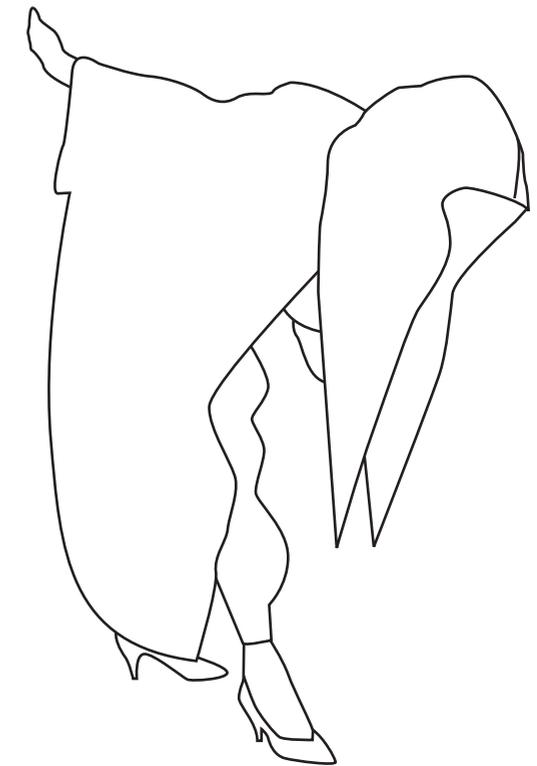


Junya Watanabe

Dresses from Classic collection
Autumn/Winter 2004-2005

Cotton, polyester, and down

Courtesy of Comme des Garçons



Yeohlee Teng

Cape

1982, exhibition copy 2008

Black wool melton hooded cape with white
wool doeskin piping

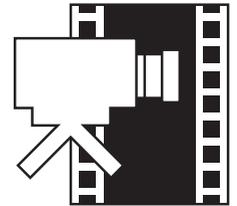
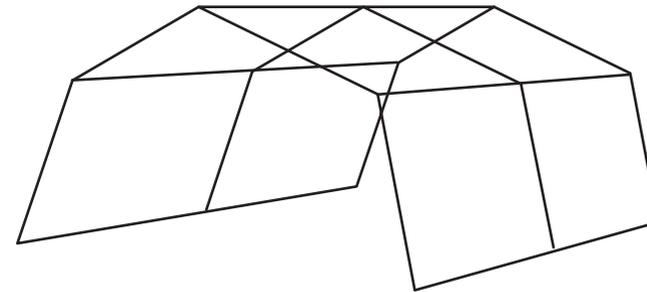
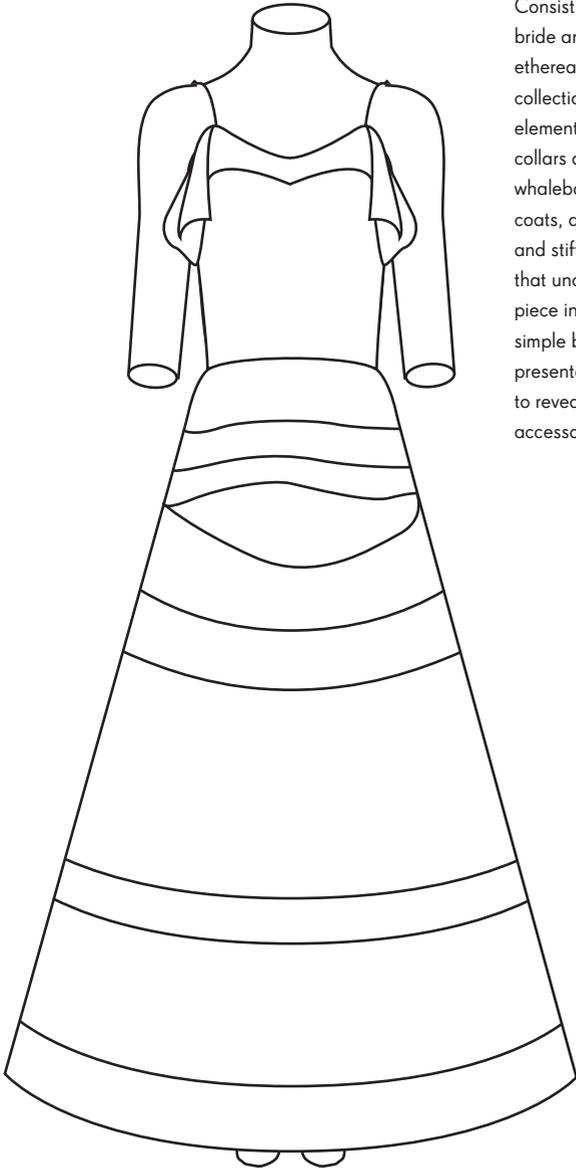
Courtesy of Yeohlee Teng

The term 'urban nomad' was coined by Yeohlee herself to describe the impact of the urban environment on the design of her garments. Her imperative was to design clothes that were multi-purpose, would travel well and even give a sense of refuge to the wearer, resulting in complex designs that appeared deceptively simple and austere.

Yohji Yamamoto

Secret Dress from Wedding collection
Spring/Summer 1999
Silk / Film of runway presentation
Courtesy of Yohji Yamamoto

Yamamoto's Wedding collection reveals his fascination with volume, structure, and transformation. Consisting exclusively of garments designed for a bride and members of her wedding party—including ethereal black dresses for the newly widowed—the collection incorporates many of Yamamoto's signature elements: long languid silhouettes, cantilevered collars and necklines, and fluid dresses. Plastic whalebones—inserted in the hems of dresses, jackets, coats, and skirts cut from full circles of fabric to shape and stiffen garments—create gently sculptural forms that undulate with the wearer's movements. A key piece in the collection is this wedding dress with a simple bodice and long hoopskirt. During the runway presentation, the model unzipped sections of her skirt to reveal hidden compartments from which she pulled accessories to complete her ensemble.



Shigeru Ban

Construction of Paper Tube Shelters
at Refugee Camp, Rwanda
1995
Film

Paper Tube Shelters designed for United
Nations Human Rights Commission
1995
Photographs
Courtesy of Shigeru Ban Architects, Tokyo

Shigeru Ban began using paper tubes in 1986 as a structural material in an exhibition design. Inexpensive, easily replaceable, and low-tech, paper tubes can be made to any length and are also recyclable, with little waste produced during their manufacture. Ban explored their potential in the range of temporary shelters that he designed for earthquake victims in Japan, Turkey, and India and for more than two million Rwandan refugees. Each of the Rwandan paper-tube structures ingeniously uses the standard plastic sheet issued to refugees by the United Nations to form its walls and roof.

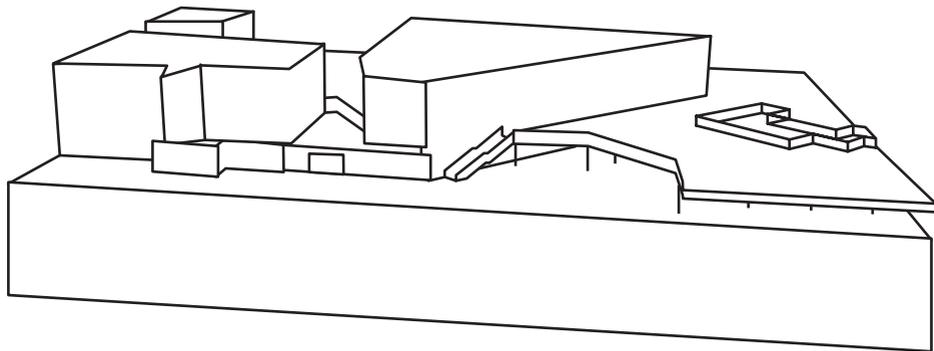
Viktor & Rolf

Russian Doll (or Babushka) collection
Autumn/Winter 1999-2000
Film of runway presentation
Courtesy of Viktor & Rolf

Viktor & Rolf's collections, based on ideas rather than current trends, are shown each season in Paris in extravagant and unusual presentations that are more like performance art or theatrical spectacle. For their autumn/winter 1999-2000 presentation, the designers explored concepts such as shelter and social class in Russian Doll, an haute couture collection that featured nine different garments reverently layered (by Viktor & Rolf themselves) on a single model standing on a slowly rotating platform. Beginning with a humble woven jute dress, each subsequent garment was decorated with increasingly luxurious materials including silk lace and Swarovski crystals. By the show's end, the model was cloaked in a massive cape that both sheltered her and concealed the eight garments underneath.

GEOMETRY

The use of geometry to generate form is a strategy shared by both architects and fashion designers. Simple forms such as circles, squares, and ellipses as well as more complex forms such as the torus and the Möbius strip, with its convoluted twist and continuous form, are used in both disciplines. In architecture, geometry is often used to create complex interior spaces or shape the overall physical form of the building, while in fashion design, once a garment is draped on a body, its shape is transformed and the geometry that generated it often becomes invisible.



Preston Scott Cohen

Tel Aviv Museum of Art
2006

Architectural model showing site; scale 1:100. Styrene, Plexiglas, and 3-D printed components
Fabrication: Preston Scott Cohen, Inc., Isamu Kanda and Gjergji Bakallbashi
Courtesy of Preston Scott Cohen, Inc.

Cornered House
1991-1992

Architectural model: basswood
Courtesy of Preston Scott Cohen Architect

Spiriculate
1998

Pencil on Strathmore 500 paper
The Museum of Contemporary Art, Los Angeles
Purchased with funds provided by the Drawings Committee

Complex geometry is at the core of Preston Scott Cohen's architecture. Cohen's work with difficult sites, programmatic constraints, and spatial configurations has resulted in a formal virtuosity that is evident in the projects shown here. Each new project develops out of an elaborate ongoing investigation into geometry's potential to reshape architectural language. His repertoire of three-dimensional architectural forms is based on familiar building types distorted by oblique projections. Cohen's work has evolved from early projects—in which intricate hand-drawn geometric projections remarkably foreshadow computer-generated forms—to large-scale projects, in which the complex layers of design demand new approaches to engineering and construction.

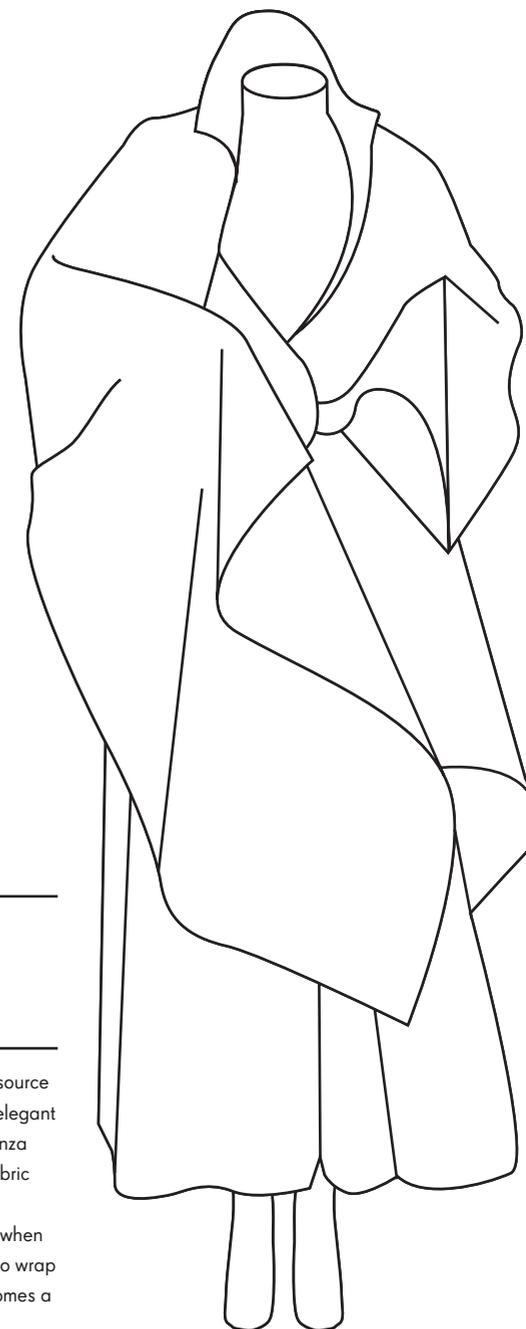
Cohen's building for the Tel Aviv Museum of Art is organized around a synthesis of oblique lines and hyperbolic parabolas. Twisting façades define a circulation sequence around and into the museum, while inside an extraordinary spiralling atrium pulls light into gallery spaces three storeys below ground. The building's discontinuous planes, which are actually aligned according to independent axes, resolve the difference between the idiosyncratic triangular site and the flexible rectangular galleries within.

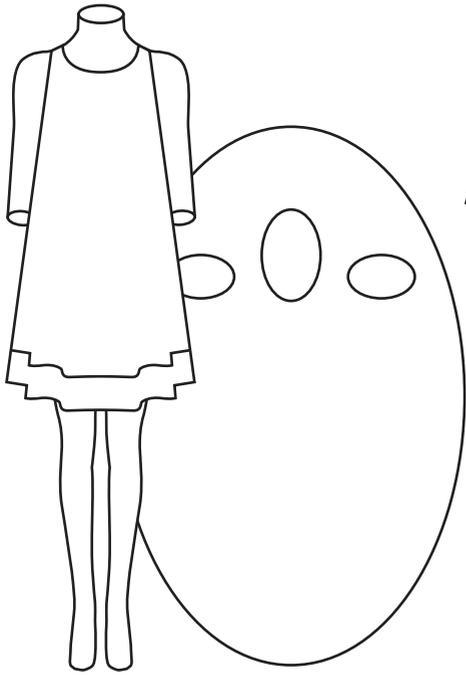
Yeohlee Teng

Infanta Two-Circle Dress
Autumn/Winter 2005-2006

Silk organza; black matte jersey
Courtesy of YEOHLEE inc

The importance of geometry as a generative source for Yeohlee Teng's work is evident in her starkly elegant evening dresses as well as in this black silk organza Infanta dress, which is composed of circles of fabric layered on top of each other. In its basic form, it appears as a deceptively simple skirt. However, when one lifts the top layer of organza from the back to wrap the body in a shawl-like enclosure, the skirt becomes a dress with curvilinear, sculptural front.





Isabel Toledo

Packing dress
Spring/Summer 1988
Raw silk
Courtesy of Isabel Toledo

Toledo's Packing Dresses, made from two circles of fabric sewn together with holes cut for head, arms, and legs, collapse flat for easy travel and storage. When laid flat the straightforward geometry of the dress is visible but when on the body gravity causes its form to become more complex.



Nanni Strada

Coat with welded stitching from
Sportmax collection
Autumn/Winter 1971-1972
Wool
Courtesy of Nanni Strada Design Studio, Milan

Over the course of her career, Nanni Strada has eschewed the seasonal dictates of fashion, focusing instead on innovation in both textile development and garment design. Strada's practice makes use of rational approaches, structural inventions, and technical processes more often associated with industrial design than with fashion. In 1972, inspired by research into traditional Asian dress, Strada created a simple roomy geometric garment in a single size whose pattern maximizes the amount of fabric used by conforming to the planar nature of the cloth.



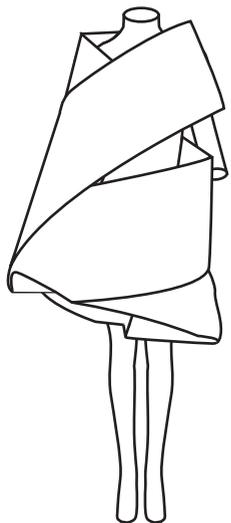
Junya Watanabe

Wired dress
Autumn/Winter 1998-1999
Cotton and metal wire
Ensemble with wired circle skirts
Autumn/Winter 1998-1999
Cotton and metal wire
Courtesy of Comme des Garçons

Narciso Rodriguez

Dress from collection
Spring/Summer 2003
Textured linen
Dress from collection
Autumn/Winter 2004-2005
Silk with crystal embroidery
Courtesy of Narciso Rodriguez, New York

Every detail of Narciso Rodriguez's clothing is carefully composed; seams and fit lines follow curves of the body and show how a garment is put together. After an initial period of sketching, Rodriguez's design process is characterised by many hours spent draping and fitting garments on a live fit model rather than on a dressmaker's form. He repeatedly marks, tapes, pins, and re-tapes fit lines to achieve precise proportions and balance. He works out ideas for shape and proportion in a series of sketches before beginning to work with fabric. Once Rodriguez is satisfied with a design, its elements are translated into a computer drawing from which the actual paper pattern is generated.



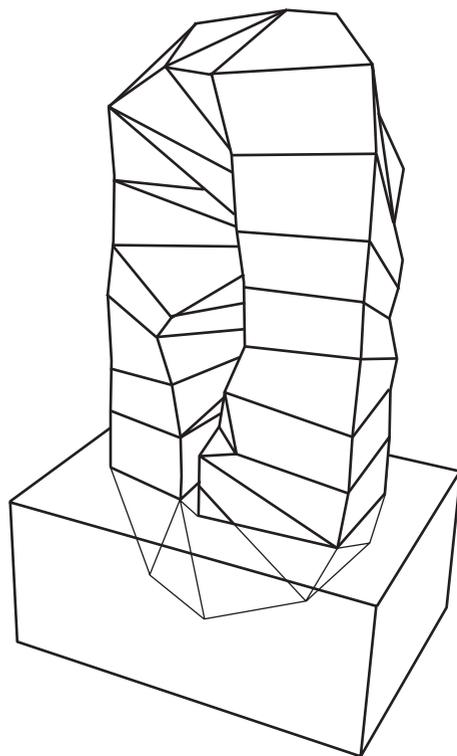
J. Meejin Yoon

Möbius Dress
2005
Felt

Views of Möbius Dress
Looped and Unlooped

2005
Digital image
MY Studio/J. Meejin Yoon

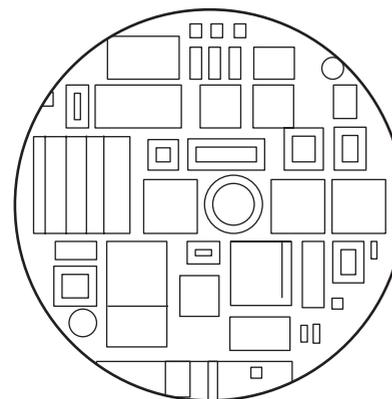
J. Meejin Yoon's multidisciplinary practice MY Studio encompasses architecture, site-specific installations, and, on occasion, fashion design. Yoon's work falls between the conceptual and the concrete; many of her small-scale conceptual designs enable her to test ideas that she may later incorporate into large-scale, realisable projects. This dress is a one-of-a-kind project undertaken by Yoon to explore form and performance. Made of white felt, the Möbius Dress takes the shape of a Möbius strip, a loop made by flipping one end of a rectangular strip and then connecting it to the opposite end. By cutting while following the strip two times around, three connected loops are formed. When the cut edges of the dress are zipped together, the garment encloses the body in a stiff A-line shape. When unzipped, the dress unfolds and its intertwining loops cascade to the floor.



Eisenman Architects

Max Reinhardt Haus, Berlin (unbuilt)
1992-93
Architectural model: Painted foam and acrylic
Courtesy of Eisenman Architects

Over the course of a career spanning thirty years as a teacher, writer, theorist and architect, Peter Eisenman has approached design by considering the physical and cultural layers of each project's site. For the Max Reinhardt Haus, a thirty-four storey mixed-use tower proposed for Berlin, Eisenman explored the idea of folding in a vertical orientation. Starting with the form of a Möbius strip, which can be seen as symbolising the then newly reunified city, he transformed the shape through a series of iterative operations to create the complex prismatic form of two faceted towers joined by a twisting arch.



Kazuyo Sejima + Ryue Nishizawa/SANAA

21st Century Museum of Contemporary Art,
Kanazawa, Japan
2004
Digital print

Architectural model; acrylic
Courtesy of SANAA; ©Shinkenchiku-sha
(The Japan Architect Co., Ltd.)

Luminosity, transparency, and a deceptively simple use of geometric forms to generate complex spatial compositions characterise the work of SANAA. The firm's original use of continuous, often transparent or translucent exterior surfaces establishes subtle but provocative relationships between interior and exterior, individual and community, and public and private. The outer shell of the 21st Century Museum of Contemporary Art is a low-slung cylinder made of two layers of laminated glass. The building's circular plan eliminates the traditional hierarchy of façades and entrances (there are four entrances, one at each quarter-point of the circle) and encourages a multiplicity of approaches and directions. The museum contains a number of individual volumes—squares and circles of varying size—that house galleries, offices, courtyards, and other museum spaces. They are like boxes arranged inside a tray; their walls vary in height, many puncturing through the ceiling and roof of the single-storey museum to reveal the interior division of space on the building's exterior.



Yohji Yamamoto

Whalebone Top and Skirt
from Wedding collection
Spring/Summer 1999
Rayon with plastic supports in the shape of
a whalebone
Courtesy of Yohji Yamamoto

STRUCTURAL SKIN

In both fashion and architecture designers have recently begun to develop structural skins that bring the surface and the structure of a design—or the 'skin and the bones'—together so they become one and the same thing. Structure and façade become joined in a single surface.

