ACTIONS OF
ARCHITECTURE

ARCHITECTS AND CREATIVE USERS

JONATHAN HILL

actions of architecture

Central to this book is the idea that architecture is made by use and by design. Drawing on the work of a wide range of architects, artists and writers, it considers the relations between the architect and the user, which it compares to the relations between the artist and viewer and the author and reader. The book's thesis is informed by the text 'The Death of the Author', in which Roland Barthes argues for a writer aware of the creativity of the reader.

'The Death of the Author' is an important influence on artistic production, encouraging less didactic subject–object and artist–viewer relations than ones familiar in the art gallery. Its relevance to architecture is equally strong but largely unnoticed. *Actions of Architecture* argues for an architect aware of the creativity of the user. With a role as important in the formulation of architecture as that of the architect, the creative user either produces a new space or gives an existing one meanings and uses contrary to established behaviour.

A*ctions of Architecture* begins with a critique of strategies that define the user as passive and predictable, such as contemplation and functionalism. Subsequently it considers how an awareness of user creativity informs architecture, architects and concepts of authorship in architectural design. Identifying strategies that recognize user creativity, such as appropriation, collaboration, disjunction, DIY, montage, polyvalence and uselessness, *Actions of Architecture* states that the creative user should be the central concern of architectural design.

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ACTIONS OF ARCHITECTURE

architects and creative users

Jonathan Hill

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INTRODUCTION

'The Reader/Viewer/User's Guide' is an introduction to this book and its two sections, while each section has its own conclusion.

STARTING AT THE CENTRE

In a lecture at the Bartlett School of Architecture in 1992 Robin Evans offered some advice as he recognized a pattern to his writing. He produced many versions of a text until he considered it complete but, while the introduction and conclusion changed many times, the centre stayed mostly the same. His advice was to begin at the centre and work outwards. Central to this book is the idea that architecture is made by use and by design.[1] The word architecture has a number of meanings. For example, it is a subject, practice, and a certain type of object and space, typically the building and the city. In this book I consider each of these definitions but focus on another: architecture is a certain type of object and space *used*. Within the term 'use' I include the full range of ways in which buildings and cities are experienced, such as habit, distraction and appropriation.[2]

THE DEATH OF THE AUTHOR

As a student at the Architectural Association (AA), I first noticed that architects are often reluctant to develop a critical understanding of architecture. So, instead of studying architects, I investigated the work of artists interested in architecture, finding

[1] The architect is traditionally a designer of buildings, public spaces and cities and an intermediary in a supervisory capacity between the client and builder. In this book, 'architect' is the legally protected title of an individual registered with the Architects Registration Board in Britain or an equivalent professional organization in another country. In concentrating on the user and architect, it is not my intention to deny the role of others involved in the production of architecture, such as the client, engineer and builder.
[2] A space or object is architecture if it is usually experienced in ways associated with buildings and cities. In this book the experience of the building is a reference point to compare architecture to the experience of other objects and spaces. But even a building is not architecture if an experience primarily associated with another discipline but part of the experience of buildings and cities, such as contemplation, dominates other types of use. The more an experience associated primarily with another discipline excludes other types of use, the less a building is architecture. However, an object or space not usually considered to be architecture, such as an artwork, is architecture if the experience of it is similar to that usually expected of the building.

numerous references to Roland Barthes' 1968 text 'The Death of the Author'. Questioning the authority of the author, Barthes recognizes that the journey from author to text to reader is never seamless, direct or one-way. He states that reading can be a creative activity through which each reader constructs a text anew, and argues for a writer aware of the creativity of the reader.[3] 'The Death of the Author' suggests a new writer as much as a new reader, both having a role in the creation of a text.

'The Death of the Author' does not refer to art and architecture. It is, however, an important influence on artistic production, encouraging less didactic subject–object and artist–viewer relations than ones familiar in the art gallery. The relevance of 'The Death of the Author' to architecture is equally strong but largely unnoticed. In this book I question the authority of the architect, state that use can be a creative activity through which each user constructs a building anew, and argue for an architect aware of the creativity of the user. I argue for a new architect as much as a new user, both having a role in the creation of architecture.

THE ROLE OF THE USER

Architects' conception of their role in architectural production is revealed in the role they ascribe to the user. 'The Role of the User', the first section of this book, discusses models of the user found in texts, buildings and spaces made since the beginning of the twentieth century. I argue that how architects conceive the user affects what they design and the relations between the user and the architect.

To acquire social status and financial security architects need a defined area of knowledge, with precise contents and limits, in which they can prove expertise. One of the aims of the architectural profession is to further the idea that only architects make buildings and spaces that deserve the title architecture, suggesting that the user is predictable and has no part in the creation of architecture. The user is an important consideration in the architect's design process. But the user is also a threat to the architect because the user's actions may undermine the architect's claim to be the sole author of architecture.

In this book, however, I distinguish the need of architects, collectively as a profession, to deny the creativity of the user from the work of individual architects who choose to acknowledge that creativity. I begin with an analysis of the ways in which architects define the user as passive and predictable. Drawing on the work of selected architects, writers and artists, I subsequently discuss how an understanding of the user as creative and unpredictable informs architecture, architects and concepts of authorship in architectural design. I argue that the creativity of use should be the central issue of architectural design.

MONTAGE AFTER SHOCK

In 'The Role of the User' I outline a number of architectural design strategies that

[3] Barthes, 'The Death of the Author'.

acknowledge the creative role of the user in the formulation of architecture. In 'Montage After Shock', the second section of this book, I consider the potential of montage as such a strategy. 'The Montage of Fragments', the first chapter, is a history and evaluation of montage. More familiar in art and literature than architecture, montage involves the appropriation and dialectical juxtaposition of often unrelated fragments. As there is no clear resolution to be discovered in a montage, its meaning can be made anew by each person. The importance of montage depends upon its ability to involve the reader/viewer/user in the creation of meaning.

In contrast to conventional understandings of montage 'The Montage of Gaps', the second chapter, proposes a theory of montage of particular relevance to architecture, in which the gaps are as important as the fragments. In the following six chapters I discuss architectural projects that montage spatial, sensual and semantic gaps, and consider how the architect and the user share authority in each instance. The montage of gaps is an addition to the strategies outlined in 'The Role of the User'; it is not intended to replace them. It indicates the potential to develop new architectural design strategies that recognize the creativity of use. The interplay of architectural design and user creativity needs to be a constantly expanding field of discourse, experience and practice.

THE FORM OF THE TEXT (AND THIS BOOK)

In many disciplines, ideas and things are placed in a hierarchy that either states that one determines the other or allows each to be considered separately. But how something is made informs what is made. In *The Manhattan Transcripts* Bernard Tschumi states: 'In architecture, concepts can either precede or follow projects or buildings. In other words, a theoretical concept may be either applied to a project, or derived from it.' He continues: 'Quite often this distinction cannot be made so clearly, when, for example, a certain aspect of film theory may support an architectural intuition, and later, through the arduous development of a project, be transformed into an operative concept for architecture in general.'[4] A non-hierarchical relationship between subject, method and form can be the producer's explicit intention, whatever the discipline. For example, in *The Arcades Project*, Walter Benjamin's study of the nineteenth-century Parisian arcades, all three are montage.[5]

Evans' advice to start in the centre refers to the production of a single work, a text, in which starting to think and starting to write are inseparable. But this book has a number of fragments and incorporates texts and designs that question the static alliance of text with theory and design with form. It has a principal agenda and can be read as a linear argument. But it is also designed as a montage of gaps. Each of the fragments is a distinct piece of work that can either be considered on its own or in relation to the other fragments and the gaps between the fragments. Montage is a means to think spatially, to make unexpected connections between diverse ideas. As

4 Tschumi, *The Manhattan Transcripts*, p. xix.
5 Benjamin, *The Arcades Project*.

Barthes indicates, the reader can remake any book, but montage makes this possibility explicit. Just as the reader can make a new book through reading, the viewer can make a new architectural project through viewing, and the user can make a new building through using.

SECTION 1
the role of the user

1.1
the passive user

FATHER FIGURES

Reyner Banham discusses his relationship with modernism[1] and its architects in the introduction of *Age of the Masters*: 'I had the good luck to meet all of them – Le Corbusier, Frank Lloyd Wright, Walter Gropius, Richard Neutra, Mies van der Rohe – and for me, as for three generations of architects, they were father-figures who commanded awe and suspicion, affection, respect and the normal pains of the generation gap.'[2] The masters referred to in the book's title are the heroes of modernism and, in this quotation, their inferiors are other architects and architectural critics. Later on the same page Banham writes: 'architecture must move with the times because it helps to create the times … It is more than a commentary on the human condition – along with war and peace and love and death and pestilence and birth, abundance, disaster and the air we breathe, it is the human condition.'[3] According to Banham, architecture is a heroic endeavour made by architects, guided by the masters:

> *If, at the present time, many of us (including architects) begin to doubt if architecture has the resources to accomplish the tasks which its times demand, and to which the ambitions of the Masters committed it, one should note that architects seem to be the only people to notice that some of these tasks even exist, let alone might be accomplished. Their arrogance is appalling, but also encouraging. The demand of the Masters of the Modern Movement that architecture should respond unreservedly to the present time, however deep its roots were struck in past traditions, has forced their followers to accept moral responsibility for virtually the whole of the human environment.*[4]

Banham, however, recognizes that the moral authority of the architect, a tradition he associates in the twentieth century with modernism, has been under question since 1960: 'The gravest of all doubts was whether – or how – architects could continue to sustain their traditional role as form-givers, creators and controllers of human environments.'[5] It is rare today to find a belief in the moral authority of the architect equivalent to that

1 There are many definitions of modernism. In this book modernism refers to architectural modernism, which is associated primarily, but not exclusively, with the early twentieth century and functionalism. The open plan, which I discuss in Chapter 1.2 'From the Reactive User to the Creative User', is one such exception; it is modernist but not functionalist.
2 Banham, *Age of the Masters*, p. 3.
3 Banham, *Age of the Masters*, p. 3.
4 Banham, *Age of the Masters*, p. 4.
5 Banham, *Age of the Masters*, p. 5

expressed in modernism and *Age of the Masters* but the hierarchy of architect and user is evident in the discourse of architects even if it is expressed with less conviction. Two related ideas maintain this hierarchy. The first, the denial of the user, assumes that the building need not be occupied for it to be recognized as architecture and the second, the control of the user, attributes to the user forms of behaviour acceptable to the architect. To imply that they can predict use, architects promote models of experience that suggest a manageable and passive user, unable to transform use, space and meaning. In this chapter, I discuss four models of the passive user, each the foundation of ideas evident in the present day. The first three – functionalism, the relationship of the director to the actor, and the contemplation of art – are advantageous to architects, the fourth – habit – is less so.

FUNCTION TIMES ECONOMICS

The principal concern of functionalist theory is the relationship between a form and the behaviour it accommodates. Robert De Zurko identifies the origins of functionalist ideas in classical philosophy and medieval theology.[6] Larry L. Ligo writes that De Zurko discusses functionalist theory in terms of:

> *three analogies whose origins he finds as far back as classical antiquity: the organic, the mechanical, and the moral … The organic analogy calls attention to qualities that architecture has or should have in common with nature as represented by either plant or animal life. The organic analogy began as a simple comparison of external forms and their relation to function; it developed, especially around 1750, toward a comparison of the process by which natural and created forms grow … The mechanical analogy, the history of which is not quite as long as that of the other two, draws a parallel between characteristics of buildings and characteristics of machines; although in our century the forms of machines have been seen to influence the forms of buildings, historically this analogy has had more to do with the principle of mechanical efficiency.*[7]

Ligo adds that the moral analogy states that 'forms of buildings should reveal honestly their structural roles' and 'instill moral and ethical ideals in those who see and use them'. He identifies each of De Zurko's analogies in twentieth-century functionalism.[8]

Functionalist theory first became of importance to architects in the nineteenth century. Manfredo Tafuri defines Durand's architecture at the beginning of the nineteenth century as 'formally codified building types'.[9] Referring to Durand, Alberto Pérez-Gómez writes: 'The architect's only concern should be … the most convenient and economical "disposition". Here is the direct precedent of twentieth-century functionalism … The

6 De Zurko, p. 45.
7 Ligo, p. 9.
8 Ligo, p. 9.
9 Tafuri, *Architecture and Utopia*, p. 13.

architecture of the Industrial Revolution owed to Durand the first coherent articulation of its principles and intentions.'[10] The advent of industrialization intensified the classification of buildings by functional type and the quantification of space and labour, which Liane Lefaivre and Alexander Tzonis define as 'a rhetoric in the service of the mercantile class seeking to legitimize the norm of efficiency as the highest in all facets of human life'.[11]

Giving Louis Sullivan, Le Corbusier and Gropius as examples, Ligo writes: 'It is clear that none of these … thought of purely practical, utilitarian considerations as the totality of architecture.'[12] However, citing Le Corbusier's *Towards a New Architecture* as an example, Ligo writes: 'It must also be admitted that the number of narrow functionalist statements in any one architect's writing probably outnumbered the statements about more profound aspects of architecture.'[13] The intentions of some functionalists were more clear-cut. Hannes Meyer proposed an organizational, non-aesthetic role for buildings: 'All things in this world are the product of the formula: function times economics. So none of these things are works of art. Building is not an aesthetic process.'[14] In conclusion, Ligo writes that 'the idea of absolute functionalism' became 'a synonym for "modern architecture"'.[15]

THE PRINCIPLES OF BUILDING MANAGEMENT

With a few exceptions, such as Le Corbusier's Le Modulor, early twentieth-century modernists ignored visual references to the body; instead, they focused on the actions of the body.[16] 1918 marked the end of a military war and the further development of an ideological war fought on economic, political and social grounds and defined by the threat of social revolution and turmoil. In an attempt to avert social crisis Taylorism and Fordism, amongst other practices, were proposed as models for the regeneration of society and architecture. Le Corbusier was one early and influential advocate of Taylorism.[17]

T*he Principles of Scientific Management*, the conclusion of Frederick W. Taylor's studies since the 1880s, was first published in 1911. Through the expert analysis of labour, Taylorism calculates the optimal efficiency of each task in a production process. Named after Henry Ford, Fordism is a highly centralized, rationalized and rigid form of production which creates a limited range of products through the use of special-purpose machinery, market research, prototypes and the standardization and fragmentation of

10 Pérez-Gómez, pp. 302–311.

11 Lefaivre and Tzonis, p. 40.
12 Ligo, p. 12.
13 Ligo, p. 13.
14 Schnaidt, p. 95
15 Ligo, p. 12.
16 Vidler, 'The Building in Pain', p. 3.
17 McLeod, p. 133.

tasks according to Taylorist principles.