OMA/Rem Koolhaas

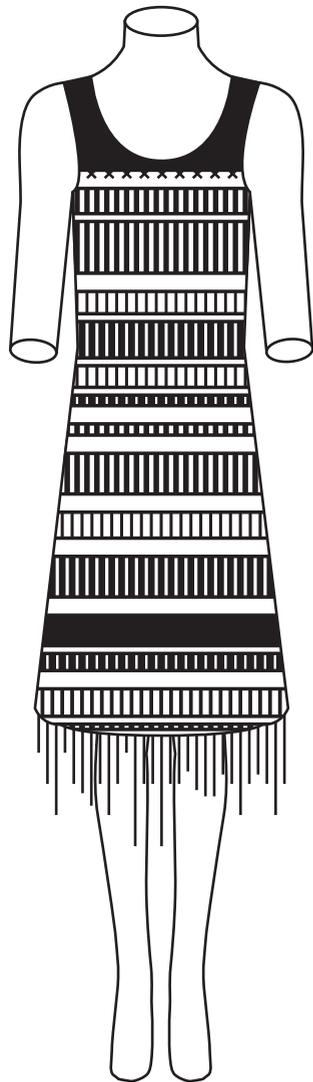
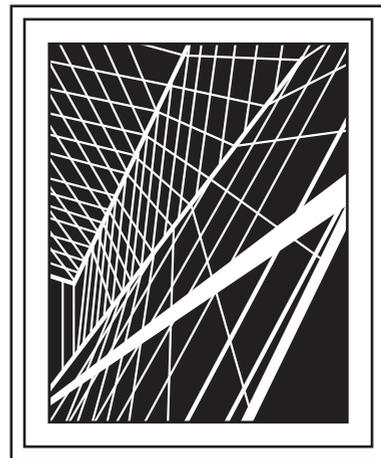
Todd Eberle, photographer
Seattle Central Library

2004

Photograph

Courtesy of Todd Eberle and Gagosian Gallery

During early work on the Seattle Central Library, the architects—Rem Koolhaas's Office for Metropolitan Architecture—together with their clients, visited libraries in Europe and the United States to research existing institutions and theorise about their future. Such extensive study and dialogue led the architects to conceive of flexible areas for the library—a reading room, "mixing chamber" (central reference area), "living room" (central meeting area), and centres for children and multilingual patrons—to set between five programmatic "boxes" established to serve the fixed needs of the project: administrative offices, book storage, meeting areas, staff areas, and a parking garage. These programmatic spaces were reconceived as compartments in a vertical stack: the building's physical shape emerged from the pushing or pulling of forms in one direction or another. Such manipulations created four dramatically different façades, each undulating with recessions and cantilevered projections. The entire building is wrapped in a mesh skin of diamond-shaped panes of glass (much like a fishnet stocking) set into a matching steel grid that operates as both a transparent curtain wall and part of the structural system.



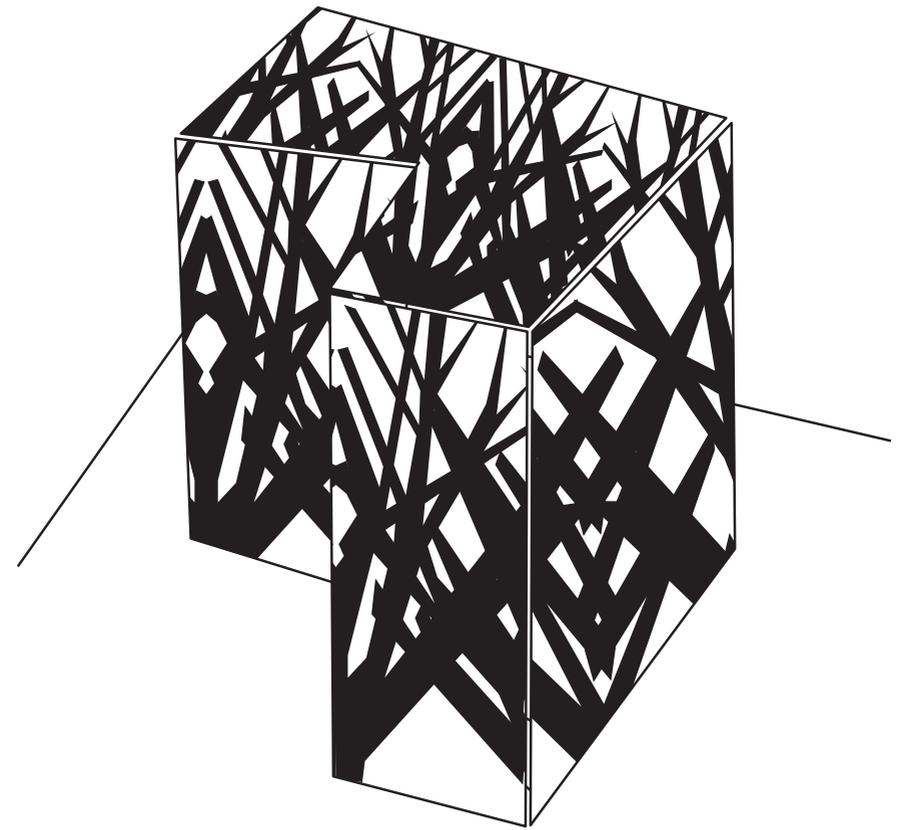
Alexander McQueen

Dress from Scanners collection

Autumn/Winter 2003-2004

Leather and polyester

Courtesy of Alexander McQueen



Toyo Ito and Associates, Architects

TOD'S Omotesando, Tokyo

2002-2004

Architectural model: acrylic resin

Façade studies for
TOD'S Omotesando, Tokyo

2002-2004

Digital print

Courtesy of Toyo Ito and Associates, Architects

Hisao Suzuki, photographer

TOD'S Omotesando, Tokyo

Digital print

Courtesy of Hisao Suzuki

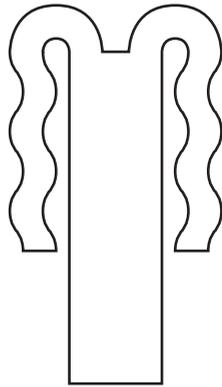
Toyo Ito combines an interest in structural systems with a desire to create architecture that appears light, transparent, and almost ephemeral. These two seemingly contradictory preoccupations have found highly refined resolution in the project shown here. For his Tod's Omotesando building, a seven-storey retail space in Tokyo for the Italian luxury-goods company, Ito wrapped the building in a graphic pattern of glass and concrete that references the trees lining Omotesando Avenue. The pattern not only serves as ornamental skin but provides structure, as the building surface supports the floor slabs, thereby eliminating the need for internal columns. Similarly, for Mikimoto Ginza 2, commissioned by a jewellery company famous for its pearls, Ito wrapped the nine-storey building in thin pearlescent walls punctured by irregularly shaped windows, creating a decorative exterior that functions simultaneously as a structural system.



A-POC (Miyake Issey and Fujiwara Dai)

A-POC TRAMPOLINE, with Ripple Chairs
by Ron Arad for Moroso
2006
Nylon
© MIYAKE DESIGN STUDIO
Ripple Chairs Courtesy of Moroso

Since 1997, Miyake has focused his attention on design research and technology. Together with Fujiwara Dai, his associate and design engineer, he pioneered the manufacturing method A-POC (A Piece of Cloth). A-POC is an industrial process by which fabric, texture, and a completed knit—the components of a fully finished woven garment—are made in a single process. The first iteration of A-POC comprised the production of continuous-knit tubes from which seamless garments can be extruded by cutting around lines of demarcation customised to the wearer's needs. More recently, A-POC has been applied to media other than clothing; in 2006 Trampoline, a knit, was presented at the Milan Furniture Fair in collaboration with designer Ron Arad.



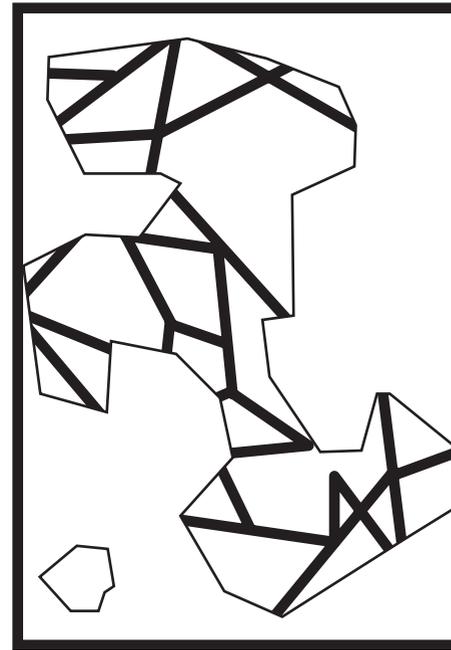
Nanni Strada

Pantysol Dress
from *Il Manto e la Pelle* collection
1973
Tubular polyester fabric

Nanni Strada and Clino Castelli
Original poster for film *Il Manto e la Pelle*
1973
Paper

Digital print
Courtesy of Nanni Strada Design Studio, Milan

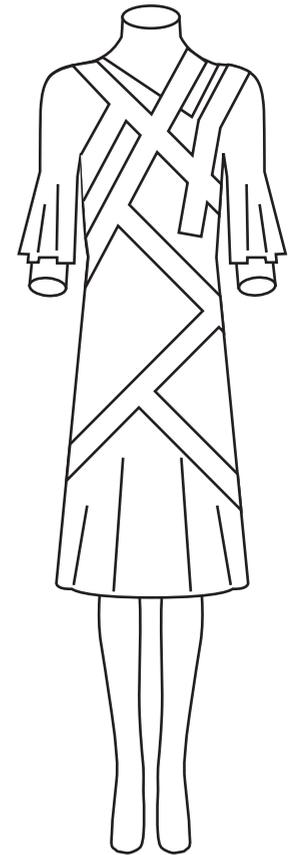
The 1974 film *Il Manto e la Pelle* (The Cloak and the Skin) documents Nanni Strada's efforts to incorporate the technology used to generate tubular knits for hosiery into her own design methods. In 1979, she received the Compasso d'Oro award for industrial design in recognition of her creation of the world's first machine-knitted seamless dress.



Testa & Weiser

Carbon Beach House (pattern)
2006
Computer-generated print
Courtesy Testa & Weiser, Los Angeles

Carbon Beach House (unbuilt, 2006) represents a rethinking of residential construction in which all systems, surfaces, and structural components are integrated. The exterior shell and all interior floor plates and partitions are fabricated of carbon-fiber-faced cellular panels, which are assembled like a honeycomb and bound together by prepreg tape (carbon-fiber tape infused with soft resin) that appears on the outside as if it was just a decorative element. Testa & Weiser's intensive study of new materials and technology is coupled with a close examination of the work of contemporary fashion designers such as Yoshiki Hishinuma, whose *Inside Out 2Way Dress* prompted an investigation into taping building pieces together.



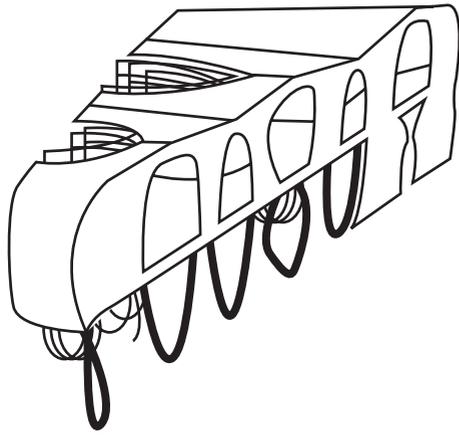
Yoshiki Hishinuma

Inside Out 2Way Dress
Spring/Summer 2004
Polyester
Courtesy of Yoshiki Hishinuma Co., Ltd.

Known for using innovative textiles and creating unusual shapes, Yoshiki Hishinuma launched his own label in 1996, after a brief stint working for Miyake Issey. His work combines new technology with traditional Japanese techniques such as shibori or tie-dyeing to develop textiles with effects like pleating, puckering and crinkling to provide texture and volume. The *Inside Out 2Way Dress* is graphic and sheer, featuring seemingly random strips of opaque tape that both hold the dress together and strategically conceal parts of the body.

CONSTRUCTING VOLUME

Both fashion design and architecture deal with creating space and volume out of flat, two-dimensional materials, albeit on different scales. Increasingly, with the aid of new technologies and materials, each has been able to develop shared techniques that provide texture, form and volume in new and intriguing ways, often introducing shapes and silhouettes that confound conventional ideas of proportion and form. Surprisingly, the new shapes in each discipline seem to find echoes in one another.



Greg Lynn FORM

Slavin House, Venice, California

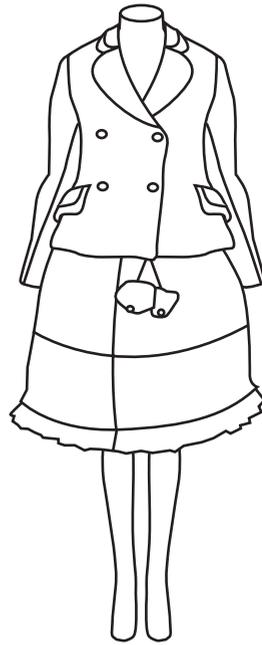
2004-2008

Architectural model: acrylic

Digital rendering

Courtesy of Greg Lynn FORM

Greg Lynn seeks out new design methods and manufacturing techniques, often from the aeronautic, automotive and industrial design industries, in order to realise his complex architectural forms. In recent years, he has turned to product design in order to experiment with form and fabrication on a more manageable scale. His conversion of digital information into the coded paths that direct manufacturing tools to generate physical models and prototypes has resulted in complex built work characterised by intricate textures and voluptuous curves. Lynn often uses materials and colours more common to product design. The Slavin House, his family residence, resembles a product blown up to the scale of architecture. Somewhat baroque in its incorporation of varied shapes and substances, the residence features two continuous rolled-steel trusses braided and looped through one another to function simultaneously as beams and pillars. A window/wall resembling a cluster of soap bubbles emerges from a corner of the house, and an interior wall, called the Blob Wall, comprising interlocking, plastic modules recalls a 1960s Paco Rabanne dress.



Vivienne Westwood

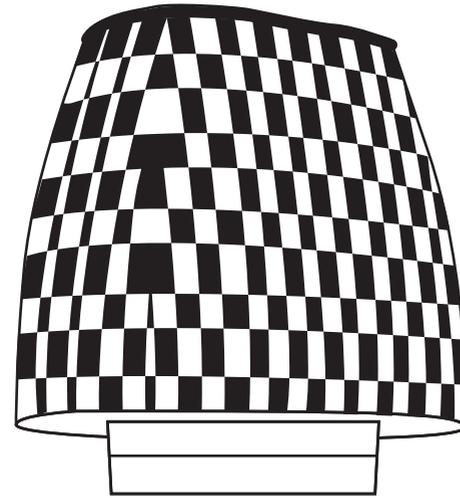
Red Harris Tweed Crinoline and Short Princess Jacket from Harris Tweed collection Autumn/Winter 1987

Wool, handwoven Harris Tweed

Courtesy of Vivienne Westwood

Westwood's abbreviated bell-shaped crinolines created voluminous shapes with undulating movement. The short, double-breasted jacket was inspired by the princess coats worn by the Queen as a girl. Curving in at the waist and then smoothly outlining the hips, the 'Princess' jacket sits poised on top of the bell-shaped skirt, counterbalancing the flirtatious, swaying crini.

Westwood first showed the Mini-Crini collection in 1985. It marked a radical change of direction for her, where, drawing from the past, she created more fitted, explicitly feminine clothes. Together with Westwood's use of Harris Tweed, this signalled a return to traditional English tailoring techniques. The curved collar and pocket flaps of the jacket are trimmed with a dress velvet that resembles ermine; it was so expensive that it could only be used sparingly.



Nigel Coates

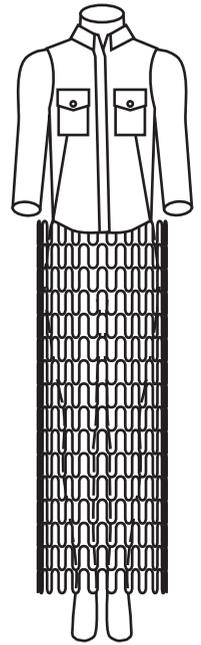
Mini-Crini, Proposed Development in Middlesbrough

2005

Architectural model: rapid prototype resin

Courtesy of Nigel Coates

This project for an office building in Middlehaven responds to a key idea laid down in the masterplan; it is one of three so-called "Prada skirts", the classy buildings at the heart of the area. The Mini-Crini achieves 'skirtness' by treating the enclosed space as the body, and the crini system of sunscreens as the clothing. The crinoline is a particularly architectural form of clothing. It combines the flexibility of fabric with the stiffness of its rigid hoops.



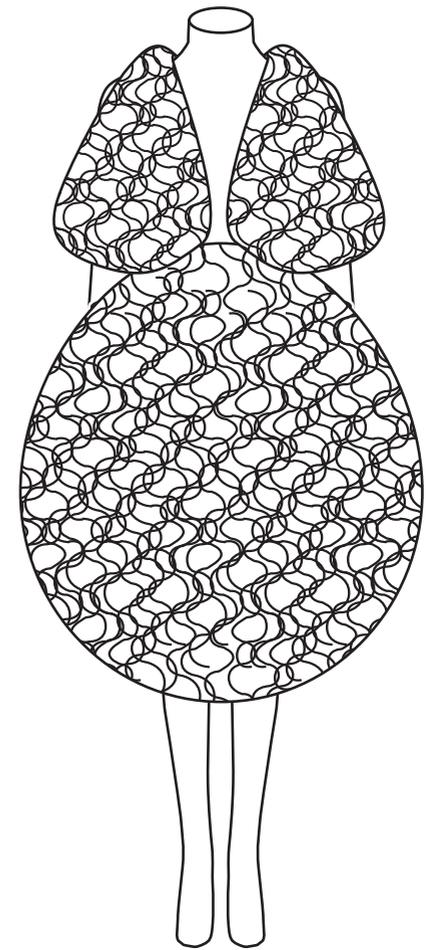
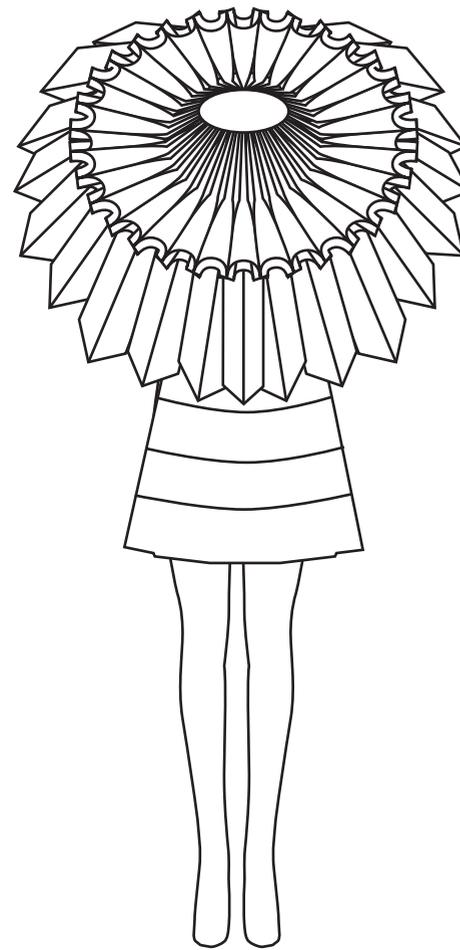
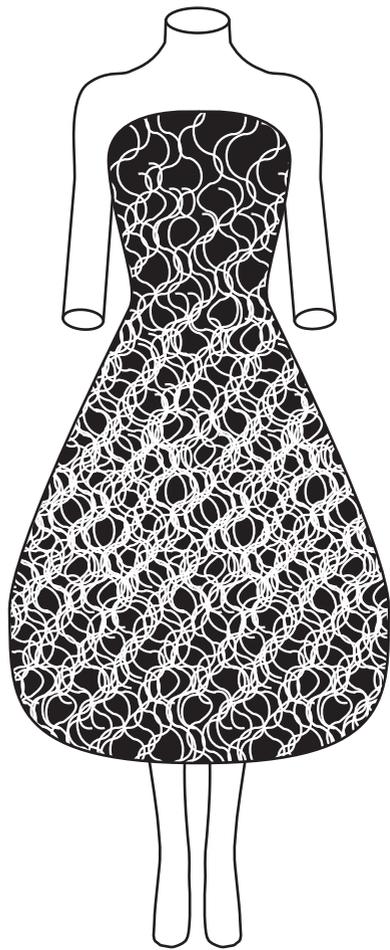
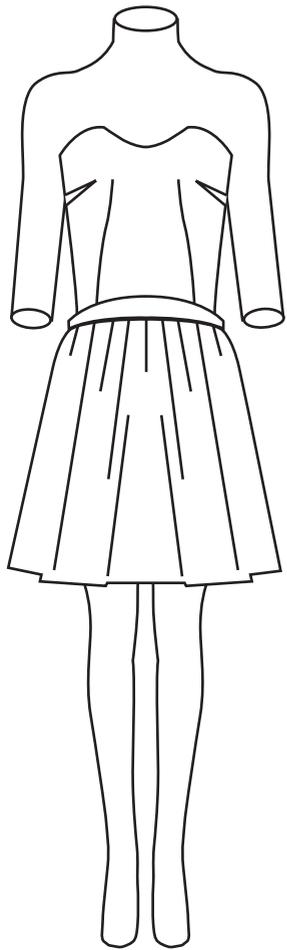
Ralph Rucci

Cargo Shirt and Ribbon Skirt from Haute Couture collection Spring/Summer 2003

Duchesse satin, satin, and organza

Courtesy of Chado Ralph Rucci, New York

This skirt features hand-looped ribbons loosely appliquéd to an underskirt, creating an elaborate three-dimensional surface and a sculptural silhouette.



Alber Elbaz / Lanvin

Dress from collection
Spring/Summer 2005
Washed silk faille
Courtesy of Lanvin

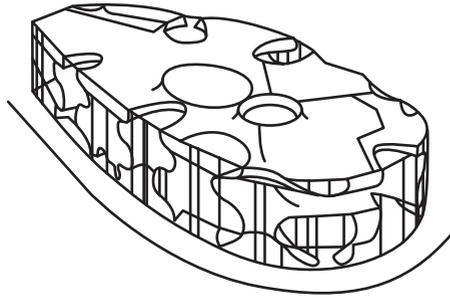
Hussein Chalayan

Dress from Before Minus Now collection
Spring/Summer 2000
Shaved nylon tulle
Courtesy of Hussein Chalayan

Junya Watanabe

Dresses and blouse from Soirée
(or Techno Couture) collection
Autumn/Winter 2000-2001
Polyester
Courtesy of Comme des Garçons

Originally hired as a pattern-cutter at Comme des Garçons by his mentor Rei Kawakubo, Junya Watanabe was given his own label at Comme des Garçons in 1992. Watanabe's designs are often structurally ambitious—characterised by innovative cutting and draping techniques and ingenious sourcing of fabrics—and range from conceptually driven to easily wearable. This collection emphasises the techniques and technologies used to make couture garments, featuring dresses made from hundreds of layers of ultra-lightweight polyester chintz, stitched, at times by hand, to form complex structures of honeycomb cells, concertina pleats, or frilling cocoons. The resulting intricate forms evoke underwater creatures such as coral, anemones, or oysters.



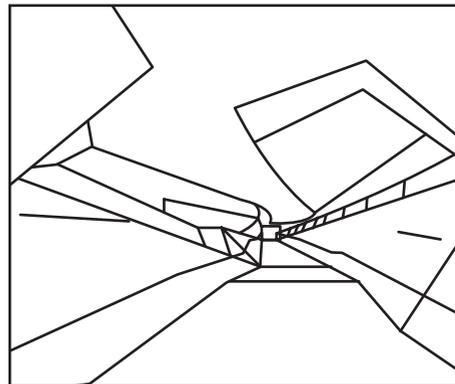
Foreign Office Architects

Yokohama International Port Terminal,
Yokohama, Japan
1995-2002
Architectural model: plastic, metal

Fly-over of Yokohama International
Port Terminal
Film

View of Interior, Yokohama International
Port Terminal
1995-2002
Digital print
Courtesy of Foreign Office Architects, London

Foreign Office Architects won the international design competition for the Yokohama International Port Terminal in Japan in 1995. A study of how circulation can shape space, the building challenges the traditional departure/arrival orientation of the cruise-ship terminal with its structure of interlaced, ribbon-like looping ramps that provide multiple paths for cars and pedestrians. The active roof surface of undulating “dunes” (made of wood planks) and green space echoes the origami-like folds of the interior, which features warped concave floor surfaces and a crisply pleated ceiling.



Toyo Ito and Associates, Architects, and Andrea Branzi Architetto

Forum for Music, Dance, and Visual Culture,
Ghent, Belgium (unbuilt)
2004

Architectural model: acrylic
Collection Centre Pompidou, Paris
Musée national d'art moderne /
Centre de création industrielle

Geology of the Sound Cave
Forum for Music, Dance and Visual Culture,
Ghent, Belgium (unbuilt)

2004
Digital rendering
Courtesy of Toyo Ito and Associates, Architects

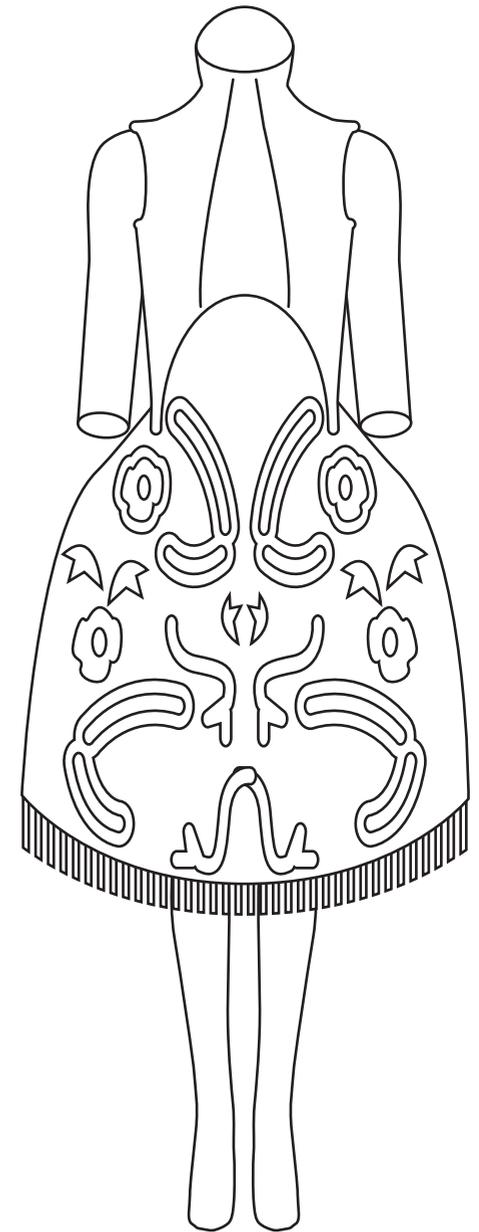
Toyo Ito's competition entry for the Forum for Music, Dance and Visual Culture draws on the structures of the human mouth and ear, vehicles for sound emission and reception. Ito conceived the building as a continuous reinforced concrete shell enclosing a system of channels that move visitors through the space, branching from one another and leaving no formal distinction between floors, walls and ceilings.

Alexander McQueen

Dress from It's Only A Game collection
Spring/Summer 2005

Silk/cotton with embroidery and metal fringe, prosthetic
leather
Courtesy of Alexander McQueen

Alexander McQueen is known for his clothing construction—in particular, the impeccable tailoring and precise execution of architectonic forms—as well as the elaborate sets he uses in his collection presentations. McQueen's ability to combine contrasting qualities—such as hard and soft, rigid and fluid, violent and fragile—in the same garment is evident in the molded leather bustier and the way a fringe of metal pins completes the soft bell-like form and quilted and embroidered surface of this dress from his It's Only a Game collection.



CONSTRUCTION
RECONSTRUCTION
DECONSTRUCTION

While fashion's use of deconstruction is not as theoretically influenced as that of architecture, its appearance in the early 1980s runway shows of Comme des Garçons and Yohji Yamamoto coincided with debates and discussions about it in the architecture world. Both disciplines, however, used deconstruction to challenge ideas of 'form', 'function' and 'beauty', and opened up new ways of thinking about architecture and fashion.

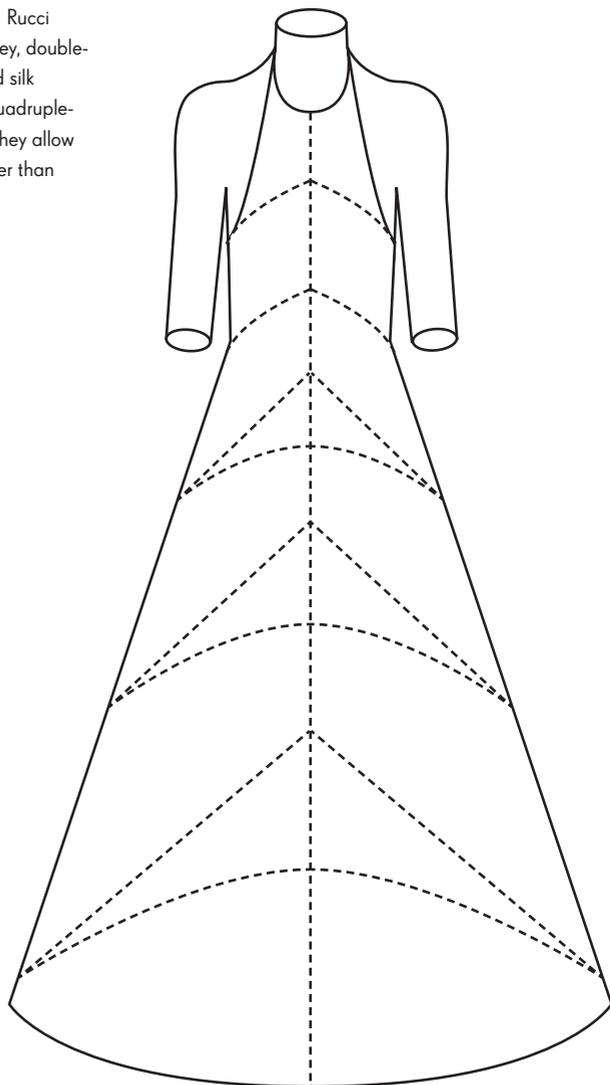
Ralph Rucci

Vertebrae Infanta Gown
Autumn/Winter 2004-2005

Duchesse satin

Courtesy of Chado Ralph Rucci, New York

Ralph Rucci is known for the remarkable construction of his garments. All of his designs demonstrate refined and impeccable craftsmanship and each one features one or more elements of fine handwork, including embroidery, knotting, stitching, and beading. Rucci favors toothy fabrics—such as heavy silk jersey, double-faced wool, duchesse satin, faille, moiré, and silk gabardine, as well as double-, triple-, and quadruple-weight gazar—for their sculptural qualities; they allow for greater volume and hold their shape better than lighter, more fluid fabrics.



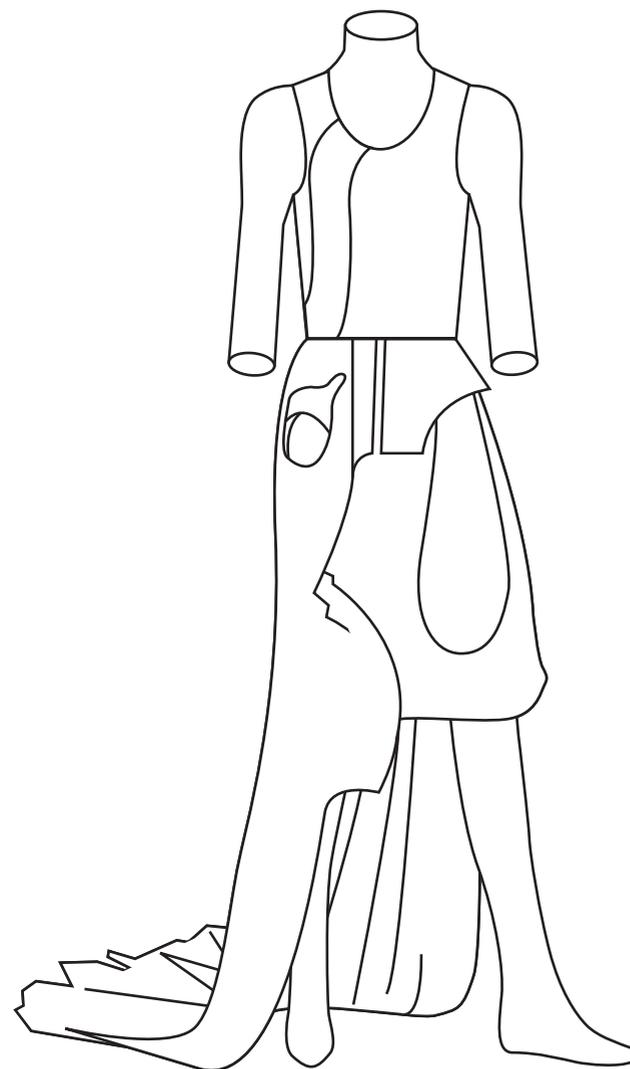
Comme des Garçons

Ensembles from Fusion collection

Autumn/Winter 1998-1999

Cotton, wool, and wool jersey

Courtesy of Comme des Garçons



Junya Watanabe

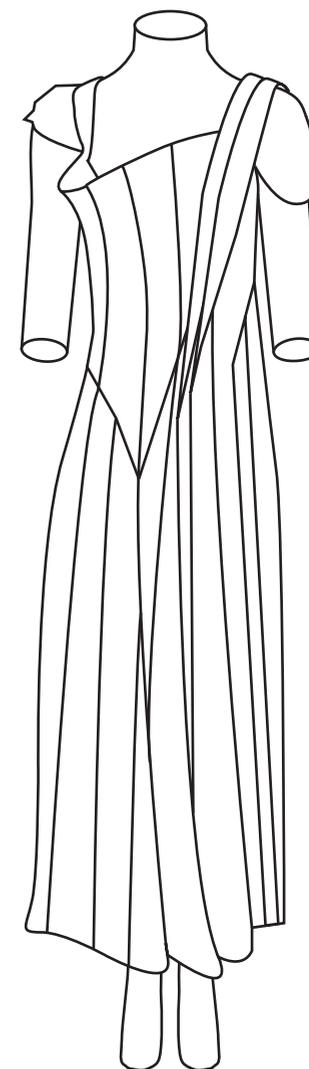
Dresses from collection

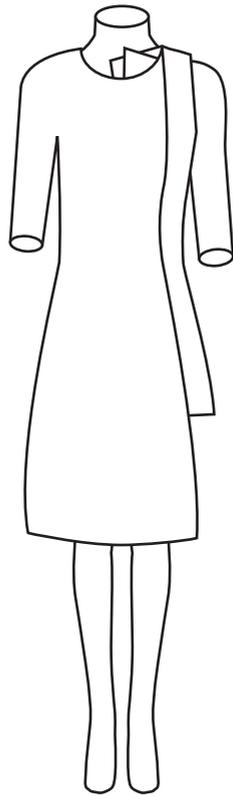
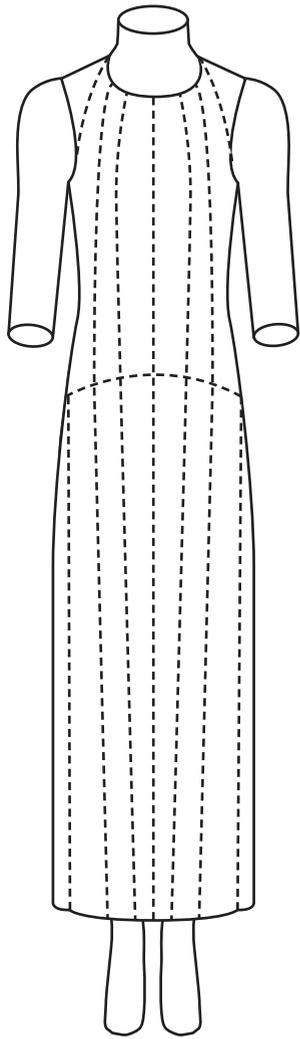
Spring/Summer 2002

Cotton denim

Courtesy of Comme des Garçons

This collection featured dresses constructed from numerous pieces of recycled-looking denim stitched and draped to maximise fluidity and movement on the body.





Comme des Garçons

Dresses from New Essential collection
Spring/Summer 1999

Cotton and polyester

Courtesy of Comme des Garçons

Since establishing Comme des Garçons in 1969, visionary designer Rei Kawakubo has consistently turned conventional notions of gender, beauty, and clothes-making upside down. Kawakubo's first Paris collection shocked many because it featured garments that were shapeless, tattered, and frayed and that directly challenged conventional fashion. She was one of the first fashion designers to explore ideas of deconstruction in fashion and many of her subsequent collections continue to feature conventional garment shapes that are taken apart and reconstructed in unexpected ways and with unusual materials.

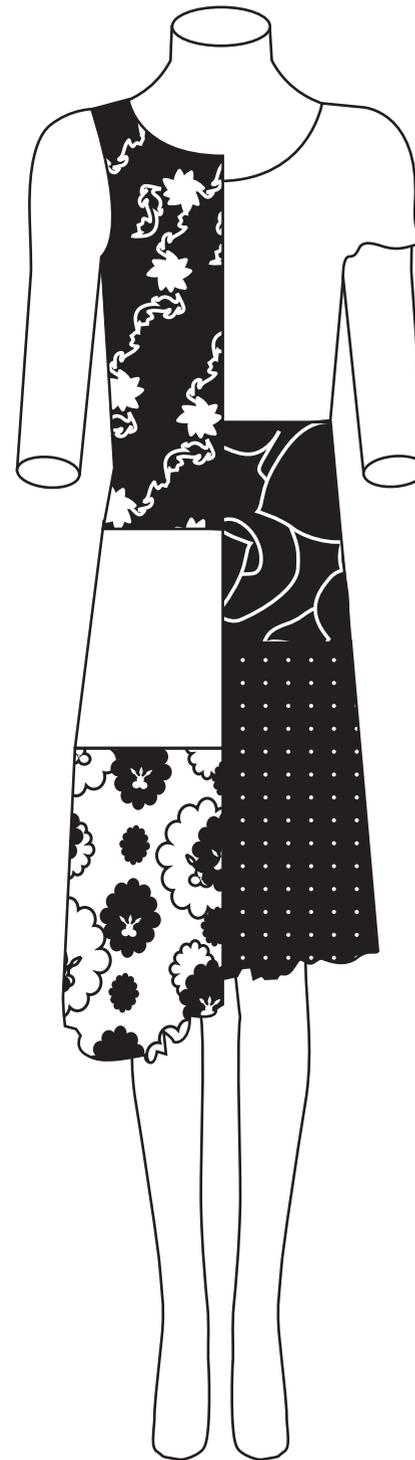
Yohji Yamamoto

Dress from collection
Spring/Summer 2000

Cotton

Courtesy of Yohji Yamamoto

The pieces in this collection all feature visible stitches that mark darts, seams, and folds—like the notations on a dressmaker's pattern—as if each garment is in the process of being constructed.



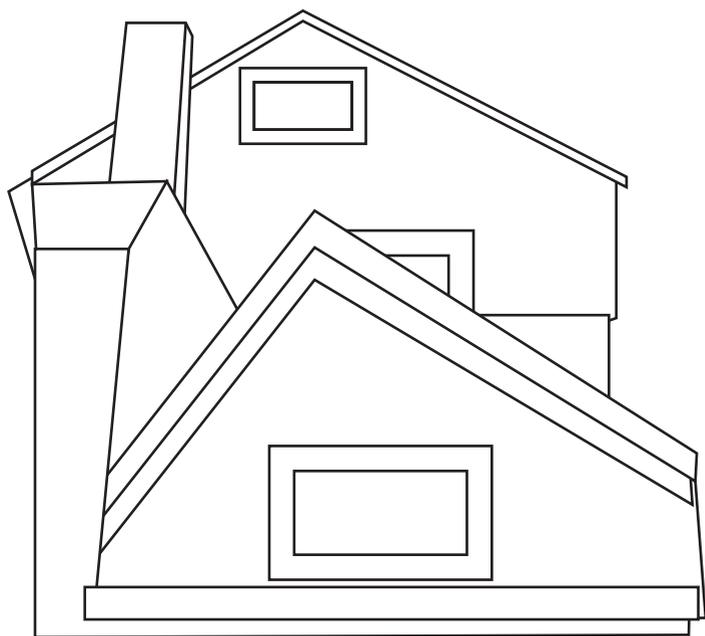
Martin Margiela

Dress made up of different vintage
tea dresses from o artisanal line
spring/summer 2005

Polyester

Courtesy of Maison Martin Margiela

While fashion's adoption of deconstructive strategies is not as theoretically influenced as that of architecture, deconstructed garments with frayed edges, exposed seams, and deliberate holes and slashes began to appear in high fashion in the influential early collections of Comme des Garçons and Yohji Yamamoto, which were shown in Paris around the same time deconstructivist theories were being discussed and debated by architects. Interestingly, "deconstruction" was not a term used by designers to describe their work, but was applied later by fashion writers. Bill Cunningham first applied the term in the March 1990 issue of *Details*, and Amy M. Spindler's 1993 *New York Times* article "Coming Apart" cemented it in the fashion lexicon through her discussion of the lineage and influence of the Japanese designers on a younger generation of Belgians including Martin Margiela and Dries Van Noten. Margiela's work with deconstruction is arguably the most conceptual and complex in fashion, and his method of appropriating and taking apart vintage clothes and reassembling them results in garments that seem completely new.