Three projects illustrate the connections between Fordism and functionalism. The Weissenhof Siedlung, Dessau-Törten housing and Frankfurt Kitchen are each analogous to a part of the mass production process, respectively the prototype, production line and scientific management of labour. Each has a distinct relationship with the user. One purpose of a prototype is to gauge potential users' enthusiasm for a product, which may be modified according to their response. The user is absent from a production line but appears at the end of the construction process as a consumer. In the scientific management of labour, the user is a subject of analysis.

In his development of the Model T Henry Ford built a wooden prototype in 1908.[18] The Weissenhof Siedlung in Stuttgart, a 1927 building exhibition organized by the Deutsche Werkbund and curated by Ludwig Mies van der Rohe, is equivalent to the prototype of Fordist production, built to test a product before it goes into mass production. Many noted modernist architects designed housing at the Weissenhof Siedlung, including Mies, Walter Gropius, Ludwig Hilberseimer, Le Corbusier, J.J.P. Oud, Hans Poelzig, Hans Scharoun and Max Taut. In both the automotive and architectural prototypes, aesthetics are as important as structural or material integrity.[19] Buildings are rarely designed according to the rigorous criteria proposed by functionalists. The Weissenhof Siedlung indicates that functionalism is itself an aesthetic.

1.1.1 Ludwig Mies van der Rohe, Weissenhof Siedlung, Stuttgart, 1927.
Photograph, Jonathan Hill.

18 Nevins, p. 391.
19 Although the Model T's main selling points were cost and reliability.

The housing development at Dessau-Törten, designed by Gropius and built between 1926 and 1928, is the most complete fusion of Fordism and functionalism. Gropius describes the house as a mass-produced commodity and the architect as the organizer of building production.[20] Site management, house plans and construction methods were rationalized, while building components were made in the factory and dry-assembled on site. The project mimicked but inverted Fordist production. Instead of the product moving along the production line, two rows of housing were built either side of a railway track along which moved the production machinery.

1.1.2 Ludwig Mies van der Rohe, Weissenhof Siedlung, Stuttgart, 1927. Photograph, Jonathan Hill.

[20] Gropius, 'How Can We Build Cheaper, Better, More Attractive Houses', p. 195.

1.1.3 Le Corbusier and Pierre Jeanneret, Weissenhof Siedlung, Stuttgart, 1927. Photograph, Jonathan Hill.

1.1.4 Walter Gropius, Dessau-Törten Housing, 1926–1928. Photograph, Musche Dessau. © Bauhaus-Archiv-Berlin.

In 1927 Grete Schütte-Lihotzky designed the mass-produced and standardized Frankfurt Kitchen for the city's social housing programme. Informed by Christine Frederick's

interpretation of Taylorism in *Household Engineering: Scientific Management in the Home*, published in 1915, Schütte-Lihotzky applied the scientific management of labour to the design of a part of a building. She analysed the actions performed in the kitchen in order to produce a space that aimed to eradicate unnecessary labour, enabling each function to be carried out with the minimum effort and in the minimum space. One of the principles of functionalism, as evident in the Frankfurt Kitchen, is determinism, the idea that the actions of the user are predictable and every event has a cause.

In 1928, based on research he conducted for a German housing agency, Alexander Klein proposed the Functional House for Frictionless Living. Like Schütte-Lihotzky, Klein applied the scientific management of labour to building design. Considering the house a machine, Klein contrasted the complex intersection of everyday paths of movement through a typical nineteenth-century house to their separation in his own design, which he considered superior because it reduced the possibility of accidental encounters and, therefore, social friction. Disregarding non-productive, irrational actions, and focusing only on actions deemed useful, Schütte-Lihotzky and Klein assumed that a one-to-one compatibility of a function and a space is necessary.[21] Henri Lefebvre writes that 'Functionalism stresses function to the point where, because each function has a specially assigned place within dominated space, the very possibility of multifunctionality is eliminated.'[22]

[21] Function is the intended use of a space. Use, of which function is a particular understanding, is a richer and more flexible term.
[22] Lefebvre, p. 369.

1.1.5 Grete Schütte-Lihotzky, Frankfurt Kitchen, 1927. Source of illustration: Catherine Bauer, *Modern Housing*, Boston and New York: Houghton Mifflin, 1934.

DIRTY WATER

Although referring to present-day industrial products rather than early twentieth-century architectural projects, Anthony Dunne recognizes the insidious user-friendliness that underpins the relationship of the user to the object in functionalism:

> *The enslavement is not, strictly speaking, to machines, nor to people who build and own them, but to the conceptual models, values and systems of thought the machines embody … For instance, camcorders have built-in features that encourage generic usage: a warning light flashes whenever there is a risk of 'spoiling' a picture, as if to remind the user that they are about to become creative and should immediately return to the norm.*[23]

The Frankfurt Kitchen and the Functional House for Frictionless Living assume that the user is passive and has constant and universal needs. Both projects are emblematic of the rational, waste-free society certain functionalists proposed, according to which the paradigmatic form of the body is the technician at work in the factory and the home. The passive user learns to operate a space the way the technician learns to operate a machine – the correct way. Le Corbusier's phrase, 'a machine for living in', is only an accurate description of functionalist sensibilities if the human is a component of the machine, not the human a servant of the machine or the machine a servant of the human.[24] The 'machine for living in' is a totalizing and all-pervading model for society as well as architecture. The desire for a society of scientific progress and functional purity is similar to the obsessive hand-washing in individuals; they are both a sign of anxiety but on different scales. In Alvar Aalto's Tuberculosis Sanatorium in Paimio, completed in 1933, the surfaces of a hand-basin are angled to silence running water as it falls into the basin below so the patients are not disturbed. But the silent flow of dirty water disappearing into drains can also be understood as a metaphor of the hidden cleansing of society through architecture. Functionalism was one of the most alarming aspects of the modernist agenda in the early twentieth-century because architects who adhered to it had confidence in a 'science' that cannot be validated scientifically and believed that the user was predictable and obedient.

DIRECTING THE USER

Functionalist ideas are the most familiar means to define and diminish the user but the other models I discuss are also prevalent in architectural discourse and practice. In a comparison of the houses of Adolf Loos and Le Corbusier, Beatriz Colomina describes

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[23] Dunne, p. 30. In place of user-friendliness Dunne proposes 'user-unfriendliness, a form of gentle provocation'. Dunne, p. 14.
[24] Le Corbusier, p. 10.

the user as an actor.[25] In a house by Loos the user is placed at the edges of the interior, looking inwards.[26] In one by Le Corbusier the user is pushed to the edges of the interior, looking outwards.[27] Colomina proposes an analogy between the user and the actor; in a house by Loos the user is a theatrical actor, in one by Le Corbusier the user is a film actor. The analogy of user to actor suggests that the relationship of architect to user is that of director to directed. It is common for an architect to describe a building as a sequence of emotive spatial experiences shared by all users. But users are far from uniform and the experience of the user is unlikely to conform to that of the architect.

THE BARCELONA PAVILIONS

The third model of the passive user, the contemplation of art, and both the denial and control of the user, are exemplified in the history of the Barcelona Pavilion.[28] Histories are provisional and selective. The past is continuously remade to suit the present. Walter Benjamin writes: 'For every image of the past that is not recognised by the present as one of its own concerns threatens to disappear irretrievably.'[29] Designed by Mies, the first Pavilion was built for a 1929 exhibition at the base of Montjuich in Barcelona. Dismantled early in 1930, its various elements were dispersed or destroyed:

The company that had supplied the marble, Köstner und Gottschalk, took charge of it for possible reuse. The chromed steel structures were also sent back to Berlin for a possible reutilization or resale, to help offset the deficit created by the Pavilion. The steel structure was sold off for scrap in Barcelona, and was almost certainly the only part of the structure to remain – but now unrecognizable – in the city. The unobtrusive foundations were covered over by a modest garden, planted with palm trees, which must have been laid out after the Civil War and remained that way for some fifty years. A small piece of the onyx did service as a table top in Dr Ruegenberg's home in Berlin; in Mies' apartment in Chicago, the metal structure from one of the ottoman stools supported a slab of marble to provide an occasional table. Philip C. Johnson, the first American admirer of the work of Mies van der Rohe, managed to acquire one of the armchairs to enrich his collection of 20th century art.[30]

25 Colomina, 'The Split Wall', pp. 73–130.
26 Colomina. 'The Split Wall', p. 75.
27 Colomina, 'The Split Wall', p. 98.
28 To distinguish one building from another, I use terms such as the 1929, or first, Pavilion, and the 1986, or second, Pavilion. The 1986 Pavilion is also referred to as the reconstruction. To refer to the project's complete history and various forms I use either Barcelona Pavilion or Pavilion.
29 Benjamin, 'Theses on the Philosophy of History', p. 255.
30 Solà Morales, Cirici and Ramos, p. 21.
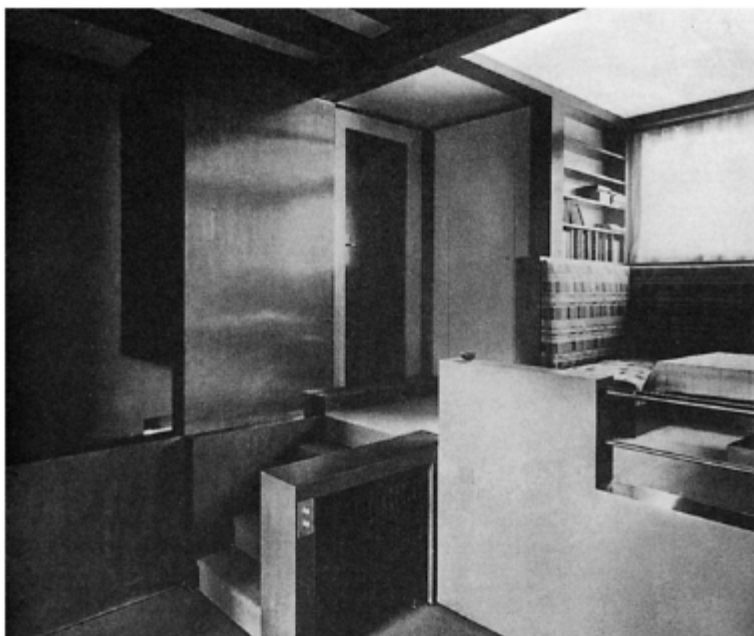
1.1.6 Adolf Loos, Moller House, Vienna, 1928. The raised sitting area off the living room. Photograph, 1930. Source of illustration: Ludwig Münz and Gustav Künstler, *Der Architekt Adolf Loos*, Vienna: A. Schroll Verlag. 1966.

1.1.7 Le Corbusier, Villa Savoye, Poissy, 1929. The roof garden. ©

One expects an exhibition building to be demolished but this cool and melancholy inventory recalls the casual dissection of a body donated to a medical school or a family picking over the trivial possessions of a deceased relative. In a similar spirit, Rem Koolhaas constructs an alternative history of the Pavilion in which it was repatriated to Germany after a short period as a headquarters for the Anarchists. The reunion with one father was, however, accompanied by the loss of another: 'It was now an architectural orphan: its creator had just left for the USA.'[31] In Berlin the dismembered components of the Pavilion were re-used: 'Next the marble was incorporated in the construction of a ministry, where it became the floor of the service entrance.'[32] After the war the remaining elements of the Pavilion were unpacked: 'First the planners of the east side of the city suggested reassembling the entire pavilion as a gas station, for the time when each worker would own a car.'[33] Finally 'the fragments were exported in return for one medium-sized computer and a secret design for a new machine gun'.[34] In Koolhaas' fiction the final fate of the Pavilion is ambiguous. It is unclear whether the fragments were reassembled into a whole.

In 1986 Ignasi de Solà Morales, Christian Cirici and Fernando Ramos supervised the construction of a second Pavilion on the site of the first one. The materials of the 1929 Pavilion did not always follow Mies' design. For example, on the exterior side and rear walls, plastered brick painted green and yellow was used instead of green Alpine marble and travertine.[35] Solà Morales, Cirici and Ramos' intention was to recreate as faithfully as possible the 1929 Pavilion, but with improvements where necessary in construction and in building those parts of the design either compromised by economic restrictions or never completed.[36]

Is the 1986 Pavilion an historical monument, a copy, or a new building? An historical monument is representative of a particular time, and rarely allowed to change or age. A building may be restored a number of times and still be considered an historical monument but a copy is less likely to be given such a status. If the first Pavilion had not been demolished it would be the historical monument. The reconstruction occupies the original site and although its architects describe it as a replica and reinterpretation of the 1929 Pavilion they also wish it to be recognized as an historical monument with all the iconic authority of an original.[37]

31 Koolhaas, 'Less is More', p. 54.
32 OMA, Koolhaas and Mau, 'Less is More', p. 56.
33 OMA, Koolhaas and Mau, 'Less is More', p. 59.
34 Koolhaas, 'Less is More', p. 61.
35 Solà Morales, Cirici and Ramos, p. 14.
36 Solà Morales, Cirici and Ramos, p. 29.
37 Solà Morales, Cirici and Ramos, pp. 38–39.