Gehry Partners

Photograph by Natalie Tepper
Gehry House, Santa Monica,
California

1979

Digital print

Photograph courtesy of Natalie Tepper/arcaid.co.uk

In 1977, Gehry began an ongoing renovation of his family's 1920s two-storey bungalow in Santa Monica, California. He appropriated off-the-shelf industrial materials such as chain-link fencing, corrugated metal and plywood and used them to loosely wrap the north and east façades. The bold volumetric assemblage of the exterior was matched in the interior, where select walls and ceilings were stripped to reveal lathing and/or the house's wood-frame construction.

Eisenman Architects

Project for a garden design,
Parc de la Villette, Paris, France
Presentation model of first scheme
June 1986

Pink, mauve, and gold paint over basswood

Project for a garden design,
Parc de la Villette, Paris, France
Presentation model of second scheme
September 1986

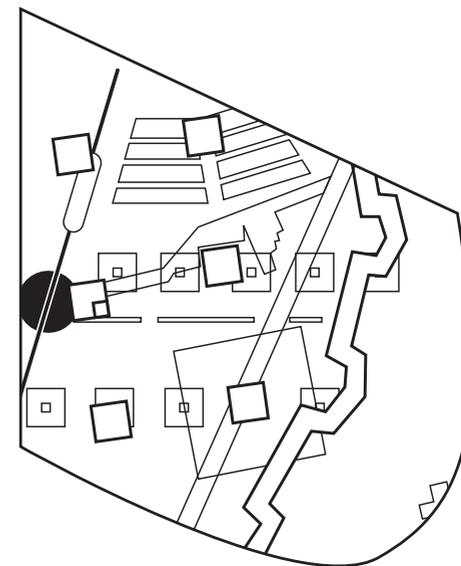
Pink, grey and gold paint over basswood

Presentation drawing for a garden project,
Parc de la Villette, Paris, France
Exploded axonometric
between 30th January and August 1986

Transparent coloured adhesive film with gold paint
and silver adhesive foil

Collection Centre Canadien d'Architecture/
Canadian Centre for Architecture, Montréal
DR 1992:008:001 / DR 1992:008:002 /
DR 1991:0019:140

Peter Eisenman collaborated with philosopher Jacques Derrida on this garden proposal, which they called Chora L Works, for Bernard Tschumi's Parc de la Villette. Eisenman devised a system of superpositions by overlaying the grids of four projects—his own earlier but parallel redevelopment proposal for the Cannaregio section of Venice, Italy (unbuilt, 1978); Tschumi's La Villette; and each of the slaughterhouses that historically occupied the Cannaregio and La Villette sites—to reveal reverberations in scale and in time. Inspired by Plato's description of chora, Derrida proposed a uniquely shaped gilded object that reflected the outline of the site.

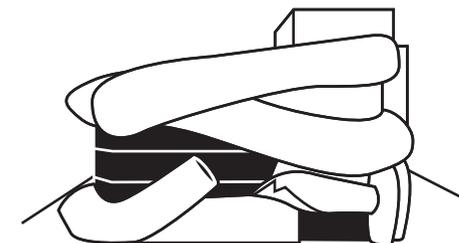


Nigel Coates

New Wing, Royal College of Art,
London (competition design)
2000

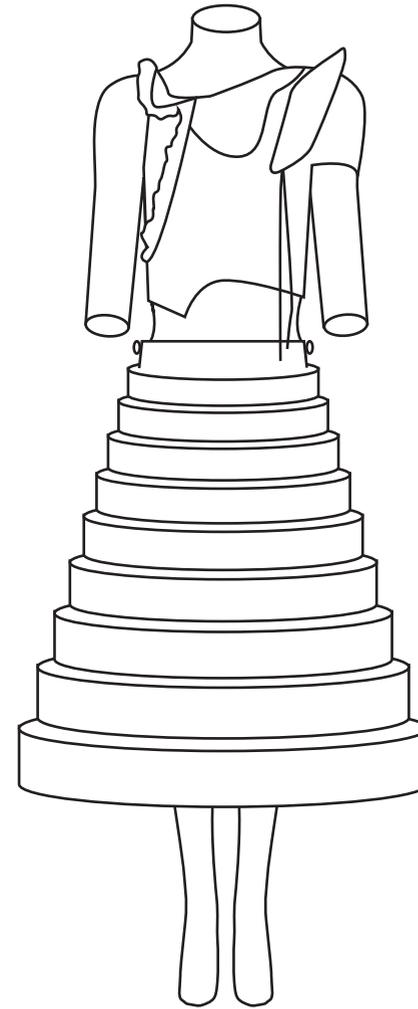
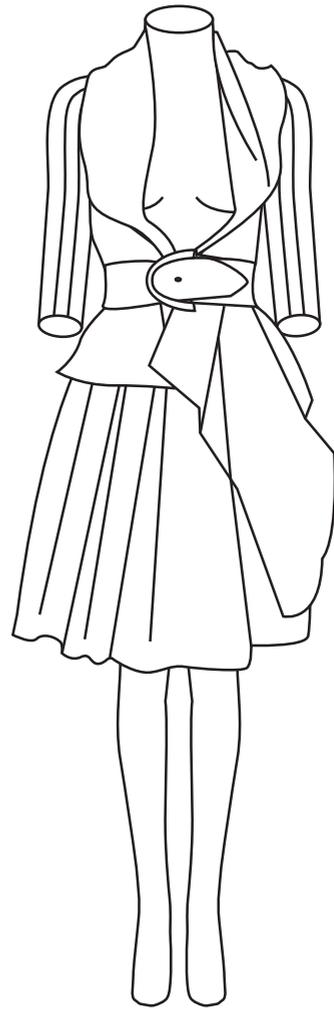
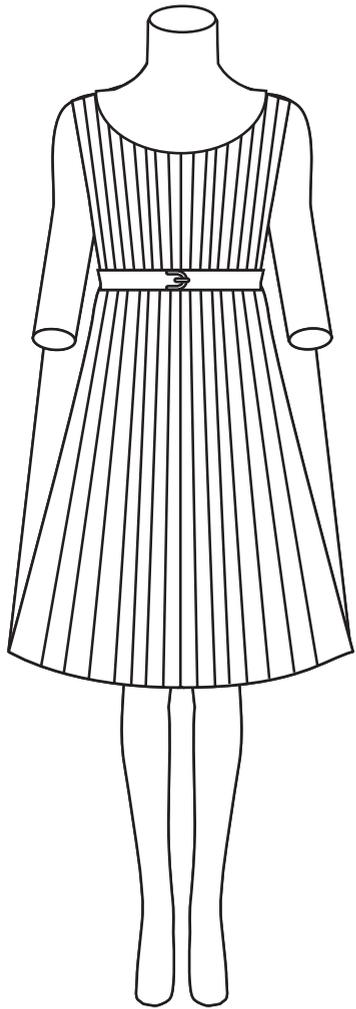
Architectural model: resin and perspex
Courtesy of Nigel Coates

This competition project for a new wing at the Royal College of Art in Kensington Gore plays with the idea for a jacket, a 3-D form that all the students inside would understand. Four such shapes are laid down on top of one another to build up the galleries and studios. The various flat components of a jacket pattern, when sewn up, make complex 3-D curves. It follows that similar shapes applied to construction would make a building with an inherent human quality.



IDENTITY

Both fashion design and architecture have long been used to express ideas of personal, social and cultural identity. However, in recent years practitioners in both disciplines have moved beyond the idea of merely signifying value, status and belonging, to express more complex and provocative issues surrounding notions of identity.



Alexander McQueen

Dress from Widows of Culloden collection
Autumn/Winter 2006-2007
Taffeta

Dress from Widows of Culloden collection
Autumn/Winter 2006-2007
Wool
Courtesy of Alexander McQueen

The fantastical sets for McQueen's runway shows often serve as a foil for his clothing, echoing its architectonic construction. His Widows of Culloden collection includes garments that hearken back to the slashed tartans of his notorious Highland Rape collection (autumn/winter 1995-96). The show was presented inside a simple wooden box containing a large pyramid of glass and steel that models walked around, inside of which appeared the ghostly hologram of Kate Moss wearing one of the collection's key pieces—a new version of McQueen's iconic Oyster dress, which features hundreds of layers of shredded, frilled, and fluted organza.

Hussein Chalayan

Afterwords
2000

Fabric, mahogany, metal, and glass
Collection Musée d'Art Moderne, Grand-Duc Jean
Collection, Luxembourg

Hussein Chalayan and Marcus Tomlinson
Afterwords
2000

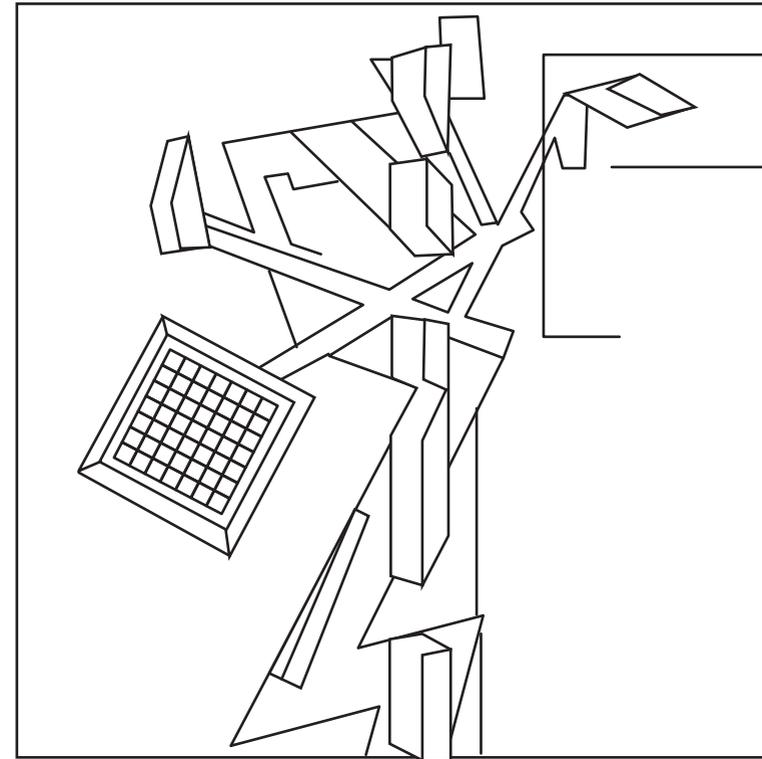
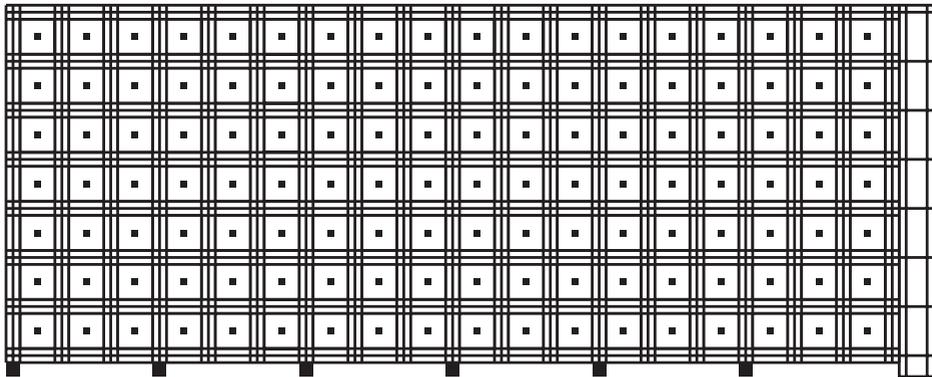
Film
Courtesy of Marcus Tomlinson

Inspired by nature, culture, and technology, Hussein Chalayan's work reveals an ongoing preoccupation with issues related to his experiences as a Turkish Cypriot living abroad and to the wider realms of religion, cultural identity, and migration. *Afterwords* explores the idea of having to flee one's home in times of strife and illustrates the potential precariousness and fragility of both shelter and identity.

Atelier Jean Nouvel

Georges Fessy, photographer
Arab World Institute, Paris
1981-1987
Digital prints
Courtesy of Georges Fessy, Paris

The Arab World Institute was one of French President François Mitterrand's Grand Projet initiatives of the 1980s. The institute, Jean Nouvel's first major architectural project (executed in collaboration with Gilbert Lezènes, Pierre Soria, and Architecture Studio), was commissioned by representatives of nineteen Arab states to foster knowledge of Arab culture in the West. The building's patterned south façade is a contemporary expression of Arab culture and architecture, while the north façade is literally a mirror of Western culture—a glass curtain wall enamelled with images of the Parisian cityscape. The south façade consists of variously sized metal diaphragms set behind a glass wall. The self-adjusting diaphragms or apertures operate like camera lenses; controlled by photoelectric cells, they open and close in response to changing exterior light conditions. The overall effect is that of a moucharaby (traditional Islamic latticework screen that adorns windows, loggias, and balconies whose original purpose was to shield women from view by outsiders), which permits one to observe from inside without being seen. During the day, the apertures are dramatically set off by incoming light, but from the exterior only a subtle and dense pattern is apparent; at night, this relationship reverses.



Daniel Libeskind

Jewish Museum, Berlin

1992

Architectural model showing the underground axes including voids, Holocaust Tower and Garden of Exile; wood

Courtesy of Jewish Museum, Berlin

Daniel Libeskind's design for the Jewish Museum extension in Berlin, completed in 1999, explicitly thematises and integrates the history and experience of the Jews in Germany, and the repercussions of the Holocaust. Libeskind was himself intimately linked:

"When I was invited by the Berlin Senate in 1988 to participate in this competition for the Jewish Museum, I felt that this was not a program I had to invent or a building I had to research, rather one in which I was implicated from the beginning, having lost most of my family in the Holocaust and myself having been born only a few hundred kilometers east of Berlin in Lodz, Poland."

The new extension is connected to the existing Baroque building via underground axial roads. The longest one leads to the Stair of Continuity and to the Museum itself; the second leads to the Garden of Exile and Emigration and the third axis leads to the dead end of the Holocaust Void. The displacement of the spirit is made visible through the straight line of the Void which cuts the ensemble as a whole, connecting the museum exhibition spaces to each other via bridges. The Void is the impenetrable emptiness across which the absence of Berlin's Jewish citizens is made apparent to the visitor.

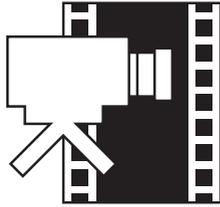
The official name of the project is the "Jewish Museum", but Libeskind called it 'Between the Lines', explaining that it is a project about two lines of thinking, organisation and relationship. One is a straight line, but broken into many fragments; the other is a tortuous line, but continuing indefinitely.

TECTONIC STRATEGIES

WRAPPING

Increasingly, fashion designers and architects are sharing techniques of construction. Architects are looking to fashion and the techniques of dressmaking, such as pleating and draping to achieve more fluid and complex forms out of hard materials, while fashion designers are employing engineering methods such as cantilever and suspension to create elaborate and often architectonic garments using fabric. Much of this transmutation of techniques has been made possible as a direct result of developments in materials technology and design software, which has allowed for significant advances in both disciplines.

Architects have utilised advances in materials technology and digital technology to reinvent what the skin of a building can look like and how it behaves, often blurring the distinction between front, back and side facades, and also the roof. Similarly, fashion designers have pushed the idea of how clothing can wrap the contours of the body, investigating distortion to challenge the prevailing silhouette.



Diller Scofidio + Renfro

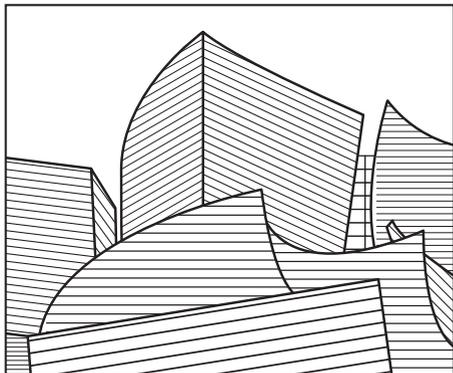
Alice Tully Hall Renovation, New York
2009
Slideshow
Courtesy of Diller Scofidio + Renfro

In the early design stages of this project, the architects presented drawings based on dressmaker's patterns in order to show their clients how the blood-red wood veneer would be cut and seamed to fluidly wrap all of the hall's interior surfaces.

Gehry Partners

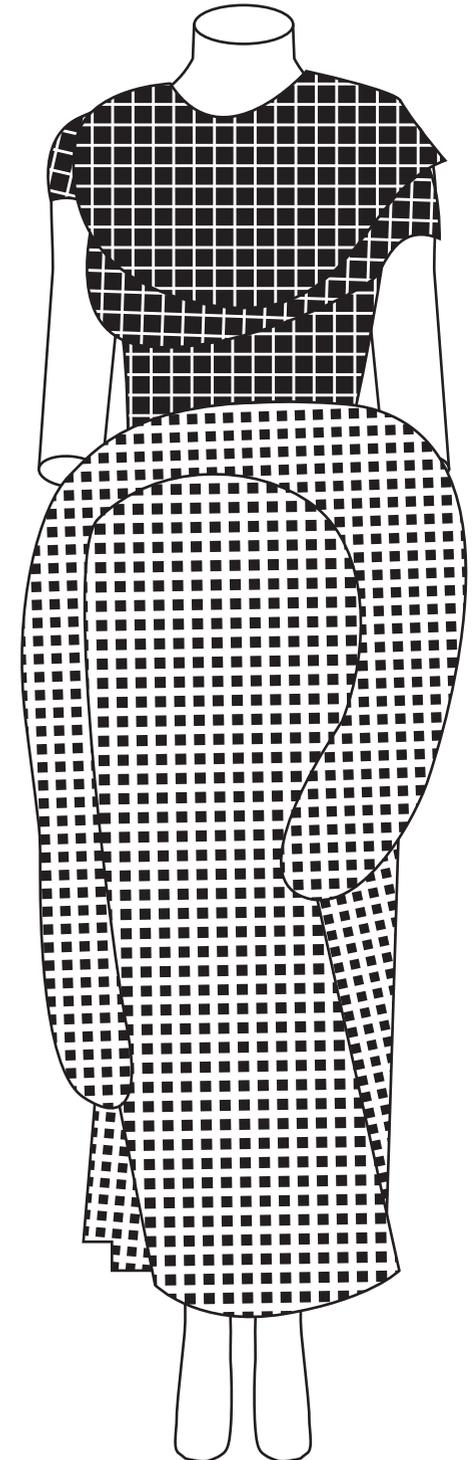
Todd Eberle, photographer
Walt Disney Concert Hall, Los Angeles
2003
Photographs
Courtesy of Todd Eberle and Gagosian Gallery

For the Walt Disney Concert Hall, Gehry wrapped the complex billowing structure with stainless steel to create a shimmering curvaceous building reminiscent of a ship's sails. The architect clad the floors, walls and ceilings of the 2,265-seat auditorium with Douglas fir, creating the sense of being inside a basket or musical instrument. Designed well before the opening of Gehry's groundbreaking building for the Guggenheim Museum in Bilbao (1991-97), Disney Hall marks his adoption of Computer-Aided Three-dimensional Interactive Application (CATIA), a software program originally developed for the aerospace industry. By applying software like CATIA to architectural design, Gehry has been able to transform his fluid sketches and sculptural paper models into lyrical and complex forms.



Comme des Garçons

Ensembles from Body Meets Dress,
Dress Meets Body collection
Spring/Summer 1997
Stretch nylon-urethane fabric; down pad
Courtesy of Comme des Garçons



Heatherwick Studio

East Beach Café, Littlehampton

2007

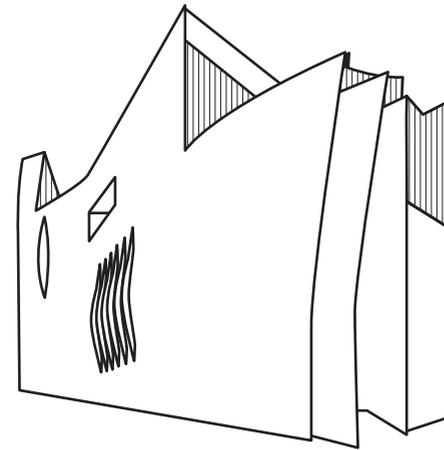
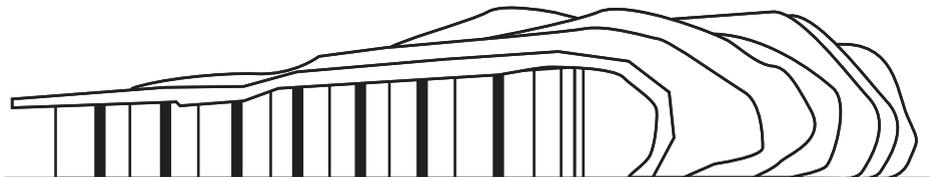
Architectural model: birchwood ply

Structural Engineer: Adams Kara Taylor

Steelwork: Littlehampton Welding

Courtesy of Heatherwick Studio

The East Beach Café was built to replace a seafront kiosk in Littlehampton, a traditional seaside town on England's south coast. Anxious to avoid using flat façades, which would only act to enforce the building's long, thin footprint, Heatherwick Studio sliced the building diagonally into ribbons which wrap up and over the building. This shell provides both the building's skin and its structure, forming a layered protective shell, open to the sea in front. Rather than use a traditional structural method in which one part rests on another, the primary structure of the building is a 'monocoque' steel shell in which all parts act together, similar to the hull of a ship. Heatherwick Studio opted for naturally finished materials that respond well to the local environment. The mild steel shell that forms the outer skin will rust and gain character as it ages, while an oil-based coating applied after the surface has 'weathered' will help to prolong the life of the building.



Office dA

House in New England

2002-2003

Model of façade detail; rubber, copper, wood, honeycomb cardboard, and metal

Courtesy of Office dA

John Horner, Photographer
House in New England

2003

Digital print

Courtesy of John Horner Photography

Monica Ponce de Leon and Nader Tehrani, who founded Office dA in 1991, conduct elaborate investigations into the properties of various materials in order to articulate a building's skin. Tectonic strategies such as weaving, folding, draping, or wrapping are executed using substances like rubber, brick, or wood, resulting in inventive fabrication techniques, the details of which are worked out in physical models and drawings and digital renderings. The spatial volume of this house features several distinct exterior skins. Two of its façades are clad in cedar siding, a material that relates to the vernacular architecture of the region, while another comprises a grid of windows that provides a view of the sylvan surroundings. A snug rubber skin, much like a wetsuit or a custom-fitted couture garment, wraps the roof, chimney, and remaining façade, where it features gill-like slits that expose the windows beneath.

Jakob + MacFarlane

City of Fashion and Design, Paris

2005-2008

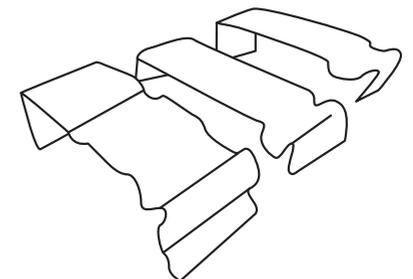
Architectural model: Wood, stereolithography

Collection FRAC Centre, Orléans, France

Digital renderings

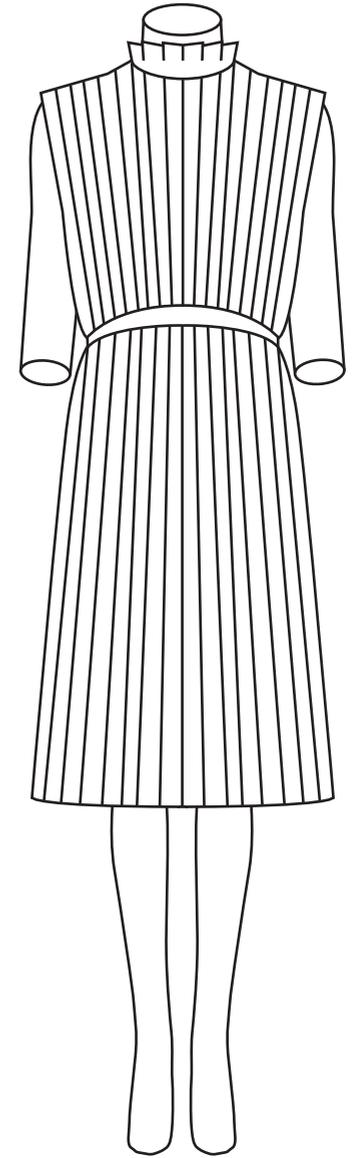
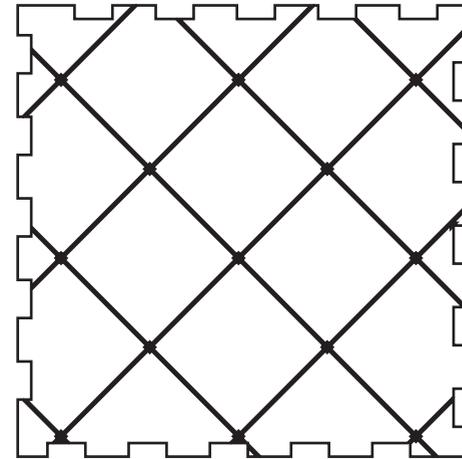
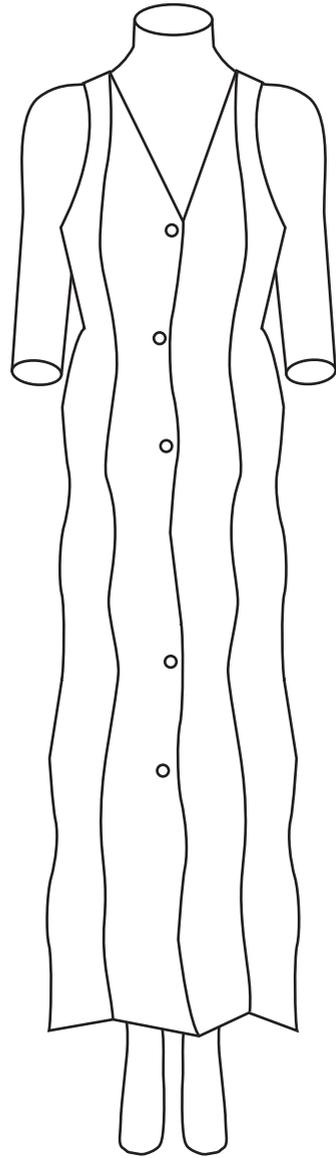
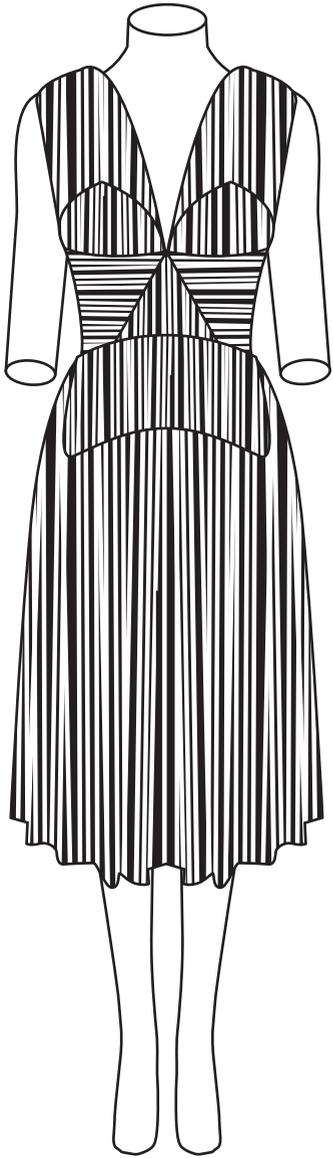
Courtesy of Jakob + MacFarlane

Jakob + MacFarlane's competition-winning entry for City of Fashion and Design—a major cultural center for fashion and design located on Paris's Quai d'Austerlitz—retains the site's original long and thin concrete building running along the Seine River. Originally built in 1907 as a barge depot, the structure is wrapped in a new external skin of glass and steel that at once protects the existing building and forms a new architectural layer containing circulation spaces, a new top floor, and a roofscape.



PLEATING

Fashion designers have long used the traditional dressmaker's technique of pleating to create unusual surfaces and to amplify volume. More recently fashion designers such as Miyake Issey have broken new ground by introducing industrial pleating techniques such as that used to create his well known *Pleats Please* line. The sculptural forms and surface manipulation of these pleated garments have also provided inspiration to a number of architects.



Isabel Toledo

Pleated dress
Autumn/Winter 2005-2006
Silk jersey
Courtesy of Isabel Toledo

Nanni Strada

"Fiamma" Dresses from Pli-Pla Collection
1993
Linen; one shown flat
Courtesy of Nanni Strada Design Studio, Milan

Nanni Strada

"Matrix" pleated scarf
1995
Iridescent silk gauze
Courtesy of Nanni Strada Design Studio, Milan

Alber Elbaz / Lanvin

Dress from collection
Autumn/Winter 2003-2004
Wool gabardine and satin ribbon
Courtesy of Lanvin

Gehry Partners

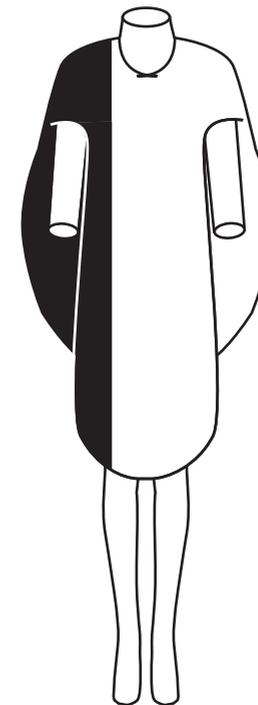
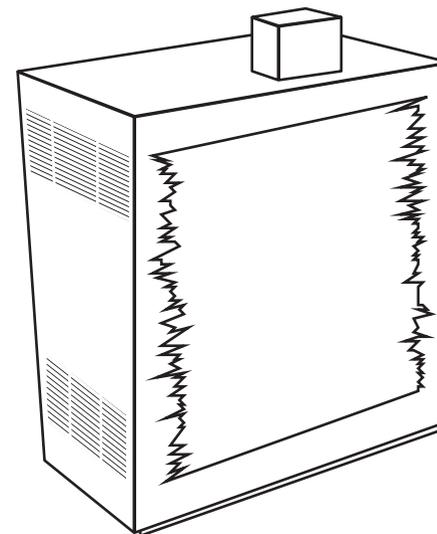
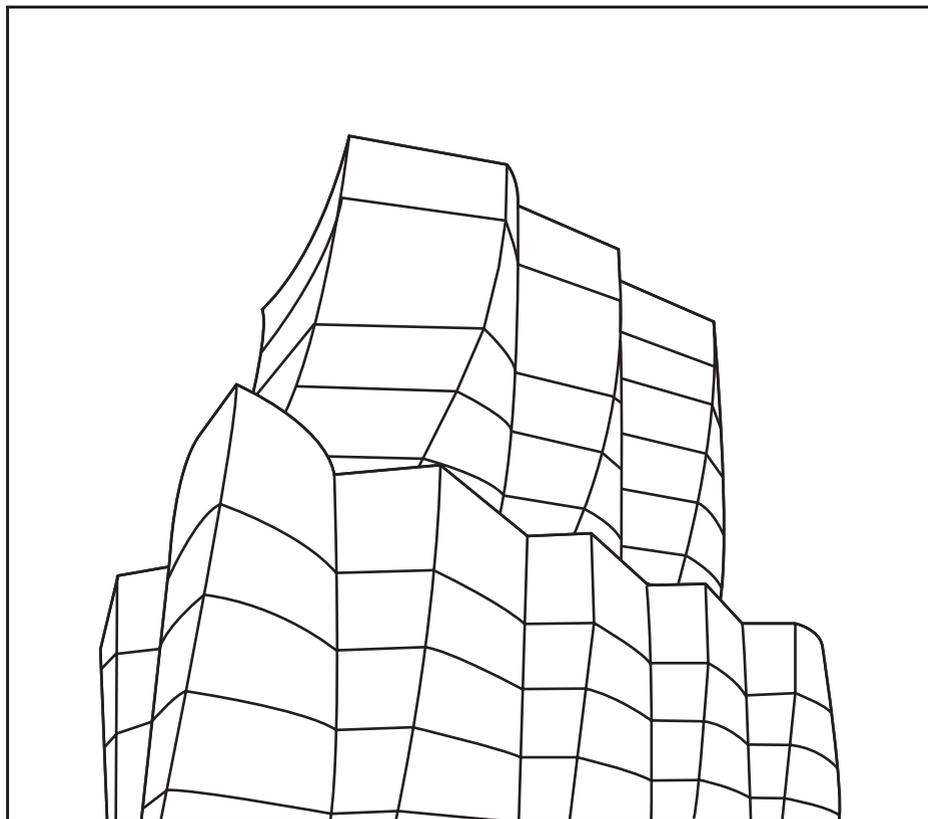
Albert Vecerka, photographer
IAC Building, New York

Digital prints
Photographs © Albert Vecerka/Esto

The IAC building is Frank Gehry's first building to be completed in New York. The commission was for the headquarters of the internet company IAC. Gehry worked in close collaboration with its Chairman Barry Diller, who asked that the design should reflect a sailing ship in its location alongside the Hudson River in New York. The challenge was to make the dynamic and free flowing shapes out of a building constructed entirely of glass.

Each piece of glass was bent through a process of cold warping, which was done onsite to fit the specific curvature of each panel. The building's white colour was achieved by the addition of tiny white enamel dots to each sheet of glass to reflect light and reduce glare. The dots were positioned below waist height and above head height enabling employees to be able to see out but also achieving a consistent colour, which changes with the weather conditions outside.

The building's billowing shape required a more flexible material than traditional steel to make up the building's skeleton. The supporting concrete superstructure columns are cast so that they are tilted at an angle to enable the building's dynamic glass façade to take shape.



Herzog & de Meuron

Todd Eberle, photographer
Central Signal Box, Basel, Switzerland
2000

Photograph
Courtesy of Todd Eberle and Gagosian Gallery

Central Signal Box, Basel, Switzerland
Competition 1994, project 1995,
realisation 1998-1999
Architectural model: copper and wood
Collection Centre Pompidou, Paris
Musée national d'art moderne / Centre de création
industrielle

Jacques Herzog and Pierre de Meuron are known for their innovative wrapping and cladding of buildings as well as their attention to material, pattern and surface manipulation. Herzog's personal interest in fashion—in particular, the qualities of pattern and texture—derives in part from growing up surrounded by the textiles of his mother's tailoring business. The Central Signal Box is wrapped in thin copper strips that twist and bend like fine pleats, serving to 'dematerialise' and soften the monolithic structure.

Miyake Issey

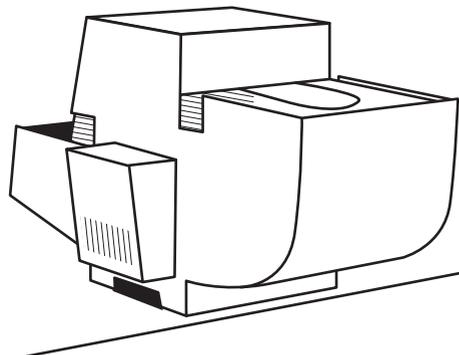
Rhythm Pleats
Autumn/Winter 1989
Polyester

© MIYAKE DESIGN STUDIO

Miyake Issey is renowned for innovation in both textile and clothing design. His technological explorations into clothes-making and the resulting organic sculptural creations have left an indelible mark on the design industry. Miyake pioneered a pleating process by which a piece of polyester is cut and sewn in the shape of a given garment, then sandwiched and pleated between layers of paper and fed into a heat-press machine. The "memory" of the fabric holds the pleats and, when the paper is cut open, the finished garment is revealed. This technology, called "Garment Pleating," is the foundation for the Pleats Please Issey Miyake line, and earlier variations in the process resulted in Rhythm Pleats, shown here. Miyake's pleated garments often take on architectonic shapes when worn.

PRINTING

Taking their cue directly from fashion, particularly the qualities of pattern and texture, some architects have chosen to wrap buildings in exuberant printed motifs, often to lend a narrative element to the structure, reflecting its identity or the context of its use in some way. Although the idea of incorporating printed textiles into clothing designs is certainly not new, some recent applications of printing in fashion have introduced fresh and unconventional ideas, particularly those that draw from the grammar of ornament or the language of architecture.



Neutelings Riedijk Architecten

Concert Hall, Bruges, Belgium,
(competition design)
1998

Architectural model: wood and plastic
Collection of the Netherlands Architecture Institute,
Rotterdam

For this competition entry for a new concert hall in Bruges, the architects proposed a sculptural building wrapped in a delicate skin of sand-coloured concrete punctured with a leaf-based pattern and backed with bronze panelling. The skin references the filigree work by stonemasons on neighbouring medieval cathedrals as well as the city's history as an important centre of lace-making.



Dries Van Noten

Coat
Autumn/Winter 1997
Print on wool

Top and Skirt
Autumn/Winter 1997-1998
Wool, cashmere, print on silk

Gold Jacket and Red and Gold Print Skirt
Autumn/Winter 1997-1998
Silk, acetate, rayon
Courtesy of Dries Van Noten

Lush colour, rich texture, and printed motifs and patterns are the hallmarks of Dries Van Noten's work. While Van Noten retains certain shapes, his prints, textures, and colours evolve from season to season. His designs reference textile history, artisanal craft techniques, and the colours and patterns of fabric from India, Afghanistan, Morocco, Romania, Turkey, and Thailand. Van Noten often overprints graphic motifs onto patterned fabric and juxtaposes prints of different scales, shades, and textures within the same ensemble.

6a Architects / Eley Kishimoto

Hairywood Tower for The Architecture
Foundation, Old Street, London
2006
Architectural model: timber, card and plywood
Courtesy 6a Architects

Hairywood was commissioned by the Architecture Foundation to launch its new gallery on Old Street. Designed by 6a in collaboration with Eley Kishimoto, Hairywood created a temporary public space and landmark for four months in the summer of 2005. The small space at the top, lined with printed timber and upholstery, is like a fragment of private space open to the street. The outside is clad with plywood, laser cut with Eley Kishimoto's pattern of Rapunzel's hair allowing dappled light into the interior. At night, the tower is lit from within and glows like a lantern.

6a was inspired by Jacques Tati's film, *Les Vacances de Monsieur Hulot* (1958) that celebrates the shared pleasure of summer holidays on the beach. Each day starts with the heroine Martine opening her hotel bedroom window and gazing out to sea. Tati built an immaculate bay window held high above the ground on a wooden tower to create this juxtaposition of interior intimacy with the public beach.



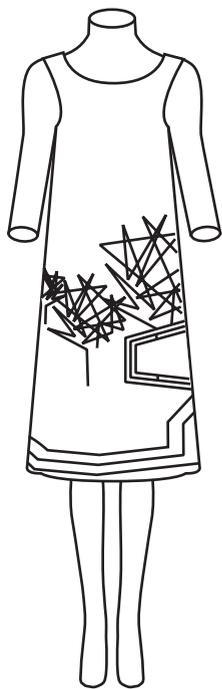
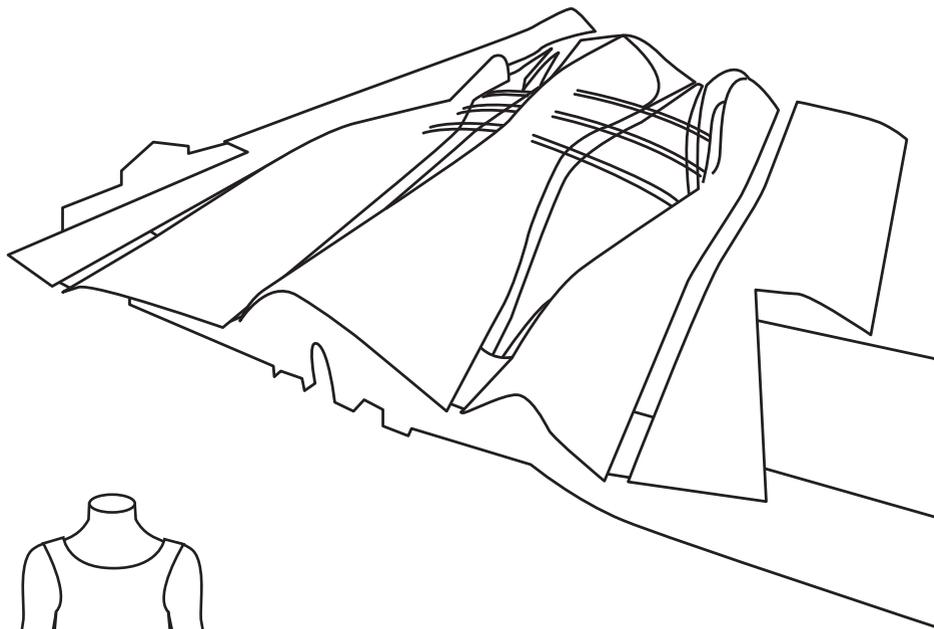
Eley Kishimoto

Rapunzel Dress from Dark Wood Wander
collection
Autumn/Winter 2005-2006
Silk

Fire Dress from Dark Wood Wander
collection
Autumn/Winter 2005-2006
Silk
Courtesy of Eley Kishimoto

Mark Eley and Wakako Kishimoto are renowned for their bold graphic prints. Their design partnership was formed in 1992 and quickly gained a reputation for incisive and intelligent print design, creating fabrics for, among others, Hussein Chalayan, Alexander McQueen, Louis Vuitton and Marc Jacobs. In 1995 Eley Kishimoto launched their own ready to wear collection featuring their distinctive graphic figuring, strong repetition and oversized motifs.