THE BARCELONA PHOTOGRAPHS

The photographs that established the reputation of the Pavilion only record the parts of the 1929 building that followed the design. Photographs of the other parts of the 1929 Pavilion do not remain and may not have been taken.[38] The subject of the reconstruction is the design as it appears in the original photographs, as much as the building constructed in 1929. As in many respects the reconstruction is closer to the design than the first Pavilion, it is the truer monument to the architect's intentions.

The architectural photograph has a number of roles, two of which are contradictory: to present the architectural object as a higher form of cultural production so as to defend and promote architects and patrons, and to further the absorption of buildings and architects into commodity production and consumer culture. Many architectural photographs have the same characteristics, such as blue skies and no people, because they mimic the perfect but sterile viewing conditions of the art gallery and product literature. The reputation of an architect is, in part, dependent on his or her ability to generate a good photograph. If an architect is successful the same image is published throughout the world, to be copied by other architects with little regard to cultural or social differences.

Juan Pablo Bonta writes: 'The effect of the Barcelona Pavilion over the physical or social environment in the hills of Montjuich was negligible; its effect as an idea spread over the entire world by means of photographs and descriptions was enormous.'[39] Between the demolition of the first Pavilion in 1930 and the construction of the second in 1986, the Pavilion became one of the most praised and copied architectural projects of the twentieth century.[40] The 1929 photographs, as much as the 1929 building, were copied. To realize the extent of the appropriation we just need to visualize the Pavilion with petrol pumps on its forecourt, a cash-point machine in the wall or a barbecue by the pool. The extent of this copying is due not only to the quality of the design, and Mies' growing reputation, but also the Pavilion's status as an artwork.

THE CONTEMPLATION OF THE ARTWORK

In an attempt to maintain and reproduce the aura of art and the artist, which despite protestations to the contrary still maintains a hold over the familiar perception of art, the art institution requires precise codes of behaviour, particularly silence and reverence.[41] Authority, value and the desired interpretation of an artwork are disseminated through publications, reviews and the codes of the space in which it is consumed. Protected against heat, light and decay, an artwork is usually seen at most a few times, but may

38 Solà Morales, Cirici and Ramos, p. 15.

39 Bonta, p. 148.
40 Solà Morales, Cirici and Ramos dispute Bonta's claim that the 1929 Pavilion did not receive favourable reports at the time of its construction. Solà Morales, Cirici and Ramos, p. 12. Bonta, p. 134.
41 Benjamin, 'The Work of Art', p. 221.

have a second and equally powerful existence in memory. Although other experiences are possible, the artwork in the gallery is primarily experienced in a state of contemplation: a form of visual awareness, of a single object by a single viewer, in which sound, smell and touch are as far as possible eradicated.[42]

Contemplation reinforces the hierarchy of the senses that is the basis of western culture. Juhani Pallasmaa writes:

> *Since the Greeks, philosophical writings of all times abound with ocular metaphors to the point that knowledge has become analogous with clear vision and light the metaphor for truth ... During the Renaissance the five senses were understood to form a hierarchical system from the highest sense of vision down to touch ... The invention of perspectival representation made the eye the centre of the perceptual world as well as of the concept of the self.*[43]

Contemplation encourages an empathetic relationship between the viewer and the viewed. Benjamin identifies concentration as a quality of contemplation: 'art demands concentration from the spectator ... A man who concentrates before a work of art is absorbed by it. He enters into this work of art the way legend tells of the Chinese painter when he viewed his finished painting.'[44]

THE CONTEMPLATION OF THE BUILDING

If a building is of sufficient quality it is usually described as the work of a single architect, most often the principal partner of an architectural firm, even though a number of architects will have been involved in its design. A building by a more commercial architectural firm is less likely to be identified with an individual architect. The production of a building is a collaborative process involving a team of architects, structural engineers, contractors, quantity surveyors, the client and others in negotiation with various statutory bodies. However, the idea of sole authorship is important to architects because of the long-held, often false, assumption that art is the product of individual creativity. For architects, the classification of architecture as not just an art, but as an art similar to painting and sculpture, is desirable because of the high status accorded to gallery-based art and artists. To affirm the status of the architect, the experience of the building is equated with the contemplation of the artwork in a gallery, a condition disturbed by the irreverent presence of the user.

Sometimes architecture is described as an autonomous, self-referential practice.[45] Modelled on art history, architectural histories often discuss the building as an object of

42 Benjamin, 'The Work of Art', p. 240.

43 Pallasmaa, pp. 6–7.
44 Benjamin, 'The Work of Art', p. 239.
45 Lefaivre and Tzonis, p. 27

artistic contemplation and imply that this is the familiar experience of the building.[46] The photograph acts as the mediator between the writer and the reader, who is encouraged to equate the experience of the photograph with the experience of the building. The object of architectural discussion is often the photograph not the building because the former, not the latter, most closely fulfils the desires and expectations of the architect and the architectural historian for an object of artistic contemplation.

Writing in 1974, Malcolm Quantrill states that the absence of people from the 1929 photographs, and the fact that this had not been noticed, indicates that: 'A whole generation of architects and architectural photographers sought to abstract the art content from the life context.'[47] Of the six points Bonta identifies as characteristic of the canonical interpretation of the Pavilion most refer to specific formal, spatial and aesthetic qualities. The sixth states that the Pavilion's status as a work of art and an architectural masterpiece are synonymous with each other.[48] Solà Morales, Cirici and Ramos state that the purpose of the reconstruction is to allow the building, rather than the photographs, to be experienced but the experience they describe is contemplation, in which the visitor is absorbed by the artwork:

> It is necessary to go there, to walk amidst and see the startling contrast between the building and its surroundings, to let your gaze be drawn into the calligraphy of the patterned marble and its kaleidoscopic figures, to feel yourself enmeshed in a system of planes in stone, glass and water that envelops and moves you through space, and contemplate the hard, emphatic play of Kolbe's bronze dancer over water.[49]

Bonta identifies flowing space and the free plan as two of the six points of the canonical interpretation of the Pavilion but more recent readings suggest that it prescribes movement.[50] The 1929 photographs are black-and-white, those in Solà Morales, Cirici and Ramos' book on the reconstruction are colour. However, the views they show are similar, in part no doubt due to Solà Morales, Cirici and Ramos' desire to show the similarity of the reconstruction and the 1929 photographs. However, another reason for the similarity of the two sets of photographs is that Mies' principal concern was vision rather than the other senses. Jose Quetglas writes: 'Mies's architecture is … formulated more by representations than by plastic realities.'[51] He adds that the Pavilion is intended

[46] Venturi, *Complexity and Contradiction in Architecture*. Jencks, *The Language of Post-Modern Architecture*. Rowe and Koetter, *Collage City*. Curtis, *Modern Architecture Since 1900*.

[47] Quantrill, p. 105.
[48] The six points are flowing space; the free plan; the building as the object on exhibition; stylistic similarities to classicism, De Stijl, a Japanese sense of lightness, Wright, constructivism and cubism; the politics of Germany; the Pavilion as a work of art and architectural masterpiece. Bonta, pp. 139–140.
[49] Solà Morales, Cirici and Ramos, p. 39.
[50] Bonta, pp. 139–140. Tafuri, 'The Stage as "Virtual City"', p. 111.
[51] Quetglas, pp.134–135.

to remain empty'.[52] Of another project by Mies, the 1935 design of the Hubbe House in Magdeburg, Tafuri and Francesco Dal Co write: 'The interpenetration between indoor and outdoors was treated as illusory: with no trouble at all, nature could be replaced by a photomontage … and become an object of contemplation.'[53] Recognizing that the symmetry of the Pavilion is horizontal,[54] Evans writes: 'Whether seascape, prairie, or desert, a vast and vacant scene tends to concentrate visual interest on the horizon. The same thing happens in the Barcelona Pavilion, as it does in many of Mies's buildings.'[55] However, unlike some other buildings by Mies, for example the Hubbe House, the Pavilion does not frame the landscape. Werner Blaser lists the Pavilion under 'Court houses with steel columns' in *Mies van der Rohe: The Art of Structure*.[56] The horizon is within the Pavilion, and the gaze inward; the Pavilion is the object on view.

The Pavilion is an architectural icon, not only because it is seductive and much copied but also because it has most often been perceived in conditions similar to that of the artwork. Between 1929 and 1930 it was an exhibition building to be viewed, between 1930 and 1986 it was known through photographs, and since 1986 the reconstruction's status as an historical monument discourages everyday use. Both exhibit and gallery, the reconstruction is an event of considerable importance because it reinforces the status of the architect as an artist and implies that contemplation is the experience most appropriate to buildings.[57]

ARCHITECTS OF ABSTRACTION

Sometimes the actions of the user are measurable, in a factory, for example. Although not an everyday occurrence, the user is sometimes equivalent to an actor, such as at a university graduation ceremony. It is also possible to experience a building in circumstances similar to the contemplation of art, when visiting a famous building, for example. Each of these models defines the user as passive and offers a limited understanding of the experience of the building.

Rob Imrie writes that architects commonly ignore bodily diversity because they conceive the body as a machine and, consequently, as passive. He notes that such a conception is not particular to architects. It is equally evident in western science and medicine, for example. Imrie writes:

> *These conceptions of the body have their roots in the post-Galilean view which conceives of the physical body as a machine and a subject of mechanical laws.*

52 Quetglas, p. 134.
53 Tafuri and Dal Co, p. 157, quoted in Wall, p. 51.
54 Evans, 'Mies van der Rohe's Paradoxical Symmetries', p. 258.
55 Evans, 'Mies van der Rohe's Paradoxical Symmetries', p. 251.

56 Blaser, p. 26.
57 The purpose of Weather Architecture, my project for the Pavilion, is to disrupt the status of the Pavilion as an object of contemplation and to affirm the creative role of the user in the formulation of architecture.

The body, in this view, is little more than an object with fixed, measurable, parts; it is neutered and neutral, that is, without sex, gender, race, or physical difference. It is residual and subordinate to the mind, or that realm of existence that is characterised by what the body is not; such as, self, thought, and reason.[58]

Lefebvre also argues that the practice of architects is but one element in the abstraction of space and its users:

> *The dominant tendency fragments space and cuts it up into pieces. Specializations divide space among them and act upon its truncated parts, setting up mental barriers and practico-social frontiers. Thus architects are assigned architectural space as their (private) property, economists come into possession of economic space, geo-graphers get their own 'place in the sun', and so on.*[59]

The space assigned to architects is 'the space of the dominant mode of production, and hence the space of capitalism'.[60] Adrian Forty writes: 'For Lefebvre the capitalist domination of space, both by imposing functional categories upon it physically, and by imposing an abstract schema through which the mind perceived space, was one of capitalism's most innovative acts.'[61]

TOOLS OF ABSTRACTION

Architects have a number of ways to ignore users or turn them into abstractions, notably the photograph and the architect's principal means of design, the drawing. The term design comes from the Italian *disegno*, meaning drawing. The history and status of the architect are interwoven with those of the architectural drawing. The origins of the architectural drawing as an essential element of building production and the architect as a distinct figure, knowledgeable in the visual arts, independent of the building trades and distant from manual work, are in the Italian Renaissance. Forty writes:

> *In the new division of labour that took place in the fifteenth and sixteenth centuries, what above all set the new genus of architects apart from the building trades was their command of drawing; it both made possible the separation of their occupation from building, and because of drawing's connection with geometry in the newly discovered science of perspective, gave architecture a means to associate itself with abstract thought, and thereby give it the status of*

[58] Imrie, p. 3.

[59] Lefebvre, p. 89.
[60] Lefebvre, p. 360.
[61] Forty, 'Flexibility', p. 9.

intellectual, rather than manual labour.[62]
Most architectural drawings offer only a limited understanding of use. Their primary purpose is to describe an object and, as they refer to only certain aspects of the physical world, they limit the types of object architects usually design. According to Evans the architectural drawing's hegemony over the architectural object has never really been challenged, and is often unacknowledged.[63] Lefebvre writes:

> *Within the spatial practice of modern society, the architect ensconces himself in his own space. He has a representation of this space, one which is bound to graphic*
> *elements – to sheets of paper, plans, elevations, perspective views of façades, modules, and so on. This conceived space is thought by those who make use of it to be true, despite the fact – or perhaps because of the fact – that it is geometrical: because it is a medium of objects, an object in itself, and a locus of the objectification of plans. Its distant ancestor is the linear perspective developed as early as the Renaissance: a fixed observer, an immobile perceptual field, a stable visual world.*[64]

Transitional object is a term used in psychoanalysis. For a child this may, for example, be a teddy bear. Its role is positive and 'a defence against separation from the mother', to be discarded when no longer needed. If a child is unable to make this transition, the result can be 'the fixed delusion which may turn the transitional object into that permanent security prop, the fetish, both in the Freudian sense (it disguises the actuality of lack) and in the Marxian sense (it functions as a commodity that supplies human want)'.[65] Like a child who cannot discard a teddy bear, the architect who chooses not to recognize the differences between the spaces of architects and users, and between the building and the representations of the building, is unable to reach a level of mature self-awareness.

It is important, however, to consider not only how the drawing and building are different but also how they can be similar. For example, traditionally an architectural drawing is a representation of a building, but it can also be analogous to a building sharing some of its characteristics. The two principal alternatives of architectural drawing are drawing a building or building a drawing but great pleasure and creative tension exists where they overlap, one feeding the other. A dialogue can also exist between what is designed and how it is designed. For example, a building made of artificial light could be developed in drawings made of artificial light, so that the material of the building is also the material of the drawing.

62 Forty, 'Language and Drawing', p. 30.
63 Evans, 'Translations', p.156.

64 Lefebvre, p. 361.
65 Wright, *Psychoanalytic Criticism*, p. 93.

VICTIMS OF ABSTRACTION

Lefebvre considers the abstraction of the user to be far from innocent:

Let us now turn our attention to the space of those who are referred to by means of such clumsy and pejorative labels as 'users' and 'inhabitants'. No well-defined terms with clear connotations have been found to designate these groups. The marginalization of social practice thus extends even to language. The word 'user' (usager), for example, has something vague – and vaguely suspect – about it.[66]

Forty writes: 'As far as Lefebvre was concerned, the category of the "user" was a particular device by which modern societies, having deprived their members of the lived experience of space (by turning it into a mental abstraction) achieved the further irony of making the inhabitants of that space unable even to recognize themselves within it, by turning them into abstractions too.'[67]

The term 'user' has a number of negative connotations, suggesting that using architecture is primarily a question of practicality, for example. However, it is a better term than occupant, occupier or inhabitant because it suggests positive action and the potential for misuse. Problems arise when we forget it is an abstraction and assume that the physique, race, nationality, gender, social class and experience of all users are the same.[68]

FROM PASSIVE TO REACTIVE TO CREATIVE

Famous buildings, such as the Eiffel Tower or the Bilbao Guggenheim Museum, are typically experienced just once, for a short time, and linger in the memory. But most buildings are experienced over a long period of time and even the occupant of a large city regularly frequents a few places and routes. In contrast to the three other models of the passive user, which affirm the status of the architect through allegiance to either science, theatre and film direction, or art, the fourth model of the passive user – habit – seems to devalue the user and the architect. For architects, habit appears to be an unrewarding model of the user because there is no obvious and recognized expertise associated with it for them to claim.

Benjamin states that, in contrast to the concentrated contemplation of the individual absorbed in a work of art, 'the distracted mass absorbs the work of art. This is most obvious with regards to buildings. Architecture has always represented the prototype of a work of art the reception of which is consummated by a collectivity in a state of distraction.'[69] Stan Allen writes: 'Benjamin's definition of distraction oscillates between

[66] Lefebvre, p. 362.

[67] Forty, 'User', p. 2, referring to Lefebvre, p. 93.

[68] A familiar term after 1950 'The user was one of the last terms to appear in the canon of modernist discourse.' Forty, 'User', p. 1.

[69] Benjamin, 'The Work of Art', p. 239.

an active form – distraction as deviation from habitual behaviour – and a passive form – a state of absent-mindedness enforced by habit and repetition.'[70] Benjamin considers both forms of distraction preferable to the absorbed concentration of contemplation but states that the passive form of distraction is the usual experience of buildings.

According to Benjamin the type of distraction, whether passive or active, is a result of the medium not the individuals who experience it. He associates active distraction with shock; individuals are first passive and then made aware by the artwork. But the user does not necessarily need the stimulus of an outside agency in order to act. Sudden realization is one way for the user to acquire an understanding and awareness of architecture but habit is not necessarily passive because it enables understanding to grow with experience.[71] Rather than Benjamin's model of passive and active distraction, which should more accurately be called reactive distraction, I suggest three types of user: passive, reactive and creative. The passive user is predictable and unable to transform use, space and meaning. The reactive user modifies the physical characteristics of a space as needs change but must select from a narrow and predictable range of configurations largely defined by the architect. The creative user either creates a new space or gives an existing one new meanings and uses. Creative use can either be a reaction to habit, resulting from the knowledge learned through habit, or be based on habit, as a conscious, evolving deviation from established behaviour.

70 Allen, p. 52.

71 Benjamin, 'The Work of Art', p. 240.

1.2
from the reactive user to the creative user

OTHER USERS

Instead of the passive user, this chapter considers the reactive user and the creative user. For reasons of self-protection architects, collectively as a professional body attempting to monopolize a practice, often devalue the user. However, a number of individual architects recognize the influential role of the user in the formulation of architecture. This chapter discusses architects' awareness of user creativity, while the next focuses on writers' and artists' evaluations of the creativity of the reader, viewer and user, and their influence on architects.

AGAINST FUNCTIONALISM

Although functionalism is no longer the dominant theory of architecture it remains an important one and its history casts a long shadow over architectural design. The classification of buildings by function, in planning applications, building regulations and architects' designs, helps to keep thoughts of functionalism close at hand. In architectural discourse and practice, one reason for the partial demise of functionalism and the reappraisal of use is the change in capitalism from standardization, homogeneity and production to diversification, fragmentation and consumption.[1] However, the extent and chronology of this transformation is uncertain. Another reason is that architects wish to continue to claim skilled knowledge of use as well as design so as to emphasize the social and economic value of their skills.

Architects' post-war reappraisal of use is primarily a reaction to functionalism because functionalist ideas are widely known, discussed and disseminated while the importance of artistic contemplation, and stage and film direction, to architects' understanding of architecture is not widely acknowledged. Functionalism poses a dilemma even for those who reject it: how can the architect propose a design strategy that refers to use without being deterministic? The continuing relevance of this question helps to explain why the architects discussed here often refer more to functionalism than to each other's ideas.

Lefebvre writes: 'It would be inexact and reductionistic to define use solely in terms of function, as functionalism recommends.'[2] In this chapter I focus on architects who redefine the relationship of design to use and consider human activity in wider terms than that of functionality. I discuss a number of post-war strategies – flexibility, polyvalence, hedonistic modernism, narrative, form against function and user collaboration – and question the degree to which each departs from functionalism. Although an architect may use a number of strategies at different times and to

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1 Jameson, *Postmodernism*, p. xxi.
2 Lefebvre, p. 369.

varying degrees, I mostly identify one architect with one strategy. The strategies are loosely arranged in chronological order but the relationship of one to another is not progressive.

FLEXIBILITY

In the mid-twentieth century reactions to functionalism focused initially on flexibility. Forty writes:

An important modernist term, particularly in the period after 1950, 'flexibility' offered hope of redeeming functionalism from determinist excess by introducing time, and the unknown. Against the presumption that all parts of a building should be destined for specific uses, a recognition that not all uses could be foreseen at the moment of design made 'flexibility' a desirable architectural property.[3]

Peter Collins writes: 'Flexibility is, of course, in its own way a type of Functionalism.'[4] However, Ellinor DeGory disagrees: 'This association seems extraordinary when it is considered that Functionalist theory, which relies heavily on ideas of spatial determinism and demands a passivity and obedience of the user, is in clear contradiction to notions of flexibility which suggest an active if not creative user.'[5] Although DeGory is correct in stating that they suggest different types of user, flexibility is a continuation of functionalism in that it assumes that the architect can cater for the future needs of the user, an assumption evident, to some extent, in many of the strategies I discuss. Flexibility is based on the principle that a building can absorb, or adapt to reflect, changes in use. Forty suggests it is a means by which architects seek to protect their livelihood:

The purpose of flexibility within modernist architectural discourse was as a way of dealing with the contradiction that arose between the expectation, so well articulated by Gropius, that the architect's ultimate concern in designing buildings was their human use and occupation, and the reality that the architect's involvement in a building ceased at the very moment that occupation began. The incorporation of 'flexibility' into the design allowed architects the illusion of projecting their control over the building into the future, beyond the period of their actual responsibility for it.[6]

DeGory writes that 'A flexibility in or within the built environment increases its exchange value.'[7] The ability to produce flexible buildings increases the value of

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[3] Forty, 'Flexibility', p. 1.
[4] Collins, p. 234.
[5] DeGory, p. 12, referring to Hill, 'An Other Architect', p. 143.
[6] Forty, 'Flexibility', p. 4.
[7] DeGory, p. 16

architects' skills.

Forty identifies three types of architectural flexibility: by technical means, by spatial redundancy, and as a political strategy. In this chapter I discuss the first two and another type of flexibility, the open plan. Flexibility as a political strategy is discussed in the next chapter.

FLEXIBILITY BY TECHNICAL MEANS

Forty identifies two types of flexibility by technical means: an intricate element with a fixed location and a limited range of configurations, and a regular structure with lightweight, uniform demountable floor, wall and ceiling panels. As an early example of flexibility by the movement of intricate elements he mentions the 1924 Rietveld-Schröder House in Utrecht by Gerrit Rietveld. Folding walls allow the first floor to be either a single space or a series of smaller spaces. The pieces of furniture fixed to the external walls define the function of each part of the first floor. But DeGory writes: 'The relationships between the designated spaces are variable; sleeping to eating, dining to bathing, washing to working etc. Hence the flexibility of the house lies in its accommodation of changing relationships between events, context and the use of the space.'[8] Pierre Chareau's Maison de Verre in Paris, completed in 1932, is another example of flexibility by the movement of intricate elements. For example, when open the pivoting storage unit in the main bathroom screens the bather, while sliding screens on the ground floor, one glass, the others perforated metal, can be moved separately to create gradations of aural and visual privacy.

With regard to the development of flexibility by technical means through demountability Forty writes:

> *Particularly influential were the systems developed in the United States in the 1950s by Anton Ehrenkrantz and Konrad Waschmann for buildings in which all services were carried in the roof space. Intended so as to offer freedom in the layout and arrangement of school and factory buildings, these systems were seized upon by certain European architects, Yona Friedman in France, Constant Nieuwenhuys (known as Constant) in the Netherlands, and Cedric Price in Britain, as holding the potential for something very much more, offering not merely flexibility within buildings but releasing buildings from their traditional fixity, and making possible a city within which all buildings could be mobile.[9]*

In any example of flexibility it is important to recognize who has the authority and knowledge to change a space. Is it the architect, owner, user or all three? Forty identifies Cedric Price's Inter-Action Centre in London, built between 1972 and 1977, and

8 DeGory, p. 10.
9 Forty, 'Flexibility', pp. 6–7.

demolished in 2000, as the closest built example of flexibility by technical means through demountable elements. Price recognizes that for demountability to be successful it must require only modest technical skills, such as those of a DIY enthusiast. He also states: 'In allowing for change, flexibility, it is essential that the variation provided does not impose a discipline which may only be valid at the time of design.'[10] Over time, Inter-Action acquired elements other than those designed by the architect, who accepted its demolition as a reasonable, and unsurprising, event once it was no longer deemed necessary and useful.

In these two types of flexibility by technical means only a limited degree of flexibility is provided. In the Rietveld-Schröder House and Maison de Verre the occupant can select from a range of configurations defined by the architect. The user was able to make more significant physical changes at Inter-Action but the architect still largely defined the character of the building. In Forty's two types of flexibility by technical means flexibility is dependent upon the physical movement of architectural elements, rather than a transformation in perception.

1.2.1 Cedric Price and Ed Berman, Interaction Centre, London, 1977, demolished 2000. Photograph, Adrian Forty.

FLEXIBILITY BY MORE TECHNICAL MEANS

At present there is much discussion on the interface between biotechnology, cybernetics and architectural technology. Simon Sadler writes that 'Cybernetics was defined in 1947

10 Price.

by the MIT mathematician Norbert Wiener … Wiener's indication that the principles of control are common to both organic and inorganic systems suggested an intimacy between man and machine.'[11] Donna Haraway writes that 'By the late twentieth century, our time, a mythic time, we are all chimeras, theorized and fabricated hybrids of machine and organism; in short we are cyborgs.'[12] The familiar definition of a cyborg is a hybrid of muscle and metal. But the fusion of humans and machines may be physical, as with the pacemaker, or perceptual, as with the television or internet. Once we understand a perspective or the web they are part of the way we understand the world; we cannot remove them, just as we need the technology of our fleshy bodies: the heart, lungs and liver. A development of flexibility by technical means has led to two hybrids of the human and the building: either a building with characteristics of a physical body or a building with mental attributes, notably intelligence. Both hybrids have qualities evident in Forty's two types of flexibility by technical means: the use of intricate elements and demountability.

A number of projects by Archigram, such as Mike Webb's 1966–1967 Cushicle, propose spaces that are an extra skin to the body. Now that the body is more and more a site of architectural investigation, Le Corbusier's phrase 'a machine for living in' assumes a new poignancy.[13] In Nat Chard's 1996 Body Apparatus-House Le Corbusier's phrase is inverted. The house-machine is in the body rather than around it: 'The apparatus, inserted within the body, engages with the programmes that are dealt with most prescriptively by the traditional house: comfort, hygiene, sleep, feeding and privacy. The mechanisms supplement and augment our existing organs, with which they work in parallel.'[14] Cushicle and the Body-Apparatus House are comparable to functionalist concerns with the minimal housing unit and the body as a machine, but they have a subtle poignancy and wit not associated with functionalism. They are an example of the development of flexibility by technical means towards an ever more symbiotic relation between a body and a building, neither of which are considered stable, unlike in functionalism.