The pattern used on Hairywood, their collaboration with 6a Architects, uses the print 'Rapunzel' from 'Dark Wood Wander', a collection inspired by a story of a princess trapped in a tower, who escapes and flees through a dark wood only to find her own fairy tale castle in flames.



Enric Miralles Benedetta Tagliabue / EMBT Arquitectes

Ceramic tiles used for roof of
Santa Caterina Market, Barcelona
1997-2005
Wood and ceramic
Ceramics manufactured by Ceràmiques Cumella

Model showing organic shape of roof
Papier-mâché

Roof Studies
Collage
Courtesy of EMBT Arquitectes

Duccio Malagamba, photographer
2005
Digital print
Courtesy of Duccio Malagamba-fotografia de
arquitectura S.L.

Hussein Chalayan

Architectural Print Dresses
from Before Minus Now collection
Spring/Summer 2000
Cotton
Courtesy of Hussein Chalayan

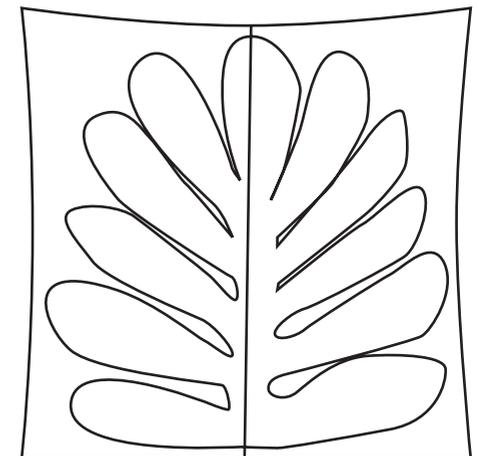
Inspired by organic forms such as leaves and plants, EMBT also uses the history of a site as a generator of architectural form. For Santa Caterina Market, the architects renovated a dilapidated nineteenth-century market hall located in the Gothic Quarter of Barcelona. Archeological remains of a Roman necropolis, discovered during excavations for the new building, led EMBT to recast its plans for the hall, which itself was built on the site of the medieval Convent of Santa Caterina. To reveal traces of the site's complex history, the architects kept three exterior masonry walls of the 1845 market structure and preserved the Roman ruins for public display. EMBT believes that construction and destruction are mirror images of the same activity and should always work together.

The primary feature of the market is the dramatic, brightly coloured tiled surface that drapes in soft undulating folds over the market's elaborate skeletal roof structure like an intricately printed skirt. Thousands of hexagonal tiles in sixty-seven colours—samples of which are shown here—create a pattern abstracted from images of the fruits and vegetables sold in the market. The roof's folds were conceived to direct flow and movement from the main street into the market at the heart of the neighbourhood and the market's colourful printed skin brings much needed vitality to the historic quarter.

Herzog & de Meuron

Margherita Spiluttini, photographer
Ricola Europe SA, Production and Storage
Building, Mulhouse-Brunstatt, France
1993
Digital prints
Courtesy of Margherita Spiluttini

In the printed skin of the Ricola building, the architects seem to have taken their cue directly from textiles and fashion. Ricola's façade comprises translucent panels printed with a repeating plant motif based on a photograph by Karl Blossfeldt that references the building's corporate identity as the manufacturer of herbal lozenges. In descriptions of the building, Herzog & de Meuron explicitly refer to the façade's relationship to textiles: "The effect the panels have on the interior can be compared to that of a curtain—textile-like—that creates a relationship to the site's trees and shrubs."

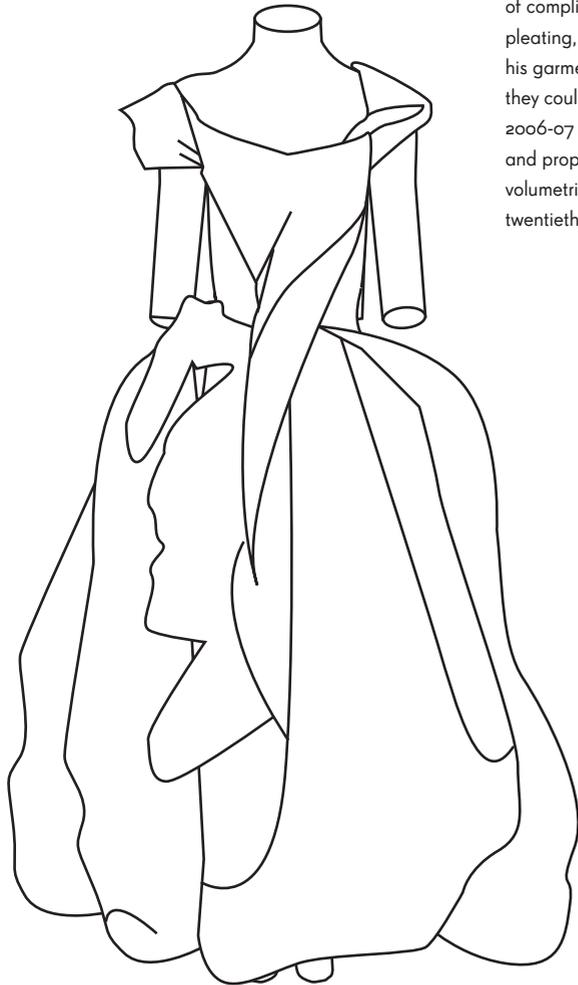


DRAPIING

Architects have translated the drapery folds of fashion and textiles into both fluid and rigid building skins, often taking a hard material such as metal and distorting and manipulating it into gentle curtain-like folds. Similarly, fashion designers have utilised the soft technique of modelling, dressmaking on a mannequin form, to create drapery that is almost stiff in its sculptural form.

Vivienne Westwood

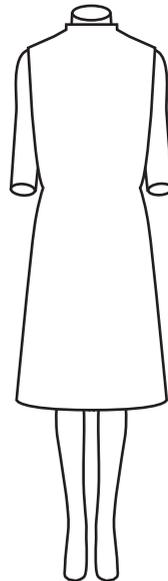
Brown Duchesse Satin Bird of Paradise
Dress from Propaganda collection
Autumn/Winter 2005
Silk, double duchesse satin
Courtesy of Vivienne Westwood



Alber Elbaz / Lanvin

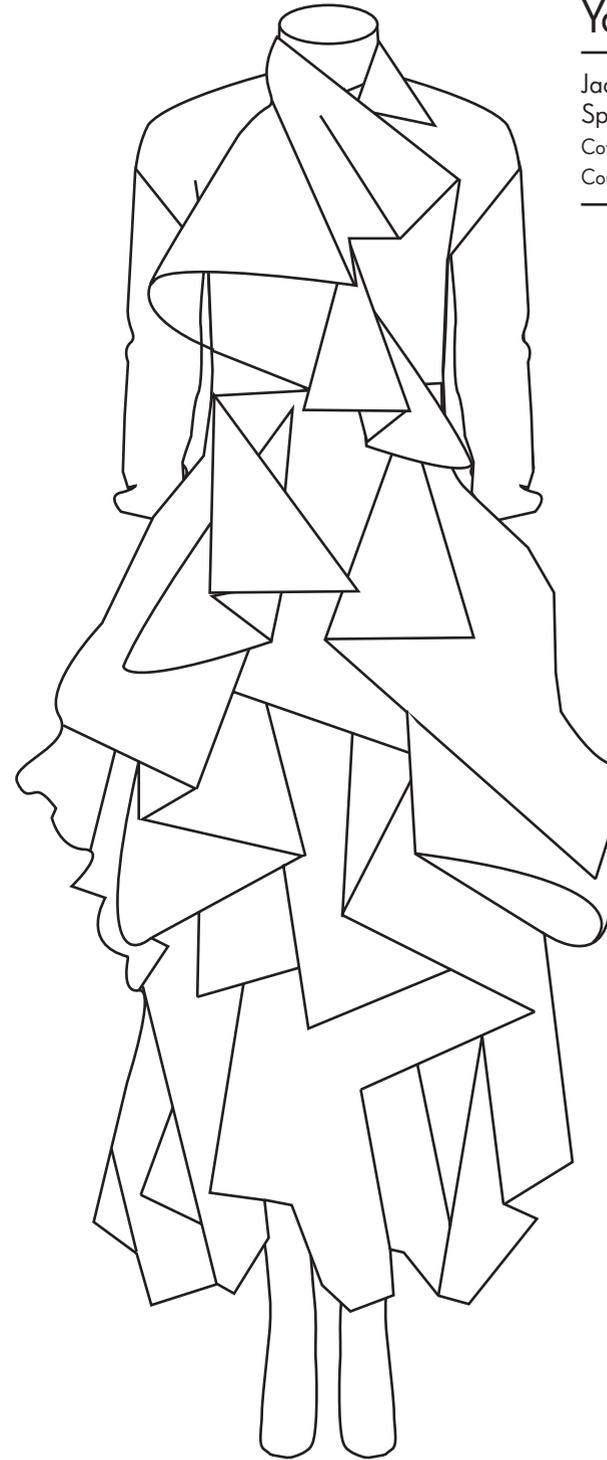
Dress from collection
Autumn/Winter 2006-2007
Washed duchesse satin
Courtesy of Lanvin

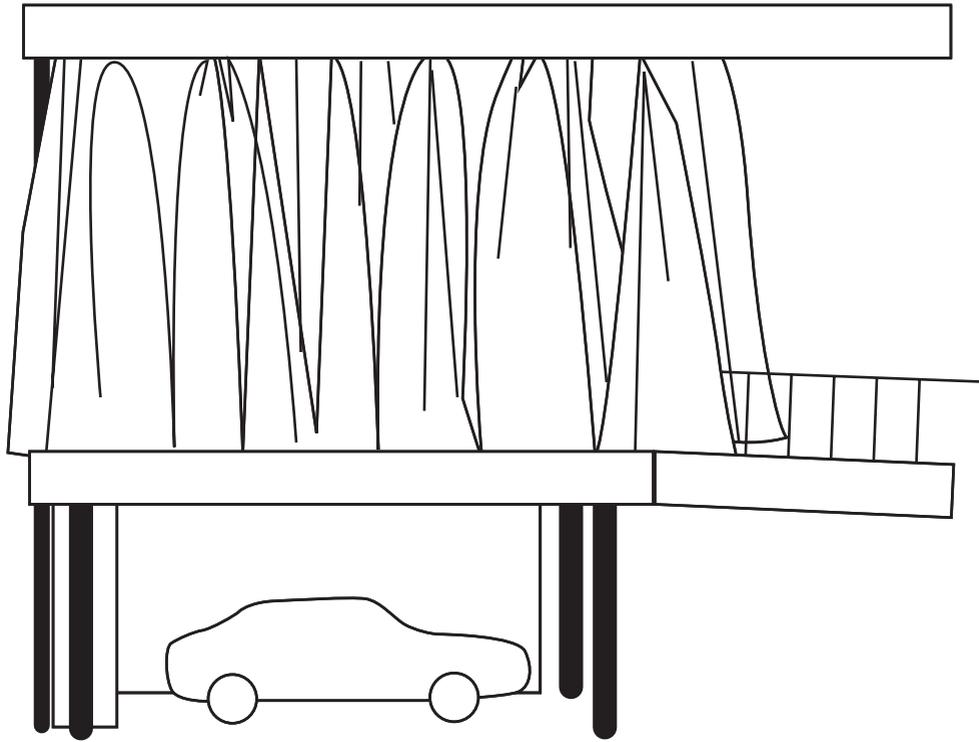
Alber Elbaz's garments are characterised by complexity, precision, and attention to detail. Since being appointed creative director of Lanvin in 2001, Elbaz has modernised the house's repertoire, designing garments in classic materials such as satin ribbon, Chantilly lace, and fine silk and taffeta and contemporising them with raw edges, exposed zippers, and ribbed jersey trim. Elbaz is known for his mastery of complicated technical challenges such as fluting, pleating, and seamless draping. It has been said that his garments are so well constructed and finished that they could be worn inside out. For his autumn/winter 2006-07 collection, the designer focused on shape and proportion, presenting garments with exaggerated volumetric forms that pay homage to the work of twentieth-century design icon Cristobal Balenciaga.



Yohji Yamamoto

Jacket and skirt from collection
Spring/Summer 2006
Cotton
Courtesy of Yohji Yamamoto





Shigeru Ban

Curtain Wall House
(Case Study House 7), Tokyo

1995

Architectural model: wood, cardboard, fabric

Collection Centre Pompidou, Paris

Musée national d'art moderne / Centre de création
industrielle

Playing on the idea of a glass curtain-wall structural system, Ban used the unexpected material of fabric for his Curtain Wall House, transforming conventional drapery into the exterior of the building. An immense two-storey fabric curtain, working in tandem with an inner series of sliding glass doors, wraps two sides of the house and, when drawn shut, provides protection from the elements and a cocoon-like sense of privacy.

Heatherwick Studio

Temple

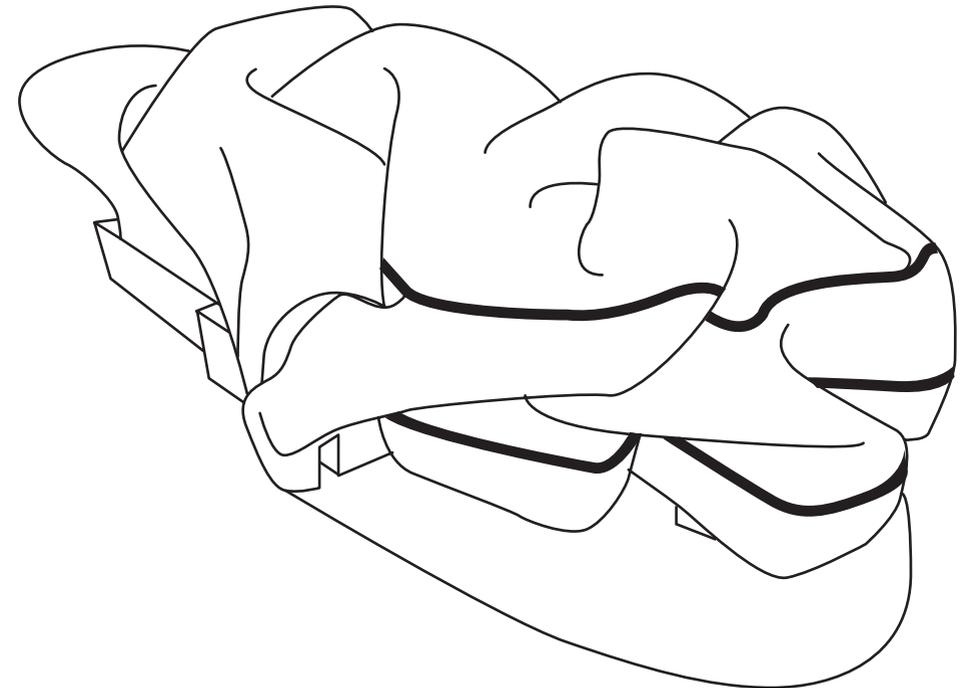
2001

Architectural model: birchwood ply

Courtesy of Heatherwick Studio

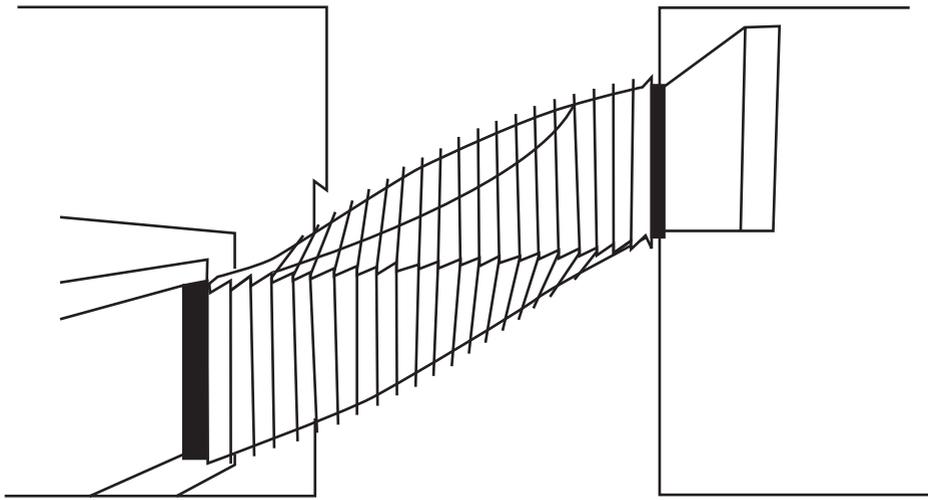
Yet to be built, the Temple is a project, in development with the Buddhist Shingon-Shu sect, in Shiroyama in Southern Japan, which will also be a depository for cremated remains.

Constructed from timber and glass, the building is made in layers, each the height of a step, built up into a folded form, which came from extensive experimentation with different fabrics and which recalls the ceremonial cloth that the Buddha sits on. As part of the development process, Heatherwick teased a piece of fabric into shape and scanned it using equipment from a nearby hospital in order to create the physical model shown here.



FOLDING

Since the early 1990s, folding has been used by architects as a device to create greater visual interest through dramatic effects of light and shadow on a building's exterior surface and to manipulate the volumetric forms of the interior. In fashion, the fold is being used in increasingly complex ways to give both structure and form to the construction of garments.



Wilkinson Eyre Architects

Royal Ballet School: Bridge of Aspiration
2003

Architectural model: perspex and acrylic
Courtesy of Wilkinson Eyre Architects; Built by Flic
Models with Wilkinson Eyre for the 2004 Venice
Architecture Biennale

Nick Wood, photographer

Digital print
Courtesy of Nick Wood

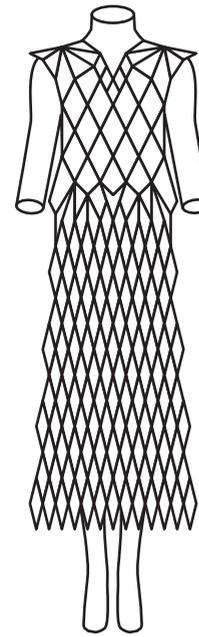
The Bridge of Aspiration spans thirty feet, four floors above Floral Street in London's Covent Garden neighbourhood, to connect the Royal Ballet School and Royal Opera House. A link between studios and classrooms and the stage, the lightweight semi-transparent enclosed structure appears to stretch like an expanding accordion. Because the openings in each building are not directly aligned with each other in elevation or laterally, the architects offered a graceful solution: a sinuous aluminum spine supports the bridge's sleeve-like enclosure, pleated with twenty-three square aluminum portals and glazed intervals. Each portal rotates four degrees from its neighboring one and shifts slightly to accommodate the skewed alignment. Achieving a quarter-rotation overall, the twisting concertina-like form appears frozen in motion and evokes the grace and fluidity of dance.



Comme des Garçons

Dresses from Clustering Beauty collection
Spring/Summer 1998

Cotton lawn
Courtesy of Comme des Garçons

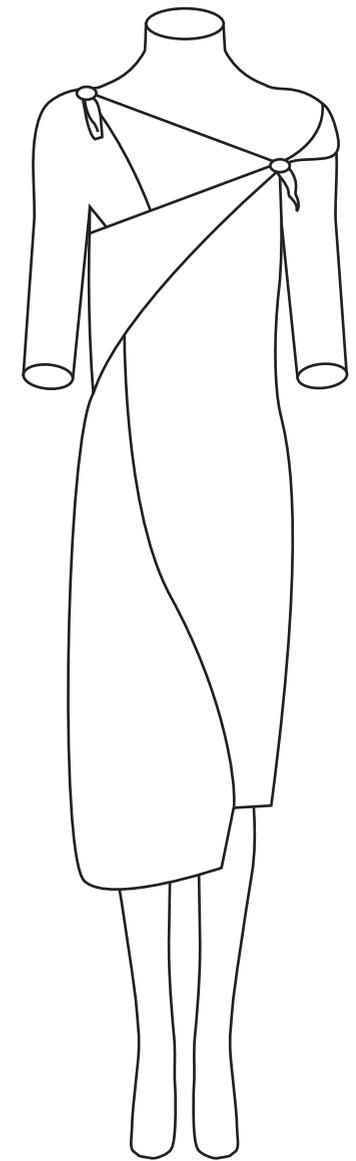


Yoshiki Hishinuma

Dress from Bellows collection,
Spring/Summer 2000

Polyester
Courtesy of Yoshiki Hishinuma Co., Ltd.

Hishinuma combines new technology with traditional Japanese techniques such as shibori or tie-dyeing to develop textiles with effects like pleating, puckering, and crinkling that provide texture and volume. He most often works with synthetic fabrics such as polyester, Lycra, and synthetic leather, though he has recently started to develop fabrics that incorporate natural fibres. Hishinuma's runway presentations are extravagant productions that feature a wide range of different looks and styles. Instead of presenting a tightly edited collection, the designer may show as many as one hundred different garments, rather like a series of collections within one presentation. The designer's Bellows Dress collection illustrates his investigation of the properties of textiles to give volume and form to garments. He used fabric with origami-like folds to create a honeycomb effect that allows each dress to expand when occupied or manipulated by the wearer.