Price's work is key to the development of flexibility by technical means towards a building with intelligence. His 1976 Generator project for the Gullman Paper Corporation in Florida is a system of lightweight, interchangeable components on a grid of foundation panels. Neil Spiller writes:

> *What is remarkable about this project is its cybernetic system. The planning of various configurations was controlled by electronics and each of Generator's components was to be fitted with a logic circuit which in turn was linked to a computer which would control*

11 Sadler, p. 148.
12 Haraway, p. 150.
13 Armstrong, p. 86. Spiller, 'Leaving Nadir', p. 92.
14 Chard, p. 29.
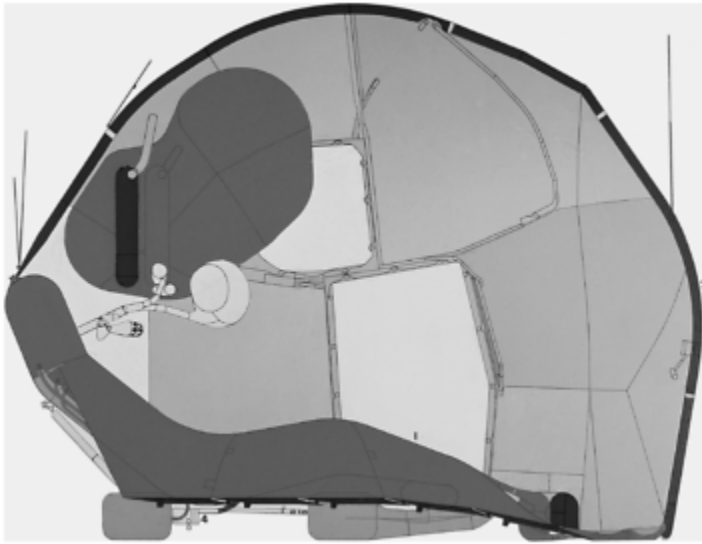
1.2.3 Nat Chard, Body Apparatus-House, 1996. © Nat Chard.
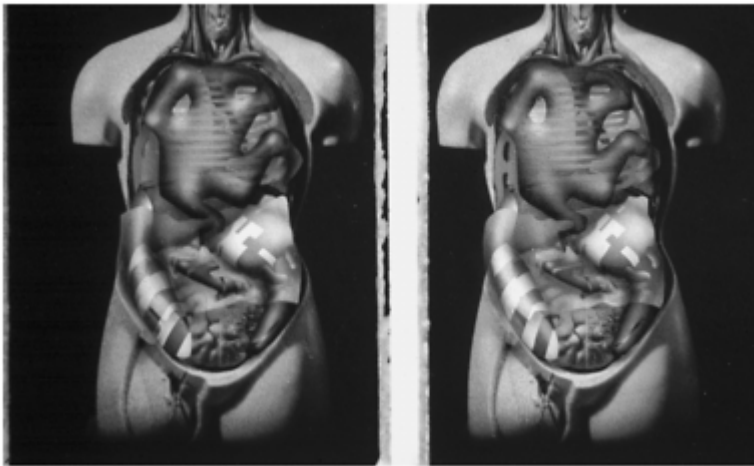
1.2.2 Mike Webb, Cushicle, 1966–1967. Fully opened. © Archigram Archives.

location and usage. The design team …developed a range of programs that would have enabled it to interpret the suggestions of users and contribute its own ideas …[15] *[A] program would dream up, in the event of a lack of activity within Generator, unsolicited plans for adjustment. Here I believe we have for the first time an architecture that is in some sense out of human control,*

15 Spiller, 'Contributions', p. 54.

responsive yet operating with digital imperative.[16]

Generator is similar to Inter-Action in that changes to the system are physical. The possibility of other types of difference is limited. But, as Spiller writes, Generator suggests a building out of human control, out of the control of the architect and the user. The architect designs the system but does not control its evolution. In addition to the architect and user, there is another animate and creative participant in the formulation of architecture: the building, sometimes reacting to the other participants, sometimes acting independently. The building may, for example, consist of 'twitching robotic wall pieces that get bored and fall asleep if not entertained by passers-by'.[17] The principle that architecture is made for its users is subtly addressed in such work. It questions the assumption that it is possible to create a building that meets the needs of its users and suggests, instead, that an animate, unpredictable, ever-changing building may be a more stimulating companion. It suggests that the user may be a passive spectator observing the 'game', an involved but reactive participant, or one of three principal creative agents in a feisty dialogue, the others being the architect and the building.

FLEXIBILITY BY SPATIAL REDUNDANCY

In flexibility by spatial redundancy a space is so large that it can accommodate different uses. Although they were not described as such at the time of their construction, Forty mentions, as an example, 'baroque palaces, where rooms were not dedicated to specific uses'.[18] Freedom of use was, however, possible for the aristocratic family rather than their servants. A more recent example of flexibility by spatial redundancy is Koolhaas' renovation, proposed in 1979–1981 but not constructed, for the Arnhem Koepel Prison, a panopticon built in 1882:

> *Perhaps the most important and least recognized difference between traditional (1882) and contemporary architecture is revealed in the way that a hypermonumental, space-wasting building like the Arnhem panopticon proves flexible, while modern architecture is based on a deterministic coincidence between form and program ... Flexibility is not the exhaustive anticipation of all possible changes. Most changes are unpredictable ... Flexibility is the creation of a margin – excess capacity that enables different and even opposite interpretations and*

16 Spiller, 'Contributions', p. 54.

17 A project by Tom Holdom in the Interactive Workshop at the Bartlett School of Architecture, UCL, tutored by Professor Stephen Gage, Pete Silver and Will McLean. Spiller, 'Contributions', p. 54.

18 Forty, 'Flexibility', p. 5.

ıses.**19**

1.2.4 Rem Koolhaas/OMA, Proposed renovation to the Arnhem Koepel Prison, 1979–1981. Internal perspective. © OMA.

FLEXIBILITY BY OPEN PLAN

Suggesting a loose fit between space and use, the open plan is similar to flexibility by spatial redundancy, and unlike flexibility by technical means, in that change of use is less dependent upon a physical transformation of the building than a change in the perception of the user. In either 1518 or 1519 Raphael and Antonio de Sangallo produced a design for a villa in Rome of which only a part, later to be called the Villa Madama, was built. Evans writes:

> In the Villa Madama, as in virtually all domestic architecture prior to 1650, there is no qualitative distinction between the way through the house and the inhabited spaces within it ... Thus, despite the precise architectural containment offered by the addition of room on room, the villa was, in terms of occupation, an open plan permeable to the numerous members of the household, all of whom – men, women, children, servants and visitors – were obliged to pass through a matrix of connecting rooms where the day-to-day business of life was

9 Koolhaas, 'Revision', pp. 239–240.

arried on.[20]

Referring to the design of the Palazzo Antonini, Udine, by Andrea Palladio in 1556, Evans writes: 'Palladio's villa and palace plans are sets of interconnected rooms. The peculiarity of this one is that lavatories were brought within the main building. In pairs they flank the square anteroom at the very centre of the plan (ventilated from above). They, too, could be used as thoroughfares.'[21] He concludes that:

> *The matrix of connected rooms is appropriate to a type of society which feeds on carnality, which recognizes the body as the person, and in which gregariousness is habitual … Such was the typical arrangement of household space in Europe until challenged in the seventeenth century, and finally displaced in the nineteenth by the corridor plan, which is appropriate to a society that finds carnality distasteful, which sees the body as a vessel of mind and spirit, and in which privacy is habitual … In this respect modernity itself was an amplification of nineteenth century sensibilities.*[22]

Evans implies that open plan is a description of use as much as form, and that flexibility of use is not created by the physical flexibility of a building alone. He considers buildings to be testaments to a way of living at a certain time, which can be occupied in ways for which they were not intended. Evans describes the Villa Madama as an open plan because all its rooms can be public and permeable to movement; a way of life he believes was evident in the sixteenth century. As the Villa Madama and Palazzo Antonini allow alternate, and potentially private, routes between rooms, Evans' interpretation of the carnality of sixteenth-century society may, however, be misleading. If occupied today, it would be unlikely to be used openly because of our desire for spaces that are private.

Evans equates modernity, and by implication modernism, with attempts to order social behaviour and limit the unpredictability of everyday life. But the modernist open plan is not functionalist, and is therefore distinct from the functionalist modernism discussed in Chapter 1.1, 'The Passive User'. Although the modernist open plan does not reflect a society which feeds on carnality'. the interconnectivity of spaces is apparent in both the Villa Madama and the Barcelona Pavilion, for example. The history of the Pavilion suggests that the user is passive, as does the building itself to some extent, for example in its control of the gaze. But the Pavilion's spatial ambiguity also implies an overlap of uses unlikely to occur while it remains a museum. The ease with which the open plan can be inhabited in different ways is its most significant virtue, although the flowing space of the modernist open plan is less adaptable than the sequence of rooms in the open plan of the Villa Madama and Palazzo Antonini.

Another precedent for the modernist open plan is the matrix of rooms divided by

20 Evans, 'Figures, Doors and Passages', pp. 64–65.

21 Evans, 'Figures, Doors and Passages', p. 63.
22 Evans, 'Figures, Doors and Passages', p. 88.

1.2.5 Yangban Class House constructed by King Sunjo, Changdeokgung
         Palace, Seoul, 1828. Window faced in rice paper. Photograph,
         Jonathan Hill.

fusuma, sliding partitions made of a latticed wooden frame covered with thick opaque
paper, in the traditional Japanese house. Praised by Gropius, the fusuma divided rooms
are also an example of flexibility by spatial redundancy and by technical means.[23]
Andrew Rabeneck, David Sheppard and Peter Town write: 'there is no "circulation
space" as we understand it; connections are made between rooms, each room is an
antechamber to another and names can be given to rooms based on the uses to which they
are put at a given time of day.'[24] Furniture is mostly lightweight and movable. For
example, beds are only brought out when in use; the rest of the time they are folded
away. The fusuma allow the relationships between the rooms undefined by function, and
the more fixed spaces of cooking, dining and garden, to shift according to the occupation
of the house and the time of the day.

Japanese architecture was better known to early modernists but traditional Korean
architecture has some similar qualities. Lisa G. Corrin writes that 'In a typical Korean
house the apertures are removable sliding doors that separate interior spaces so that uses
can be constantly altered. Even the furniture is portable.'[25] The modernist open plan
adopts the sliding screens and flowing space of traditional Japanese and Korean houses
but misinterprets and hardens their spatial, social and environmental porosity. In the

23 Gropius, *Apollo in the Democracy*, p. 120.
24 Rabeneck, Sheppard and Town, p. 84.
25 Corrin, p.33.

modernist open plan sliding internal walls are substantial enough to create privacy between adjacent spaces, while glass external walls allow the occupant to view nature but be separate from it. In traditional Japanese and Korean houses internal and external walls are delicate and porous; in Korean houses the internal temperature is maintained by under-floor heating. Rather than glass, opaque rice paper, oiled to make it waterproof, is used in windows. Consequently, the user's perception of the exterior involves all the senses rather than the primarily visual connection between inside and outside that is most apparent in the modernist open plan. Do-Ho Suh, an artist who grew up in a traditional Korean house, writes: 'Korean architecture is very porous. While you are sitting or sleeping in the room, you can hear everything inside and outside. You feel like you are in the middle of nature.'[26] The glass external wall in the modernist open plan house is a defensive barrier, isolating interior from exterior, so that the occupant is unaffected by the unpredictable natural environment. Paper in traditional Japanese and Korean houses provide a porous boundary that blurs architecture and nature. It allows one to infiltrate the other, so that the user must live with the fluctuations in nature.

The open plan continues to be a vibrant and influential spatial model. Between 1957 and 1959 Alison and Peter Smithson proposed the Appliance Houses, reinterpretations of the modernist open plan. One of the houses is a large 100m² rectangular room containing four small cubicle-rooms in an asymmetrical configuration – a kitchen, bathroom, cloakroom and utility/dressing room – each dedicated to particular domestic appliances.[27] The size of each cubicle room is different, determined by the type and number of appliances it contains. Each area of the large room is allocated a use, such as dining, which can easily change, suggesting an intriguing fluidity and overlap of use, both between the cubicles and the parts of the surrounding space.

Will Alsop's 1975 project for a House with 6 Identical Rooms, an arrangement of six interconnecting rooms in a 3 × 2 configuration, is reminiscent of a Palladian villa and, to a lesser extent, the traditional Japanese house and the modernist open plan. Each room has a lavatory, cooker, sink, shower and four doors, at least one external. The design does not imply a single system or hierarchy of use. It can be self-contained small apartments, a single house, change from one to the other, or be a combination of both. Alsop's house suggests a model of everyday life founded on complex social interaction and negotiation. If the WC is being used in one space, that space is a lavatory. As each of the rooms possesses a WC, do you leave the room you are sharing with guests to go to the lavatory next door? The house possesses no answers, it only poses questions – as every good brief should.'[28]

Although they are not described as such, the numerous flowing spaces in present-day architectural design, such as Foreign Office Architects' project for Yokohama Port Terminal, won in competition in 1995, are a further development of the open plan. The undulating surfaces of the Terminal create an open plan in three

26 Do-Ho Suh, in Corrin, p.33.
27 Smithson and Smithson, pp. 43–47.
28 Alsop, pp. 485–486.

1.2.6 Foreign Office Architects, Yokohama International Port Terminal, 2003.
© Foreign Office Architects.

dimensions, not just two, unlike the other examples discussed in this chapter. While some contemporary projects concentrate solely on the aesthetic possibilities of folded surfaces, the Terminal also considers their social implications. As much a landscape as a building, it is particularly appropriate to the habits of its users, locals using the Terminal as a park or travellers either moving or waiting, and to Japanese architectural traditions that blur the boundary between interior and exterior.

1.2.7 Andrea Palladio, Villa Rotonda, Vicenza, 1570. Photograph, Jonathan
Hill.

One impediment to the free-flowing movement the open plan implies is that, if the
spaces of the open plan are similar, there is little reason to move from one to another
unless an architectural device, such as the views out, creates difference. For example, the
Villa Rotunda, Vicenza, designed by Andrea Palladio in 1570, is symmetrical across its
axes but different garden designs are seen from each of the four elevations.

1.2.8 Andrea Palladio, Villa Rotonda, Vicenza, 1570. Photograph, James
Madge.

FROM REACTIVE TO CREATIVE

Rather than the passive user, flexibility by technical means suggests the reactive user,
except for the cybernetic versions that offer a potential dialogue between a creative
building and a creative user. Flexibility by spatial redundancy and the open plan suggest
three types of user creativity, which can occur singly or in combination: mental, a change
in understanding, such as renaming a space or associating it with a particular memory;
bodily, a movement or series of movements independent of, or in juxtaposition to, a
space, such as a picnic in a bathroom; physical, a rearrangement of a space or the objects
within it, such as placing a chair on a table. In addition to these, the cybernetic version of
flexibility by technical means suggests two further types of user creativity:
constructional, a fabrication of a new space or a physical modification of an existing
form, space or object, such as removing the lock from a door; conceptual, a use, form,
space or object intended to be constructed, such as a door.

POLYVALENCE

In the 1960s Aldo van Eyck and Herman Hertzberger began a forceful criticism of flexibility. Hertzberger writes: 'Although a flexible set-up admittedly adapts itself to each change as it presents itself, it can never be the best and most suitable solution to any one problem; it can at any given moment provide any solution but the most appropriate one. Flexibility therefore represents the set of all unsuitable solutions of a problem.'[29] Hertzberger's criticism of flexibility is directed particularly at the neutral spaces associated with flexibility by technical means through demountability,[30] and not the more intricate moving elements of either the Rietveld-Schröder House or the Maison de Verre, which he praises and does not equate with flexibility.[31]

Instead of flexibility, Hertzberger proposes polyvalence, which he identifies in 'a form that without changing itself, can be used for every purpose and which, with minimal flexibility, allows an optimal solution.'[32] In denying a simple, and singular, resolution of form and function, Hertzberger states that a form with polyvalence can be used in a number of ways. He finds a precedent for polyvalence in Amsterdam: 'What makes the old canal-houses so liveable is that you can work, relax or sleep in every room, that each room kindles the inhabitant's imagination as to how he would most like to use it.'[33] Hertzberger writes: 'Just like words and sentences, forms depend on how they are "read" and which images they are able to conjure up for the "reader".'[34]

He believes that a form with polyvalence is capable of varied uses because it resists fixed meanings: 'If we want to respond to the multiplicity in which society manifests itself we must liberate form from the shackles of coagulated meanings. We must continuously search for archetypal forms which, because they can be associated with multiple meanings, can not only absorb a programme but can also generate one. Form and programme evoke each other.'[35]

Hertzberger was a member of the editorial team of the Dutch architecture magazine *Forum* in the early 1960s, when it praised the elementary forms of archaic habitation. He associates polyvalence with pure, archetypal forms, such as the square.[36] As examples of polyvalence he proposes the podium-block and square hollow, used first in his Montessori School, Delft, completed in 1966:

29 Hertzberger, *Lessons For Students in Architecture*, p. 146.
30 Hertzberger, *Lessons For Students in Architecture*, p. 149.
31 Hertzberger, *Lessons For Students in Architecture*, pp. 219–220, 238–240.
32 Hertzberger quoted in Forty, 'Flexibility', p. 3.
33 Hertzberger, *Lessons For Students in Architecture*, p. 147.
34 Hertzberger, *Herman Hertzberger 1959–90*, p. 22.

35 Hertzberger, *Lessons For Students in Architecture*, p. 149.
36 Strauven, *Aldo van Eyck*, p. 354.

The central point of the school hall is the brick podium-block, which is used for both formal assemblies and spontaneous gatherings. At first sight it would seem that the potential of the space would be greater if the block could be moved out of the way from time to time and, as was to be expected this was indeed a point of lengthy discussions. It is the permanence, the immobility, and the 'being in the way' that is the central issue, because it is indeed that inescapable presence as focal point that contains the suggestions and incentives for response. The block becomes a 'touchstone'. and contributes to the articulation of the space in such a way that the range of possibilities of usage increases. In each situation the raised platform evokes a particular image, and since it permits a variety of interpretations, it can play a variety of different roles, but conversely also the children themselves are stimulated to take on a greater variety of roles in the space.[37]

nd

The floor in the kindergarten section has a square depression in the middle which is filled with loose wood blocks. They can be taken out and placed around the square to form a self-contained seating arrangement. The blocks are constructed as low stools, which can easily be moved by the children all around the hall, or they can be piled up to form a tower. The children also use them to make trains. In many respects the square is the opposite of the brick platform in the other hall. Just as the block evokes images and associations with climbing a hill to get a better view, so the square hollow gives a feeling of seclusion, a retreat, and evokes associations with descending into a valley or hollow. If the platform-block is an island in the sea, the hollow square is a lake, which the children have turned into a swimming pool by adding a diving board.[38]

[37] Hertzberger, *Lessons For Students in Architecture*, p. 153.
[38] Hertzberger, *Lessons For Students in Architecture*, p. 154.

1.2.9 Herman Hertzberger, Montessori School, Delft, 1966. Podium block. ©
Architectuurstudio Herman Hertzberger.

INCOMPLETION

To incite users to transform a building, Hertzberger uses two principal strategies:
polyvalence and incompletion. With reference to the Diagoon Dwellings in Delft,
completed in 1970, he writes: 'The skeleton is a half-product, which everyone can
complete according to his own needs and desires.'[39] Surfaces were left bare and specific
areas, such as the balconies between the houses, were left vacant, to be completed by the
building's occupants.

Although Hertzberger criticizes functionalism,[40] his belief that a form with
polyvalence 'can be used for every purpose' and allow 'an optimal solution' suggests a
certain sympathy for the functionalist attempt to define use. Rather than each
architectural element having a single use, as in functionalism, he proposes a single
element suited to many uses. The incompletion of the Diagoon Dwellings can be seen

39 Hertzberger, *Lessons For Students in Architecture*, p. 157.
40 Hertzberger, *Lessons For Students in Architecture*, p. 146.

1.2.10 Herman Hertzberger, Montessori School, Delft, 1966. Square hollow. ©
Architectuurstudio Herman Hertzberger.

s either evidence of the architect's modesty or a patronising attempt to confront users
Hertzberger states that the architect 'must use his imagination to the full to be able t
identify himself with the users and thus to understand how his design will come across t
them and what they will expect from it.'[41] He also writes: 'Architects should not merel
demonstrate what is possible, they should also and especially indicate the possibilitie
that are inherent in the design and within everyone's reach.'[42] Hertzberger's idea of th
architect, in turns humble and paternalistic, is comparable to that of functionalism
However, polyvalence is similar to flexibility by spatial redundancy and the open plan i
that a change of use can result from a change in the perception, or life, of the user rathe
than from just a change in the form of a building. The user associated with polyvalence i
creative mentally, bodily and physically. The incompletion of the Diagoon Dwelling
also suggests constructional and conceptual user creativity. However, as Hertzberge
defines the spaces in which he wishes the user to be creative, the Diagoon Dwellings als
suggests the reactive user.

41 Hertzberger, *Lessons For Students in Architecture*, p. 164.
42 Hertzberger, *Herman Hertzberger 1959–90*, p. 22.

1.2.11 Herman Hertzberger, Diagoon Dwellings, Delft, 1970. Balcony. ©
Architectuurstudio Herman Hertzberger.

HEDONISTIC MODERNISM

Flexibility and polyvalence are associated with the 1950s and 1960s, in particular.
Although developed in the 1970s, hedonistic modernism, narrative, and form against
function are each a response to functionalism as much as flexibility and polyvalence.

The prevalent images of human occupation in modernism tend to be those of the
worker. For example, Schütte-Lihotzky equated activities in the kitchen with those in the
factory. Koolhaas exploits an aspect of modernism that he believes has been denied:
'Recent attacks on modern architecture have described it as lifeless, empty, puritanical.
However, it has always been our conviction that modern architecture is a hedonistic
movement, that its abstraction, rigour and severity are in fact plots to create the most
provocative settings for the experiment that is modern life.'[43]

D*elirious New York* was published in 1978. Subtitling the *book A Retroactive
Manifesto for Manhattan*, Koolhaas presents an alternative history of modernism driven
43 OMA, 'La Casa Palestra', p. 8.

y the surreal rationality he finds in the Paranoid-Critical Method (PCM), a strateg
evised in 1929 by Salvador Dalí in which a chance decision is pursued to the limits o
s logic. In 1936 Dalí was expelled from the surrealist movement, in part because hi
reative process was considered too contrived, containing only the illusion of chance.[44] I
s possible to see Koolhaas' use of the PCM as not an alternative to functionalism but a
unctionalism taken to extremes: 'the inner workings of the Paranoid-Critical Method
mp, unprovable conjectures generated through the deliberate simulation of paranoia
hought processes, supported (made critical) by the "crutches" of Cartesian rationality.'[45]

In *Delirious New York* Koolhaas discusses the Downtown Athletic Club, built in 1931
o the design of Starrett and Van Vleck with Duncan Hunter. In a memorable passage h
magines life within the building: 'Eating oysters with boxing gloves, naked on the nt
loor – such is the "plot" of the ninth story, or the 20th century in action.'[46] Considere
n its own, this sentence suggests the unpredictable juxtaposition of activities bu
Koolhaas also writes that 'The Downtown Athletic Club is a machine for metropolita
achelors whose ultimate "peak" condition has lifted them beyond the reach of fertil
rides.'[47] Therefore, 'Eating oysters with boxing gloves, naked on the nth floor' i
ppropriate not unexpected behaviour within the Downtown Athletic Club.

[44] Ades, 'Dada and Surrealism', p. 132.
[45] Koolhaas, *Delirious New York*, p. 236.

[46] Koolhaas, *Delirious New York*, p. 155.
[47] Koolhaas, *Delirious New York*, p. 158.
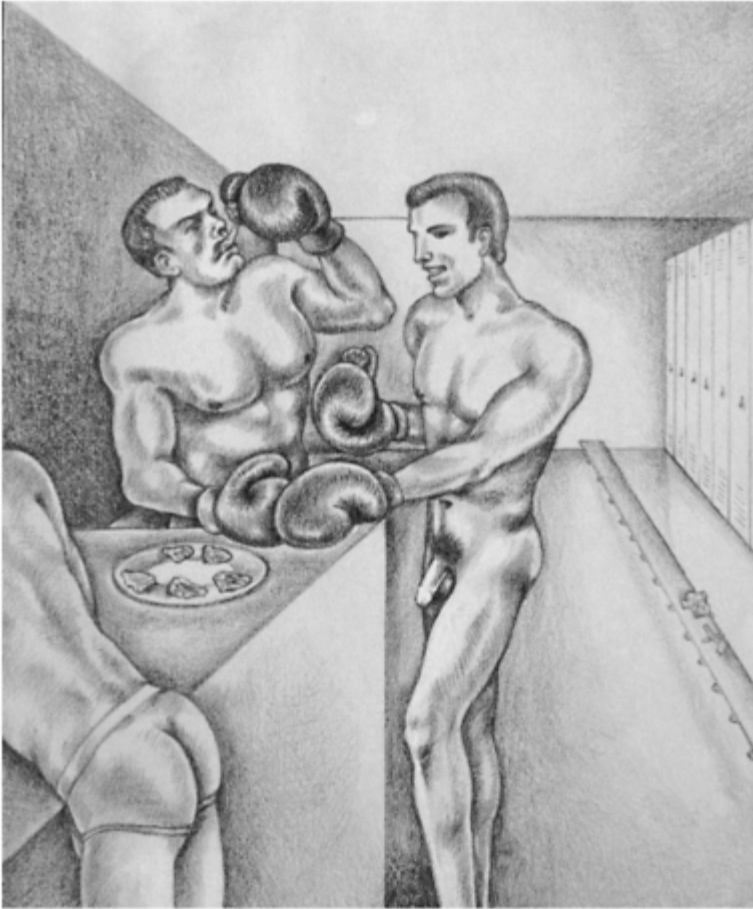
1.2.12 Rem Koolhaas, 'A machine for metropolitan bachelors. . .'. © OMA.

The Villa Dall'Ava, completed in 1991, is comparable to Koolhaas' interpretation of the Downtown Athletic Club. Situated in the Parisian suburb of Saint Cloud, the house has a panoramic view of the city. Koolhaas aligned the house with the Eiffel Tower in the distance and located a pool on the roof so that a swimmer moves towards and away from the Tower. In La Casa Palestra, an installation at the 1986 Milan Triennale, Koolhaas reworked the Barcelona Pavilion so that it fitted within a curved space in the exhibition building. Exploiting what he considers to be its latent qualities, Koolhaas transformed the 'empty' interior of the Pavilion into a site of congested bodily activities. La Casa Palestra disrupted the primarily visual experience Mies intended, and linked the modernist open plan to the carnality Evans associates with the sixteenth-century open plan. The installation focused, however, on the exercise equipment of a gym, suggesting a

dominant if not single use.**48**

Each space in the Kunsthal, Rotterdam, completed in 1992, has an expected function and Koolhaas describes the building as a 'continuous circuit'.**49** But many of the spaces could easily accommodate a different use and the varied and complex routes through the building allow each user to construct personal journeys within it. The routes and views through the building can undermine spaces intended for a specific function. For example, the main entrance, half way along the ramp cutting through the building, leads directly into the auditorium, through which the visitor must pass to reach the other spaces in the building. In the auditorium, the large window behind the speaker allows the audience a view across the service road and into the offices of the gallery administration.

Koolhaas designs a hedonistic rather than a utilitarian modernism. In the Villa Dall'Ava and La Casa Palestra he pushes functionalism into unexpected territories, towards the explorations of pleasure charted by surrealists. The Kunsthal is, however, a greater departure from functionalism. The actions of the user can undermine the assumption that a space should house a single function. At the entrance, the user has only two choices: to enter the auditorium or proceed along the ramp. But elsewhere the user can construct numerous alternative journeys. La Casa Palestra is a modernist open plan, but the interconnectivity of spaces and alternative routes in the Kunsthal recall Evan's definition of the sixteenth-century open plan. The generosity and functional ambiguity of many of the spaces in the Kunsthal are also an example of flexibility by spatial redundancy. In the Kunsthal, the user is creative mentally and bodily.