Nanni Strada

Torchon dresses, Travel Garment
Spring/Summer 1986

Creased linen; one shown twisted
Courtesy of Nanni Strada Design Studio, Milan

Jakob + MacFarlane

Puzzle House (project)

1997

Architectural model: cardboard, paper, and wood

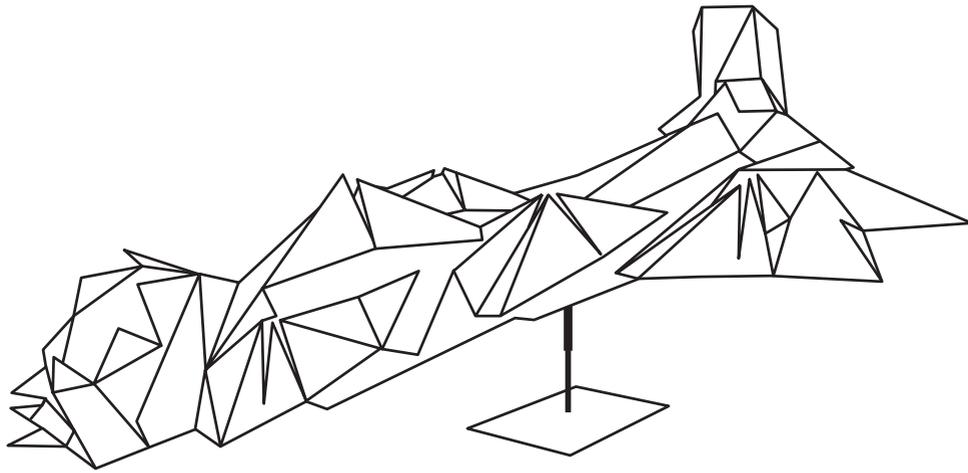
Collection Centre Pompidou, Paris

Musée national d'art moderne / Centre de création industrielle

Computer animation

Courtesy of Jakob + MacFarlane

Brendan MacFarlane and Dominique Jakob's work is characterised by an ongoing exploration of the relationship of a building to its environment and of individual rooms to a building. A number of projects investigate the potential permutations of a building's exterior cladding. In Puzzle House, a competition design, the project's main elements—the house, a central courtyard, landscape, and access roads—interlock like pieces of a jigsaw puzzle. Rather than featuring private gardens, the architects envisioned a continuous landscape surface shared by neighbouring houses. The landscape fabric folds over and encloses the exterior walls and roof of the house, situating the building nearly seamlessly within its environment.



Jakob + MacFarlane

House H, (project)

2002

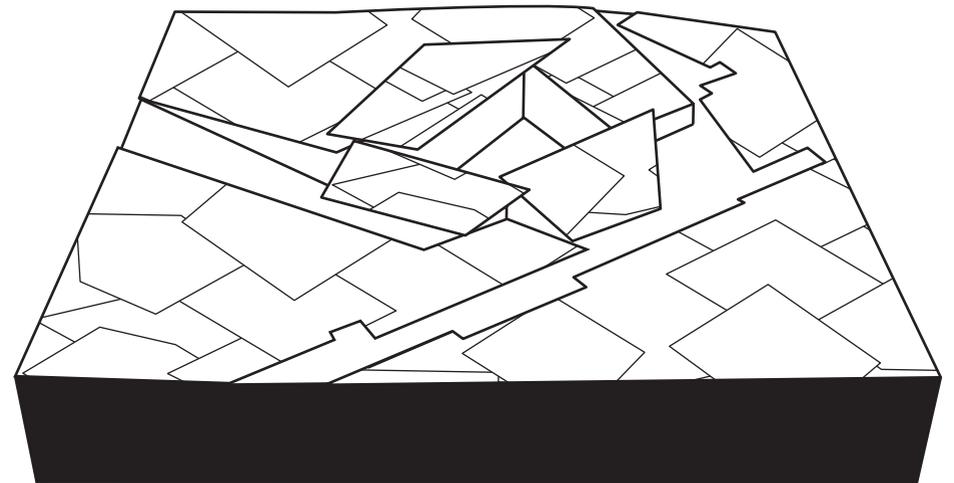
Architectural model: fibreglass, steel

Collection FRAC Centre, Orléans, France

Computer animation

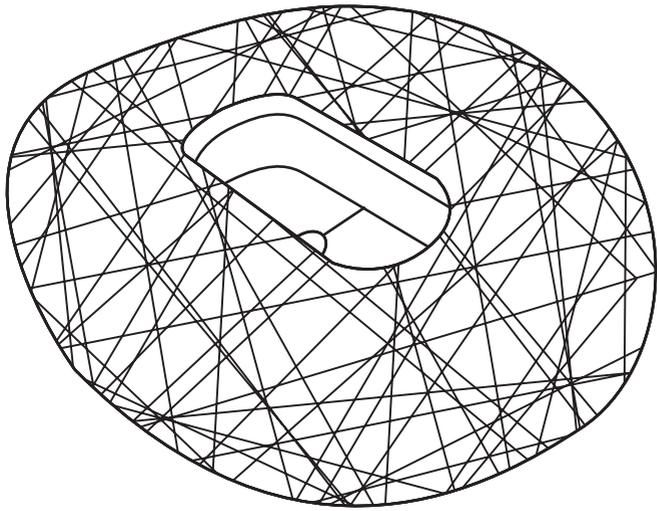
Courtesy of Jakob + MacFarlane

House H, an unbuilt live/work project, consists of a series of triangulated translucent plastic panels that zip together to enclose the building's interior spaces and unzip to open rooms to the outdoors. The irregular faceted form of the building blurs conventional divisions between walls and ceilings as its synthetic-landscape roof blurs structure with surroundings.



WEAVING

The textile technique of weaving has been adopted by architecture to connect the spatial volumes of buildings, create complex interlaced interior spaces, and craft unconventional surfaces. Fashion designers are responding by using weave in increasingly architectonic ways, lacing, knitting and plaiting warp and weft together in unorthodox combinations.



Herzog & de Meuron

Iwan Baan, photographer
Panoramic View of National Stadium,
The Main Stadium for the 2008 Olympic
Games, Beijing, China
2008

Digital print
Engineering and Sports Architecture: China
Architectural Design & Research Group, Beijing; Ove
Arup & Partners Hong Kong Ltd.; Arup Sport, London
Artistic Advisor: Ai Weiwei, Beijing
Photographs © Iwan Baan, Amsterdam

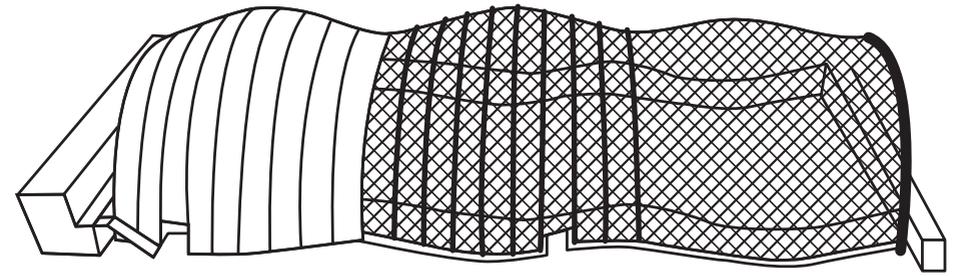
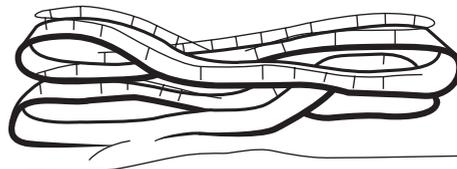
The basket-weave of steel that forms the National Stadium is at once façade and load-bearing structure, skin and bones. The structural elements mutually support each other—like a bird's nest of interwoven twigs—and converge into a spatial grid-like formation, in which façades, stairs, bowl structure, and the roof are integrated.

Foreign Office Architects

Virtual House (unbuilt)
1997
Architectural model: painted foam and acrylic

Virtual House (unbuilt)
1997
Digital renderings
Courtesy of Foreign Office Architects, London

FOA's theoretical project Virtual House was commissioned for a competition that asked architects to explore the idea of the virtual through the program of a house. Imagining an artificial ground visually characterized by camouflage, the house is adaptable to any setting. The ribbon-like structural band can bend and change direction, shifting from a lining to a wrapping. Rooms are formed and separated by double-sided, double-use bands; each composite band can combine with others, creating a more complex organization of rooms unfolding three-dimensionally, theoretically ad infinitum.



Shigeru Ban

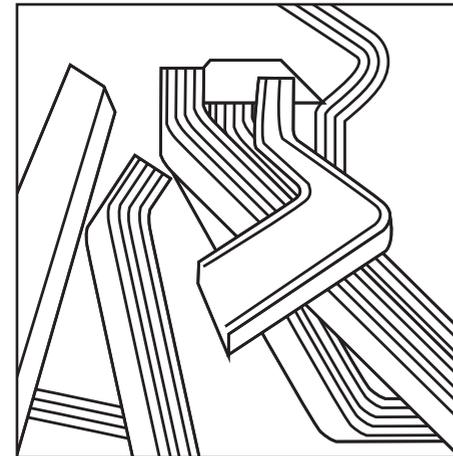
Japan Pavilion for Expo 2000, Hannover,
Germany
1997-2000
Architectural model: carton board, paper, plastic
Courtesy of Shigeru Ban Architects, Tokyo

Responding to Expo 2000's theme of sustainable development, Ban designed a recycled paper tube framework, covered with a skin of fiberglass-reinforced paper.

Zaha Hadid Architects

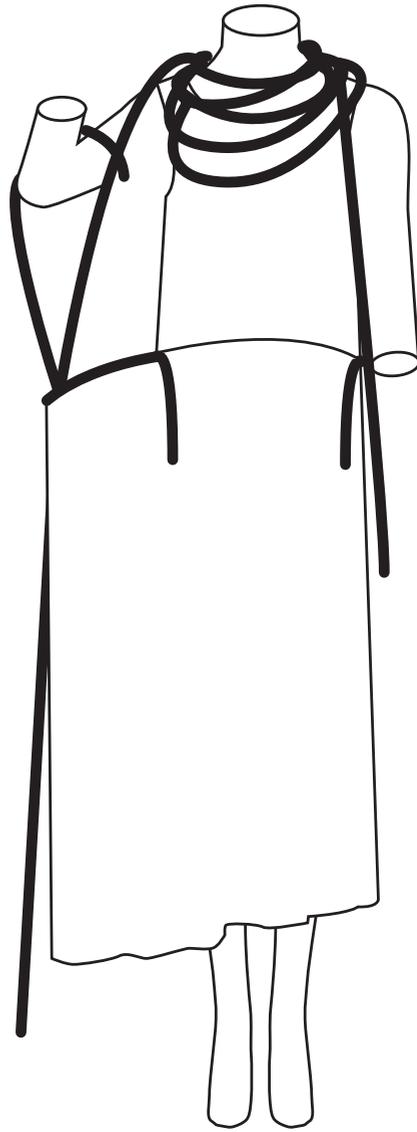
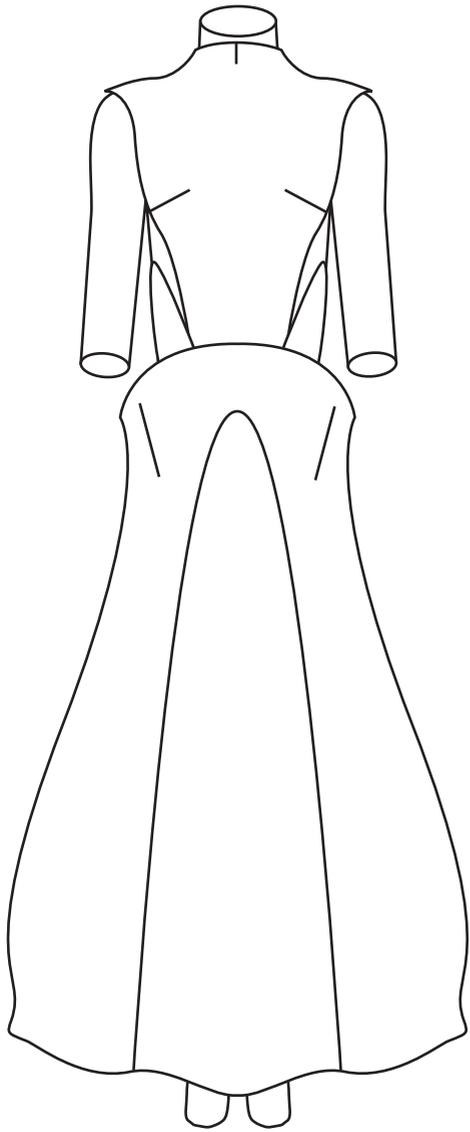
MAXXI: National Museum for the 21st
Century Arts, Rome
1997-2009
Architectural relief model: white cardboard, foamcore
Courtesy of Zaha Hadid Architects, London

Hadid's project for MAXXI, designed in collaboration with Patrick Schumacher following an international competition, is a low-slung composition of interwoven tendrils. It embodies a sense of sinuous and fluid movement. Hadid likened MAXXI to an "urban graft" or a second skin that knits together the L-shaped site with its former army barracks, overlaps circulation patterns with those of the city, and aligns with the urban grid. The building's organization and circulation follow the drift of its gently scrolling forms; it becomes a porous immersive field in which one moves experientially through the galleries rather than in the linear fashion common to museums. The immutable verticality of the museum wall becomes pliable, as it constantly changes in dimension and geometry: "walls become floors, or twist to become ceiling, or are voided to become large windows."



CANTILEVER

Traditionally the province of engineers and architects, cantilevered forms have been borrowed by fashion designers to articulate the surface of garments, manipulate volume, and create dramatic silhouettes.

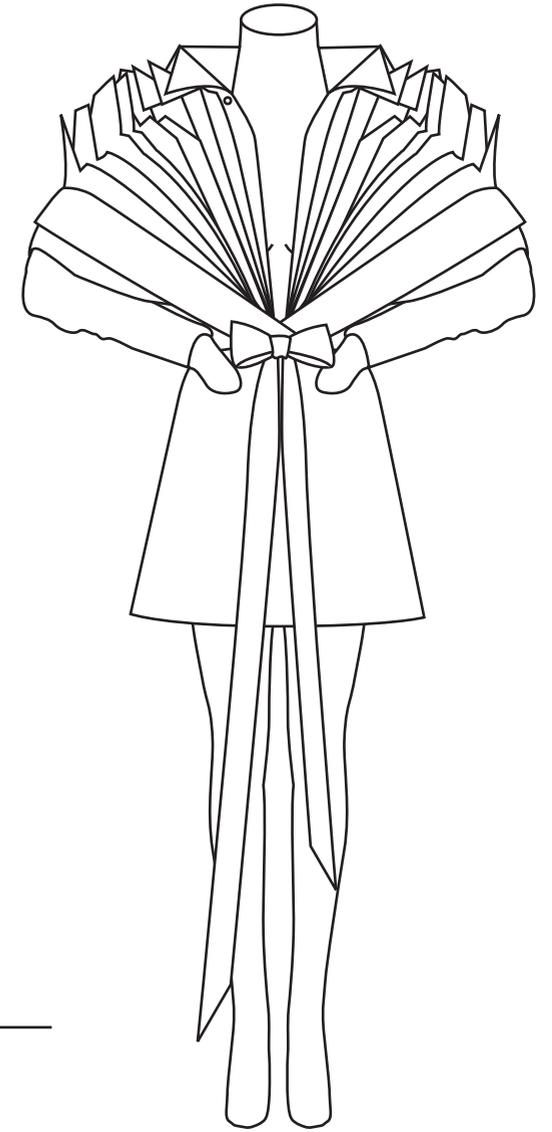


Yohji Yamamoto

Dress from Felt collection
Autumn/Winter 1996-1997
Wool
Courtesy of Yohji Yamamoto

Yohji Yamamoto

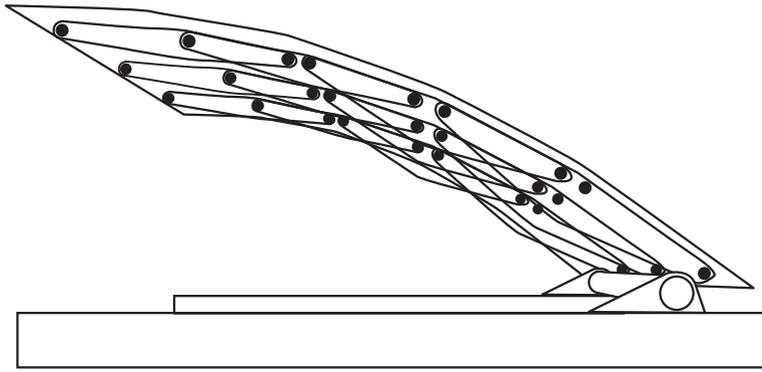
Dress from collection
Spring/Summer 2006
Silk
Courtesy of Yohji Yamamoto



Victor & Rolf

Ice blue coat dress
December 2003
Silk satin
Courtesy of Viktor & Rolf

This coat dress was custom-made for a *Vogue* magazine fashion shoot and is based on pieces from the One Woman Show collection of autumn/winter 2003-04. This collection, Viktor & Rolf's tenth-anniversary presentation, included one-of-a-kind sculptural shirts and coats made of multiple tiers of collars and plackets that fanned from the models' necks to their shoulders, pushing ideas of layering and stacking to their limit to achieve extreme cantilevered forms.



Rafael Viñoly Architects and Dewhurst Macfarlane and Partners in association with Structural Design Group

Kenji Kobayashi, photographer
Yurakucho Canopy, Tokyo International
Forum Plaza
1996
Digital print
Courtesy of Dewhurst Macfarlane and Partners

In 1995 the engineering firm Dewhurst Macfarlane was asked to design a glass canopy that shelters a wide staircase leading to the Yurakucho subway station at The International Forum, Tokyo. The conference and exhibition centre was designed by the architect Rafael Viñoly. Originally the canopy was going to be built in steel, but Macfarlane revised it to be made in laminated glass to keep the space visually open. It is the longest cantilevered structure to be built entirely from glass.

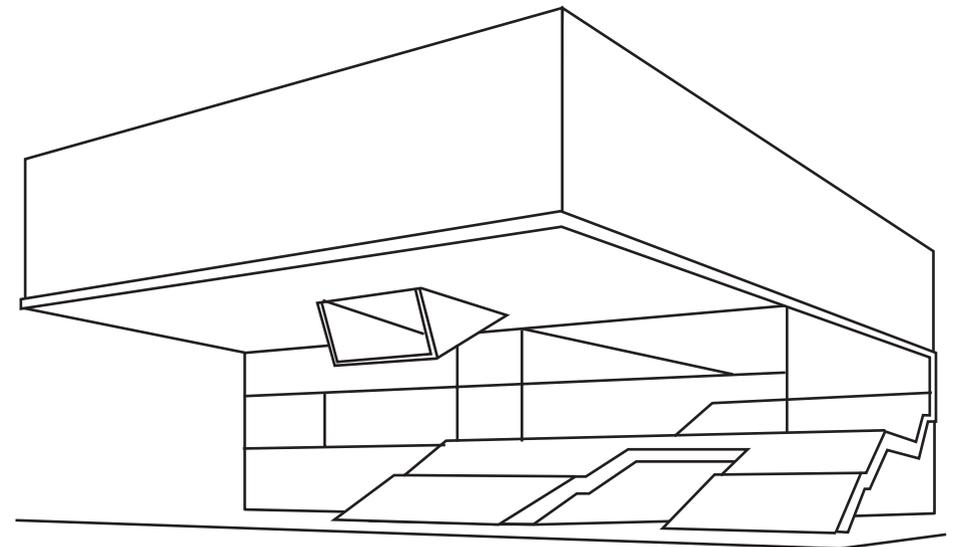
Their ground-breaking solution was a freestanding structure supported by a glass beam made from a series of glass blades connected at their ends and at their mid-points to form a rigid cantilever without the need for any supporting structure. These glass blades are held together and their load distributed by a series of steel bolts to form a cantilever 10.6 metres long.

Diller Scofidio + Renfro

Iwan Baan, Photographer
Institute of Contemporary Art, Boston
2006
Digital print
Photograph © Iwan Baan, Amsterdam

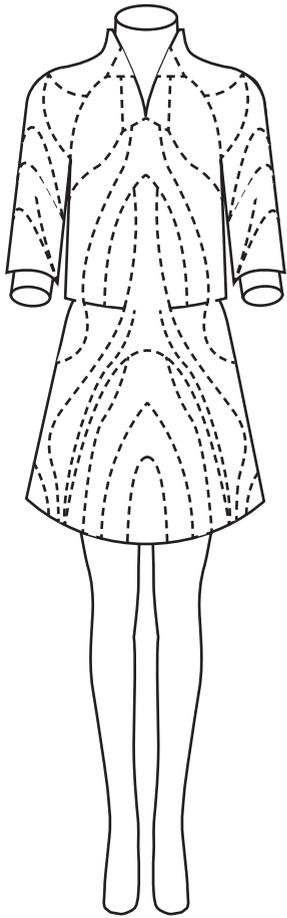
The work of Diller Scofidio + Renfro operates between architectural design, performance and conceptual art. Since the founding of their joint practice in 1979, Elizabeth Diller and Ricardo Scofidio have worked with new materials and construction processes to create intellectually grounded pieces that challenge notions of functionality in architecture.