48 OMA, 'La Casa Palestra', p. 8.
49 Koolhaas and Schwartz. *Kunsthal, Rotterdam*, p. 7.

1.2.13 Rem Koolhaas/OMA, Villa Dall'Ava, Paris, 1991. View towards the
Eiffel Tower. © OMA.

1.2.14 Rem Koolhaas/OMA, Kunsthal, Rotterdam, 1992. South elevation. Photograph, Adrian Forty.

1.2.15 Rem Koolhaas/OMA, Kunsthal, Rotterdam, 1992. Auditorium and entrance. © OMA.

NARRATIVE

Early twentieth-century functionalists usually designed a specific space for a specific function rather than a series of spaces for a sequence of functions. Teaching at the Architectural Association in the 1970s, Bernard Tschumi established narrative as the foundation of his students' investigations. Peter Buchanan states: 'Literary texts were used – Kafka's *Burrow*, Calvino's *Invisible Cities*, Borges' *Library of Babel* and Hesse's *Glass Bead Game* – to highlight the intricacies of language and space.'[50] A description of Alkahest, a student project produced by Dereck Revington in 1975, exemplifies the poetic ritualization of space that resulted from Tschumi's unit: 'Performed in a burnt-out warehouse a score prescribes an archaic and solitary ritual of staking territory, of introspective and symbolic games and acts to force intense experience of myriad psychological nuances of shaping space.'[51] A narrative such as Alkahest is a departure from functionalism in that movements are poetic rather than pragmatic and personal rather than collective. Like functionalism, however, narrative is a means to order movement and tie it to a space, even if that space is, as in Alkahest, appropriated rather than designed. Narrative recalls stage and film direction, discussed in 'The Passive User', but it most resembles choreography in that the moves of a narrative-dance and the roles of the architect–choreographer and user–dancer are defined. If the user–dancer is also the architect–choreographer, he or she displays mental, bodily, physical and conceptual creativity. If the user is the dancer, or a member of the audience, but not the architect–choreographer, he or she is passive or reactive unless allowed to improvise.

FORM AGAINST FUNCTION

Peter Eisenman and Daniel Libeskind state that the project of modernity should be abandoned because it suppresses all theories, peoples and events that do not conform to its principles of universality and rationality.[52] They suggest that the modernist devotion to progress has produced not the social emancipation of mankind but the possibility of its total destruction. Anthony Vidler writes that, beginning in the 1970s, the loss of faith in the project of modernity resulted in criticism of the humanist and functionalist bodies of authority and social processing. According to this criticism the single white male body, the model for the design of buildings from the Renaissance to Le Corbusier, is racist and sexist, while functionalism is oppressive because it denies the immeasurable and subjective.[53] Instead of form follows function, Libeskind and Eisenman propose form against function. Unlike Hertzberger, for example, they do not make a distinction between function and use.

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50 Buchanan, p. 60.
51 Buchanan, p. 61.
52 Eisenman, 'Post-Functionalism', unpaginated. Eisenman, 'The End of the Classical', p. 154. Libeskind, 'Architecture Intermundium', p. 114.
53 Vidler, 'The Building in Pain', p. 3.

Built in 1976 in Cornwall, Connecticut, House VI is the sixth house by Eisenman. The clients, and present owners, are Suzanne Frank, an architectural academic who Eisenman appointed as a researcher at the Institute for Architecture and Urban Studies when he was its Director, and Dick Frank, a regular photographer of Eisenman's buildings. In naming the house for the architect rather than the client, as is the case with most published houses, the intellectual property of the architect is prioritized over the legal or emotional property of the client. Based in New York, the clients 'wanted a country house where we could spend weekends and vacations'.[54] Suzanne Frank recalls that 'Eisenman spoke to us about our needs and activities in the house. He visited us in our apartment on one evening in May 1972 and asked us to talk about how we might live there.'[55] She assumed that Eisenman discussed their living patterns in order to accommodate them, but it is possible he spoke to them in order to do the opposite. In an initial design proposal the clients' bed, stored in a closet when not in use, was located in an alcove large enough to sleep two people next to the stair landing on the first floor. But, at their request for a more private sleeping arrangement in another part of the house, the architect provided two single beds separated by a slot in the floor. Eisenman has stated his opposition to function and functionalism.[56] Of House VI he writes:

> *In its original incarnation it certainly questioned the idea of inhabiting, or habitation, as habit. There was nothing about the occupation of the house that was habitual (even in its first drawings it had no bedroom: the bed occupied a place in a closet, to be rolled out at night). Even when there was a bedroom it did not have a door which would close it off for auditory and visual privacy. Furthermore there was the notorious slot in the bedroom floor, the column at the dining table, and the bathroom in what appears to be a closet. In short, nothing about the house's function conformed to the existing typology of country house.*[57]

In 1990 the clients initiated the renovation of House VI because problems with the building's construction caused the house to leak, and they wished to transform elements of the house inconsistent with their daily life. Suzanne Frank writes:

> *The most inconvenient element in Eisenman's design … was the slot in the bedroom floor, which sliced right through the middle of our bed. This forced us to sleep in separate beds, which was not our custom. Foolishly, we lived with twin beds for many years until the renovation in 1990, when we resolved the situation by introducing a large bed that bridged the floor slot. My husband had a notch cut into the wooden bedstead just above the floor slot, thus nodding to the existence of the slot, but not allowing it to separate us – an apt notation, I*

54 Frank, p. 51.
55 Frank, p. 53.
56 Eisenman, 'Post-Functionalism', unpaginated.
57 Eisenman, 'Afterword', p. 110.

elieve.[58]

 building not designed or named according to function, giving no clues how it is to be
ccupied, is a rejection of function. House VI is named according to a function, even if i
gnores the traditional ideas of comfort associated with domesticity. Rather than outrigh
ejection, House VI resists function. The single beds and the slot between them ar
isconcerting because they refer to the absence of a normal double bed.

   House VI is an incitement to the user comparable to that in Hertzberger's work
owever, in the Diagoon Dwellings, for example, Hertzberger wishes to encourage an
ccommodate users' attempts to domesticate his design. Eisenman, however, suggest
at the most rewarding building is the one that is hardest to use. In contrast to th
nsidious user-friendliness he associates with functionalism, Dunne, as has been noted
uggests 'user-unfriendliness, a gentle provocation . . . which does not have to mean user
ostility.'[59] The Diagoon Dwellings are an example of user-friendliness. House VI is a
xample of user-hostility. As it took 14 years for the Franks to fill in the slot betwee
eir beds they were remarkably passive to the authority of the architect. But as
rovocation to use, however, House VI suggests the five types of user creativity.

   In 1998 Libeskind completed the Jewish Museum in Berlin. He is the appropriat
rchitect for the Jewish Museum because his intellectual position, and the history of th
ews in Berlin, is permeated by a sense of loss. The subject of Libeskind's work i
bsence, taking things out rather than putting them in, denying the language of familia
rchitectural elements. The Museum has no visible entrance. It is reached via a
nderground passageway leading from the Baroque main building of the Berlin Museum
ext door. One of the routes beneath the Jewish Museum leads to a high and unheated
ower of raw concrete lit from above by a very thin, unglazed, corner window, which
llows a shaft of natural light to enter the space and, depending upon the wind direction
ounds from the street and playground opposite. Running through the zigzag form of th
useum is a void that can be looked into but not entered. During the design process
ibeskind considered making the ceiling heights in the galleries marginally too low t
ccommodate one particularly large painting he disliked. The architect hoped that th
urator's reaction would be to either remove the painting from the collection, or t
mputate a section of the offending canvas.[60]

   In a number of ways, for example its lack of a conventional and visible entrance, th
useum resists the day-to-day functioning of a museum. However, so eloquently does i
erform the function of a museum – to represent a history – that it opened to the publi
efore its collection was installed. During the course of the Museum's construction
ibeskind assumed an increasingly public stance, criticizing the regressive an
onservative authorities in Berlin.[61] In the Museum he aims to represent the life of

8 Frank, p. 60.

59 Dunne, p.38.
60 Libeskind, Lecture to the School of Architecture, Kingston Polytechnic, 1991.
61 Libeskind, *Traces of the Unborn*, p. 29.

1.2.16 Daniel Libeskind, Jewish Museum, Berlin, 1998. Photograph, Jonathan Hill.

Jews in Berlin before the 1930s, their fate under the Nazis, and their presence in contemporary Berlin. The Museum is a discourse of internal rules resistant to function in principle, but affirms its particular function. Especially while it had no collection to guide the visitor, the Museum suggested the mental and bodily creativity of the user, who ordered and completed the Museum by the sequence and manner in which he or she moved through the spaces, filling them with an imaginary collection.

DOING IT YOURSELF

The 1960s are a particularly fruitful period for my investigation because of their liberal political, social and cultural climate, and influence on subsequent decades. I return to them here because they offer interesting examples of a strategy – collaboration with users and their participation in the design process – distinct from the others I have discussed so far, although evident to some extent in Inter-Action and the Diagoon Dwellings.

1.2.17 Daniel Libeskind, Jewish Museum, Berlin, 1998. Photograph, Jonathan Hill.

Banham cites the diminished authority of the architect since 1960. Maurice Culot, member of the Atelier de Recherche et d'Action Urbaine (ARAU) founded in Brussels in 1968, writes: 'We do not force our own architectural tastes on people, but follow the advice of the people involved.'[62] Referring to Culot's proposals for Brussels, Graham Shane comments: 'Indeed Architecture as such is unimportant, and Culot advocates "pastiche architecture", like the instantly old Port Grimaud – the French Mediterranean holiday resort – to give people what they want.'[63] However, like the modernists he criticizes, Culot assumes that architectural taste is universal and homogenous. The result, as Gillian Rose recognizes, is that 'it is the architect who is demoted; the people do not accede to power.'[64]

Bernard Rudofsky's *Architecture Without Architects: An Introduction to Non-Pedigreed Architecture*, published in 1964, discusses spaces and buildings made without the involvement of architects. Rudofsky is interested in buildings produced through 'communal enterprise' before architecture 'became an expert's art'. He argues against architects and for builders; one section is titled 'Mason versus architect'. Some of his examples are buildings made by builders without the direct

62 Culot quoted in Maxwell, p. 191.
63 Shane, p. 189.
64 Rose, p. 336, quoted in Till, p. 72.

nvolvement of users; others are a collaborative effort between builders and users.
Rudofsky states, correctly, that 'Architectural history, as written and taught in the western world, has never been concerned with more than a few select cultures.'[65] Rudofsky presents a laudable account of architecture without architects in non-western cultures. But *Architecture Without Architects* is also a rejection of industrialized society, which limits the scope and relevance of Rudofsky's argument.

Adhocism: The Case for Improvisation, jointly authored by Charles Jencks and Nathan Silver, was published in 1973, but in spirit it is also a book of the 1960s. Jencks and Silver state that users should have more involvement in design and outline the merits of architectural bricolage. It is, however, incorrect to assume that a building will be ad-hoc just because its users design it. It may, instead, be highly planned, while a building designed by an architect may be bricolaged together. Jeremy Till and Sarah Wigglesworth, architects, describe the construction of their house in North London:

> *We are now having trouble detailing the windows; framing them in zinc or standard pieces of timber feels too precious. Lying around the site (once a forge for the neighbouring railway) are some old pitch-pine sleepers. In a moment of vernacular inspiration Sarah realises they will make perfect window surrounds and, together with the builders, sort out a way of making them work.*[66]

Till and Wigglesworth's attitude to design is not typical of architects, who are more often obsessed with the creation of a finite, consistently detailed, object. Whether or not they are architects, when the designers are also the users the building process has the potential to be not the production of a fixed object but an endless, flowing cycle of designing, making and using. Jane Rendell describes the transformations to a house in South London:

> *In a matter of days, a table had gone from being the crowded focus of a lively drunken evening, to being rearranged as a number of smaller tables as in a restaurant, to framing candle-lit icons to be sold in a Saturday street market. At last it was left to blaze in the grate on a particularly cold night. This shifting relation between spaces and their potential utilities produced a continuous sense of doubt and uncertainty. You could never be sure exactly what something was and what it was not.*[67]

In 1968 the Catholic University of Louvain decided to build a new medical faculty at Woluwé-Saint Lambert near Brussels. The university's initial proposal was rejected by the students, who suggested the appointment of Lucien Kroll's co-operative architectural practice. The university's decision to consult the students, and the students' response, was characteristic of the political climate in the late 1960s.

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65 Rudofsky, unpaginated.
66 Till and Wigglesworth, p. 16.
67 Rendell, p. 244.

1.2.18 Sarah Wigglesworth Architects and Jeremy Till, 9–10 Stock Orchard
      Street, London, 2001. View of the entrance from the street.
      Photograph, Paul Smoothy.

1.2.19 Lucien Kroll, Medical Faculty, Catholic University of Louvain,
Woluwé-Saint Lambert, Brussels, 1971. West elevation of La Méme.
© Atelier Lucien Kroll.

The students participated in the design process, in negotiations with the university, and in building construction. Kroll organized architects and students into groups, who worked with models rather than drawings. He reorganized the groups a number of times as the design developed. His aspirations, for a working relationship between architects and users, are exemplified in one part of the project. He writes: 'At a meeting in Louvain, a student told me that very often a group would rent or purchase a run-down small house, pull up the floors, demolish walls, stairs, doors, and so on, and rebuild according to their own ideas.'[68] Kroll built them the simple 'house' they wanted, and either left the students to transform it or helped them make the changes they wanted: 'I saw how S., a big American student, designed for himself a very small room, 7 meters high. I said nothing. I was later to be criticized for this: others after him would not like the room! However,

[68] Kroll, p. 48.

when he left, three students argued over this room.'[69] Kroll's working process is flexible
e varies consultation and participation according to each project. However, his emphasi
n improvization, and the involvement of the user in design and construction, can b
ppressive as he nearly demands the participation of the user. He disparages thos
tudents at Woluwé-Saint Lambert who do not want to adapt their environment.[70]

1.2.20 Lucien Kroll, Medical Faculty, Catholic University of Louvain,
Woluwé-Saint Lambert, Brussels, 1971. 'Fons and Maria', the two
figures made by builders. Courtesy of Atelier Lucien Kroll.

Involving users in the design process does not necessarily produce better architecture,
but neither does working with users automatically lead to the enfeeblement of architects.
Wolfgang Pehnt writes: 'An architect attentive to the words and wishes of people, who
concedes to builders the right to participate, while also cultivating a personal vocabulary,
Kroll recognizes no unsolvable contradiction even in these circumstances. He believes in

69 Kroll, p. 48.
70 Kroll, p. 48.

architecture as the ultimate personal statement of the architect while being at the same time the ultimate personal architecture of the user.'[71] Some strategies discussed in this chapter, such as flexibility by technical means, recognize a reactive user, others, such as polyvalence, suggest a creative user. Kroll's example indicates the compatibility of the formal and spatial skills of the architect, an understanding of a specific site and its users, the user's participation in the design process, and a strategy that recognizes user creativity in the five ways outlined in this chapter.