For the Institute of Contemporary Art on Boston's Fan Pier, vertical sheets of transparent glass, translucent glass and opaque metal form a continuous external skin that blurs the distinction between walls, windows and doors.



SUSPENSION

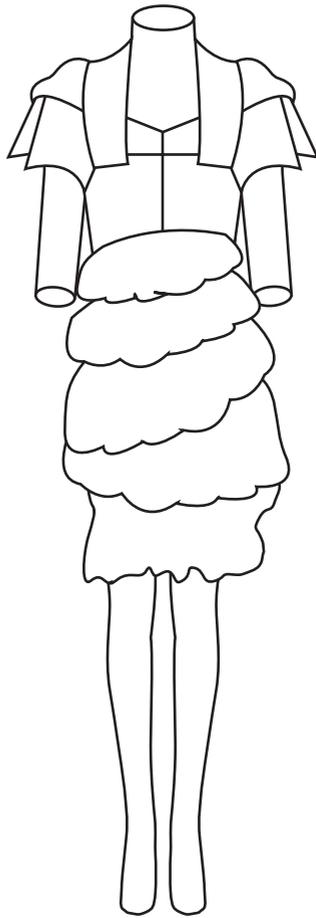
Fashion designers have also borrowed the principle of suspension from architectural engineering. Suspension in tailoring can refer to the way the pieces of fabric seem to hang in the final garment, held together by almost indiscernible layers of hand-stitching, or describe a system of cables that hoist the fabric in a way that recalls the engineering of suspension bridges.



Ralph Rucci

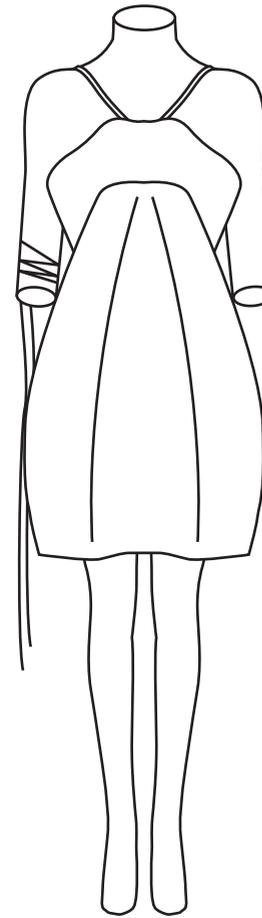
Degradé Vertebrae Suspension Suit
from Haute Couture collection
Autumn/Winter 2005-2006
Silk and cashmere
Courtesy of Chado Ralph Rucci, New York

Ralph Rucci's "suspension" garments are less about gravity than they are about the complex engineering that goes into the composition and finishing of a garment, some of which comprise more than eighty-five individual pattern pieces. "Suspension" refers to the way the pieces of fabric seem to hang in the final garment, held together by almost indiscernible layers of hand-stitching.



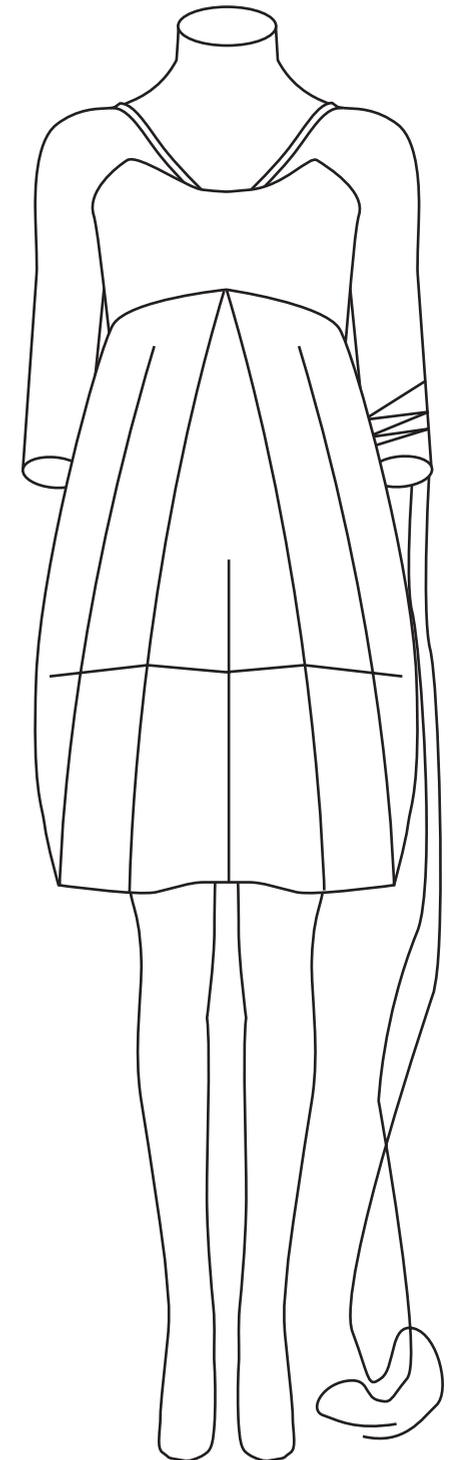
Isabel Toledo

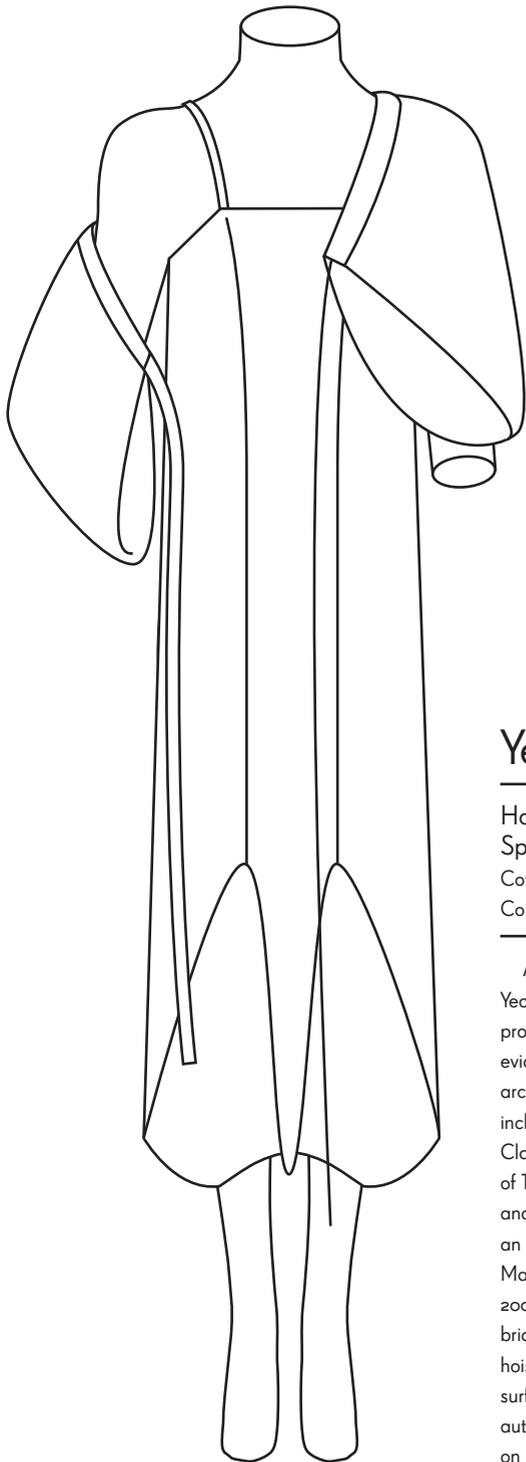
Mushroom dress and bolero
Autumn/Winter 2005-2006
Silk
Courtesy of Isabel Toledo



Yeohlee Teng

Catenary Harness Dresses
Autumn/Winter 2006-2007
Silk faille and duchesse satin
Courtesy of YEOHLEE inc





Yeohlee Teng

Hoist Dress with Cable Wrap Pouffe
Spring/Summer 2006

Cotton

Courtesy of YEOHLEE inc

Architecture is a significant source of inspiration for Yeohlee Teng; her study of building methods, tectonic properties, and various architectural concepts is evident throughout her collections. This connection to architecture has been recognised in several exhibitions, including "Intimate Architecture: Contemporary Clothing Design" at the Massachusetts Institute of Technology (1982), and "Energetics: Clothes and Enclosures" at Berlin's Aedes Gallery (1998), an exhibition that paired her designs with those of Malaysian architect Ken Yeang. Teng's spring/summer 2006 collection incorporates her study of suspension bridges, resulting in several dresses whose skirts are hoisted with cables or straps to provide volume and surface articulation. Building on this research, in autumn/winter 2006-07, Teng developed a dress based on catenary curves.



Foster and Partners

Jean-Philippe Arles, photographer
The Millau Viaduct, France

2004

Digital print

Photograph © Jean-Philippe Arles/Reuters/Corbis

Completed in 2004, The Millau Viaduct Bridge is the world's highest suspension bridge. The bridge spans 2.45 kilometres over the River Tarn, through a spectacular gorge in Southern France. The architects, Foster and Partners, worked in collaboration with the French engineer Michel Virlogeux to alleviate traffic to the southern coast of France during the summer months.

Their brief was to design and build a bridge that had a minimal impact on the surrounding environment. The viaduct is cradled by 154 steel stays stretched out from seven concrete masts, which split into two when they reach the platform of the bridge. This design allows the expansion and contraction of the road, which is subject to harsh weather conditions. The tallest of these masts rises 245m from the River Tarn, which is higher than the Eiffel Tower in Paris.

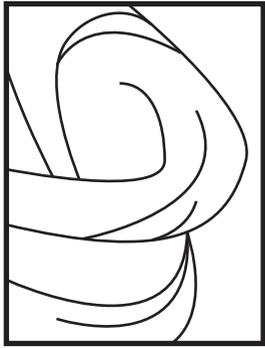
Its shallow curved structure gives drivers spectacular views over the surrounding countryside, whilst its delicate silhouette acts as a testament to successful collaboration between architecture and engineering.

SYNTHESIS

More recently, the blurring of boundaries between fashion and architecture has led to the development of hybrid practices that synthesise aspects of both disciplines.

“The body is a perfect small-scale exercise in spatial design, a testing ground for ideas and techniques to apply to buildings.” Elena Manferdini

“We are all makers, operating in the same terrain, and drawing on craft and technology. We develop our own tools, share software and are challenged to work with new materials.” Testa & Weiser



Testa & Weiser

Strand Tower

2006

Computer-generated prints

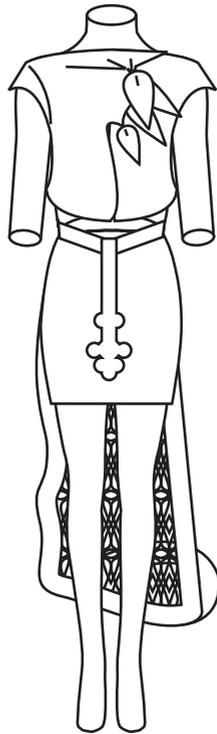
Stranima

2006

Animation by Devyn Weiser and Emily White

Courtesy Testa & Weiser, Los Angeles

Peter Testa & Devyn Weiser's work represents a synthesis of ideas, materials, and tectonic strategies drawn from both fashion and architecture. The architects devote equal attention during the design process to material development, fabrication technology, and engineering issues. Carbon Tower, an earlier project, is a prototype for the first all-composite high-rise building and takes full advantage of the strength of carbon fiber. Conceived as a structural network of forty twisted strands of carbon fiber, the tower's skeleton would be significantly lighter and stronger than steel-frame construction. Made by purpose-built robotic pultrusion (a method for producing continuous extrusions of composite materials) and braiding machines that "knit" vertical and horizontal strands together to form an exterior helix, this skeleton allows for the elimination of the core and interior columns typical of conventional high-rises. Ultra-lightweight and breathable membranes replace the conventional curtain wall, ensuring a more efficient use of energy. These renderings and the animation "Stranima" illustrate the complex weaving and spinning of the carbon fibres that comprise the more recent Strand Tower project.



Elena Manfredini

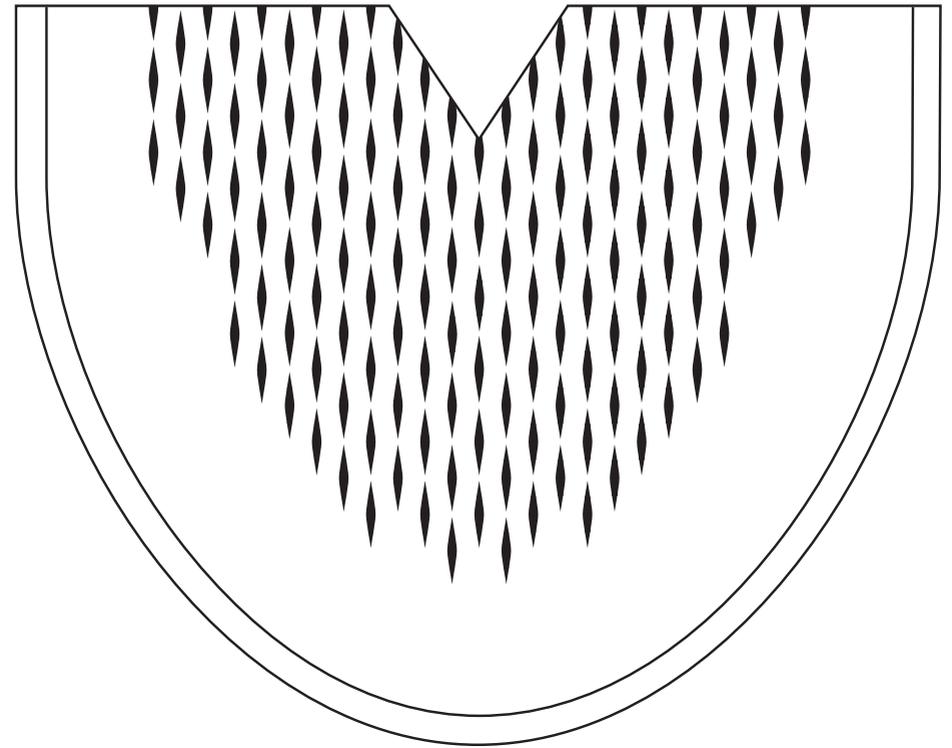
Custom dress

2006

Laser-cut fabric

Courtesy of Elena Manfredini, Los Angeles

Elena Manfredini approaches the design of a garment as she would the skin of a building by using tools and techniques more commonly applied to architectural and aeronautical design. Trained as both a civil engineer and an architect, Manfredini has included fashion in her interdisciplinary practice since 2002. She creates garments using Maya three-dimensional modeling software, translating patterns through a machining computer application to laser-cut individual pieces of fabric and texture them with slashes, cuts, or perforations. Manfredini experimented with numerous fabrics before settling on a cotton-polyester blend that can fluidly follow the curves of the body and yet does not burn or fray during the heat-intensive laser-cutting process.



Nanni Strada

Laser-cut Chasuble

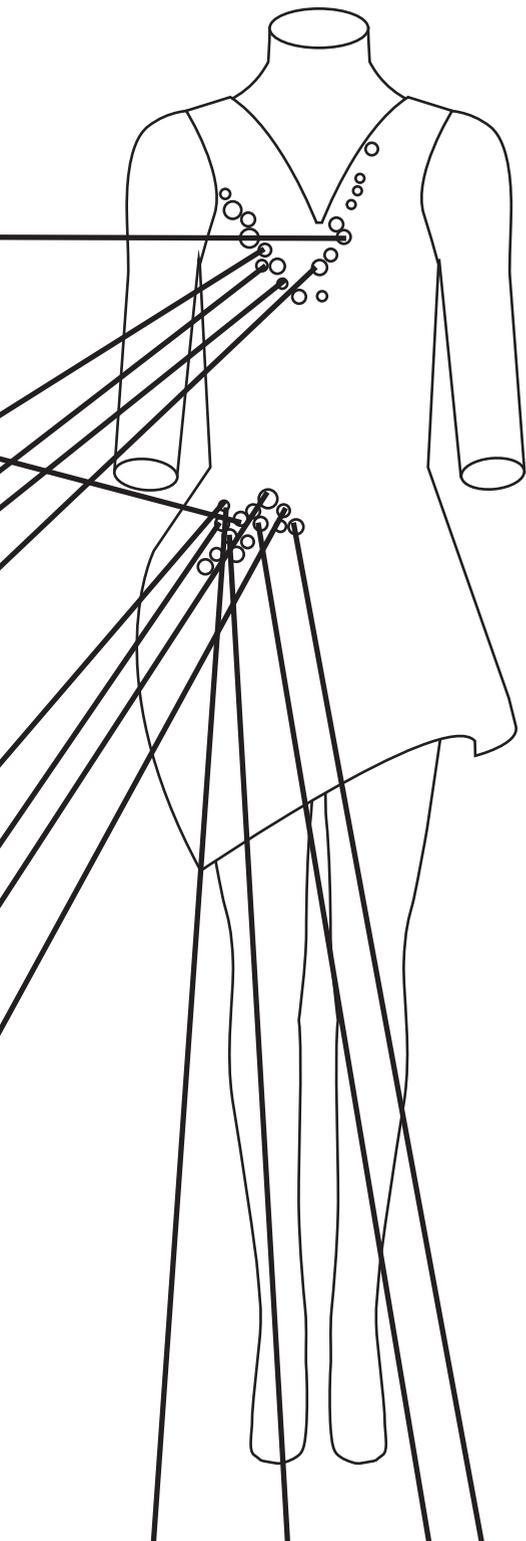
2005

Outer layer: crêpe de chine polyester;
inner layer: gold cloth

Courtesy of Nanni Strada Design Studio, Milan

FINALE

Much of the work in Skin + Bones challenges conventional ways of thinking about architecture and fashion, revealing the potential that can be gained from an increasingly fruitful dialogue between these two creative disciplines. New generations of designers in both fields are poised to develop ever more ingenious ways of adapting and adopting each other's forms and strategies to transform the very nature of buildings and clothes.



Hussein Chalayan

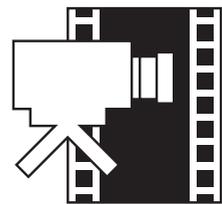
Laser dress from 'Readings' collection
Spring/Summer 2008

Laser light and Swarovski crystals
Courtesy of Swarovski

This collection was inspired by the culture of sun worship and the cult of celebrity. The showpieces created for the finale of this collection consisted of two dresses, a jacket and a hat containing over 200 moving lasers and Swarovski crystals. The lasers are held in place on custom made brass hinges which move by small servo motors. This trains the lasers first on the crystals, before then moving the beam away from the model, creating a matrix of red laser light.

The graphical rays that the effect creates is intended to represent the aura of performance. In reality, the outfits delineated the space surrounding them to the extent that they suggest fashion as not only an architecture of the body, but also one of space.

As a form of spectacle, showpieces such as these are often not intended to be worn or produced for retail, but serve to crystallise the concept of the collection. Chalayan sees these pieces as 'monuments to other ideas already evolved' demonstrating the architectonic qualities of these elaborate and involved creations within his design process.



Nick Knight

Readings
Editor: Ruth Hogben

2007
Film

Courtesy of Nick Knight/SHOWstudio

Credits

For The Museum of Contemporary Art, Los Angeles (MOCA)
Brooke Hodge, Curator of Architecture and Design
Rosanna Hemerick, Senior Associate Registrar
Sophia Gan and Jason Pugh, Senior Exhibition Technicians
Susan Jenkins, Director of Exhibition Management

For Somerset House, London
Curator: Claire Catterall
Exhibition Organiser: Sue Thompson
Curatorial consultant (fashion): Alistair O'Neill
Design: Eva Jiricna Architects
Graphic Design: Multistorey
Illustrations: Robert Boon
Lighting Design: dpa Lighting
Construction Management: Fraser Randall
Setworks and joinery: Devonshire House Associates
Conservation: Halahan and Associates
Technicians: the white wall company

For the Embankment Galleries presentation of the exhibition MOCA and Somerset House Trust would like to extend thanks to all the designers and organisations who loaned pieces for the exhibition and to all those who worked so hard to make this exhibition possible.

With special thanks to Shonagh Marshall, Colin McDowell, Mark Prizeman, Mark Garcia, Catherine Smith, Cindi Svensen and the team at Somerset House

Skin+Bones:
Parallel Practices in Fashion and Architecture
is organised by The Museum of Contemporary Art, Los Angeles (MOCA)

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