THE USE OF COLLABORATION

Whether or not users are involved in the design process, it is possible to make buildings and spaces that are more accessible to previously excluded groups. Through increased building legislation and greater design awareness, it is possible to ensure that physical disability, for example, does not restrict access to, and movement through, a building. When users are involved in the design process it is possible for the architect to respond to their needs and desires as individuals and groups. At Woluwé-Saint Lambert the users were involved in the design process and their ideas were manifest in the form of the buildings. Woluwé-Saint Lambert is an example of what can be achieved when the users are known, but the students who worked with Kroll left the university long ago and others, with quite different desires and needs, have replaced them. Woluwé-Saint Lambert indicates that shifting the terms of authorship of architectural design can be effective at the time of construction. But it does not necessarily increase the likelihood of a building or space being responsive to future users. If a space is too functionally specific it may achieve the opposite, unless the new users are able to be designer-users changing the original building. Any attempt by architects to meet the specific needs of a defined group of users at a particular time is likely to be effective only in the short term. Other strategies discussed in this chapter, such as polyvalence, do not involve the user in the design process but aim to produce forms and spaces that the user can transform. They are as valuable as user collaboration because they recognize that appropriation is key to user creativity.

[71] Pehnt, p. 10.

1.3
the creative user

LEARNING FROM OTHERS

This chapter focuses on the reformulation of subject–object relations in urban culture by situationists and Lefevbre and in literature by Roland Barthes, and considers their relevance to architects.

MANAGING SPACE

In *Discipline and Punish* Michel Foucault recognizes the pervasiveness of social ordering in buildings. David Sibley writes: 'Thus, the asylum and the prison, rather than being considered exceptional, should be thought of as models which have a wider application in society even though they may assume a more muted form. In particular, pervasiveness should be thought of as a continuum rather than a dichotomous variable. This is the essence of Foucault's argument in *Discipline and Punish*.'[1] Foucault suggests that the experience of a building depends on the way it is managed as well as designed.[2] Whether a building is authoritarian or democratic is not dependent on form and space alone.
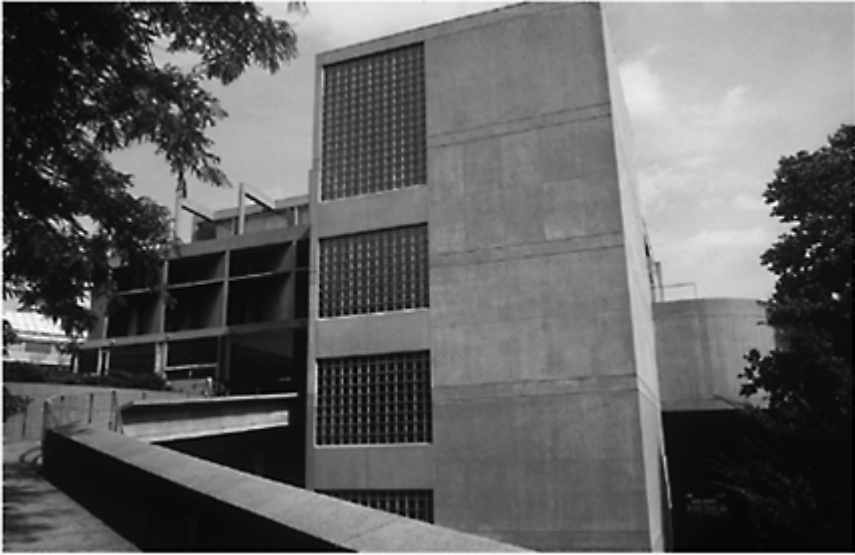
Le Corbusier's 1964 Carpenter Visual Arts Center at Harvard University is located on a compact site between other buildings of the university. One part of the Center, a ramp in elongated 's' in plan, rises up from the ground to reach the first floor entrance and slopes down to meet the ground on the other side. For the most part uncovered, the ramp is enclosed on four sides where it cuts through the main body of the building. Forming part of a route through the campus, the ramp accommodates pedestrians and cyclists who either visit the Center or pass through it uninterrupted. Considered in isolation, the ramp seems to belong to both a private building and a public street. But to reach the Center one must enter the university campus, which both defines and deters outsiders and affords its members the knowledge that they will mostly encounter people of comparable social status. The distinction between public and private occurs at the edges of the campus rather than at the edges of the ramp or at the entrance to the Center. The everyday movements of the students and staff of the university are a means to spatially manage the Center and the campus.

APPROPRIATING SPACE

Users are rarely clients. It is unusual for users, as distinct from client-users, to influence the design process. Even if a user owns a space he or she is unlikely to have

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1 Sibley, *Geographies of Exclusion*, p. 82.
2 Foucault, 'Space, Knowledge and Power', p. 372.

1.3.1 Le Corbusier, Carpenter Visual Arts Center, Harvard University,
        Cambridge, Mass., 1964. East elevation and entrance ramp.
        Photograph, Murray Fraser.

ommissioned it. An owner-user has the opportunity to transform a space but other users
etached from the commissioning, ownership, design and management of a space, may
e more likely to initiate unexpected uses because they lack a strong sense of
esponsibility for a space.

  Lefebvre describes the user in two ways, as a negative abstraction, and as an
ppropriator attacking the functionalist domination and fragmentation of spatial practice.
orty names the appropriation of existing spaces proposed by Lefebvre and situationists
s an example of flexibility as a political strategy. He writes:

> *This assumption that 'flexibility' is achieved through the building, and that it is*
> *the business of the architect to embed it in the design has been a general feature*
> *of the normal architectural use of the concept – and is what sets it apart from*
> *the third sense of 'flexibility' which sees it as not as a characteristic of*
> *buildings, but of use … In Lefebvre's idea that through use, through positive*
> *acts of appropriation, the functionalist domination of space can be broken,*
> *'flexibility' acquires its political connotation.*[4]

3 Lefebvre, p. 369.
4 Forty, 'Flexibility', p.10.

few, if any, spaces cannot be appropriated for another use. Even a building type seemingly rigidly defined in terms of use, such as a prison, can be used for another purpose although traces of a former use, whether a memory or a form, may influence later occupation. In 1995 I stayed on the twenty-fifth floor of an apartment building in Beijing. The building contained two lifts. As one was permanently out of order, the residents were forced to use the other. Five-foot square, it had two purposes, one obvious, the other less so. Its walls stacked with shampoo, vegetables and light bulbs, the lift was also a shop and the lift operator the shopkeeper. Providing both convenience and security, I assume it was a legal shop-lift.[5] Its two drawbacks were the long wait for the single lift and the closure of the shop, and therefore the lift, from 11.00pm to 7.00am. Any resident returning outside these hours was required to walk up maybe thirty floors to their apartment.

The users of the shop-lift have little opportunity to transform the space they briefly inhabit; instead, it is the shop-keeper who is the creative appropriator. Iain Borden gives skateboarding as an example of the appropriation of space through the everyday lived experience of the user described by Lefebvre. Early skateboarders were surfers, who transferred movements developed on the surfaces of the ocean to the urban surfaces of Los Angeles. One aspect of skateboarding is the appropriation of the unexpected or ignored. Many of us will have seen a skateboarder use a seemingly unpromising upturned section of a kerb when there is a ramp nearby. From the initial appropriation of found elements such as kerbs, ramps and empty swimming pools, a considerable number of skateparks were constructed.

> mimicking backyard Californian swimming pools, Arizona pipeline projects and other features of American architecture and civil engineering … These various constructed architectures of skateboarding are not, however, despite their unique contribution to the specialist typologies of the differentiated built environment, the principal contribution of skateboarding to architectural space. This lies instead in the performative aspects of skateboarding.'[6]

Borden makes a clear distinction: 'The architecture of skateboarding falls into two interdependent categories, one closer to the conventional realm of architecture as the conceptualization, design and production of built spaces, the other closer to the realm of the user and the experience and creation of space through bodily processes.'[7] Especially in the second category, the skateboarder creates a new space by a dialectical engagement of the body with the physical environment: moving in reaction to the city and projecting bodily movements onto the city. Borden's second category of skateboarding is an example of mental, bodily and physical user creativity. His first is an example of constructional and conceptual user creativity.

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5 The Chinese legal system was, anyway, unprepared for the introduction of capitalism.
6 Borden, p. 201.
7 Borden, p. 196.

CONSTRUCTING SITUATIONS

Founded in 1957 and dissolved in 1972, the Situationist International opposed both the architectural profession and functionalism. Sadler writes: 'The benign professionalism of architecture and design had, in their opinion, led to a sterilization of the world that threatened to wipe out any sense of spontaneity or playfulness.'[8] Günther Feuerstein exemplifies the situationists' dislike of functionalism in a proposal for a dysfunctional building. Sadler writes: 'As a dramatic reversal of … contemptible domestic Taylorism, Günther Feuerstein submitted his 1960 proposals for "impractical flats" to spur the German section of the Situationist International. By declining labor-saving devices, devising tortuous routes through his apartment, and fitting it with noisy doors and useless locks, Feuerstein refused to allow his home to become a cog in the mechanized world.'[9]

Situationist strategies include the dérive, an urban drift; détournement, the diversion or misappropriation of spaces; psychogeography, the study of the effects of the environment on behaviour; and unitary urbanism, a concept of the city based on the construction of participatory situations. The dérive confronts the habitual and functional experience of the city and is reminiscent of surrealist practice. According to André Breton, functionalism is the 'solidification of desire in a most violent and cruel automatism'.[10] Less open to chance than surrealist automatism, which according to Guy Debord is politically unaware, the dérive is performed by a group rather than an individual.[11] Quoting Debord, Sadler writes:

> The drift, Debord explained, entailed the sort of 'playful-constructive behavior' that had always distinguished situationist activities from mere pastimes. The drift should not be confused, then, with 'classical notions of the journey and the stroll,' drifters weren't like tadpoles in a tank, 'stripped … of intelligence, sociability and sexuality,' but were people alert to 'the attractions of the terrain and the encounters they find there,' capable as a group of agreeing upon distinct, spontaneous preferences for routes through the city.[12]

Debord does not dismiss the role of design, but argues that the creation of forms must be in response to the creation of situations. He writes:

> Our central idea is the construction of situations … Architecture must advance by taking emotionally moving situations, rather than emotionally moving forms, as the material it works with. And the experiments with this material will lead to unknown forms. Psychogeographical research … takes on a double meaning:

8 Sadler, p. 5.
9 Sadler, pp. 7–8, referring to Feuerstein, 'Thesen über Inzidente Architektur', unpaginated.
10 Vidler, *The Architectural Uncanny*, p. 150.
11 Sadler, p. 78.
12 Sadler, pp. 77–78, with quotations from Debord, 'Théorie de la dérive'.

active

observation of present-day urban agglomerations and development of hypotheses on the structure of a situationist city. The progress of psychogeography depends to a great extent on the statistical extension of its methods of observation, but above all on the experimentation by means of concrete interventions in urbanism.[13]

In the first issue of *Internationale Situationiste* in June 1958 the constructed situation is defined in maybe intentionally ambiguous terms as a 'moment of life concretely and deliberately constructed by the collective organisation of a unitary ambience and a game of events'.[14] Debord writes: 'The situation is … made to be lived by its constructors. The role played by a passive or merely bit-part playing "public" must constantly diminish, while that played by those who cannot be called actors but rather, in a new sense of the term, "livers" must steadily increase.'[15] The constructed situation is a short-lived event or performance with a number of props in which the users are also the designers and builders. While it might include the transformation of existing forms and spaces and the creation of new ones, neither is intended to be long-lasting. Sadler writes: 'Most of the architecture and spaces that were endorsed by situationists existed by chance rather than by design: back streets, urban fabric layered over time, ghettos.'[16]

Situationism, like surrealism, shifts the emphasis from the single author to either the user as principal protagonist or the hybrid producer-user who designs, makes and consumes a work.[17] Situationist practices in which users, rather than producer-users, are the main protagonists, such as the dérive, depend upon the appropriation of existing spaces ignored by architects and the public. In the constructed situation the producers are also the users, who react to each other as much as the forms around them.

It might seem that the user in the constructed situation is more creative than the user in the dérive because, as a producer-user, he or she remakes the city according to the five types of creativity – mental, bodily, physical, constructional, conceptual – while the user in the dérive only remakes the city in the mind and through bodily movement. However, rather than prioritizing one over the other I consider the user in the constructed situation and the dérive to have the potential to be equally creative, because the level of user creativity depends upon the intensity of each type in a particular situation, not just the number present.

THE SITUATIONIST ARCHITECT

Forty describes situationists' distrust of form as 'an opposition to the process of reification, of the tendency of capitalist culture to turn ideas and relationships into things

13 Debord, 'Report on the Construction of Situations', p. 26.
14 Anon, 'Definitions', p. 22.
15 Debord, 'Report on the Construction of Situations', p. 27.
16 Sadler, p. 159.
17 Aragon's *Paris Peasant* is an example of the surrealist user. Exquisite Corpse, the game

iscussed in 'The Institute of Illegal Architects', is an example of the surrealist producer-user.

'hose fixity obscures reality'.[18] In 1958 Constant proposed one of the most widel ecognized examples of situationist urbanism: New Babylon, a layered megastructur uspended above the ground, independent of existing cities. Eleonore Kofman an 'lizabeth Lebas recognize a significant difference between the ideas of the city propose y Constant and Lefebvre: 'If for Constant New Babylon floats above existing cities … (hotomontage shows a drawing of the project superimposed over an aerial view c .otterdam), for Lefebvre the possibilities of re-appropriation can be found by wanderer: llers, artists and poets within the fractured spaces of the city itself.'[19]

Constant's essay on New Babylon is titled 'Another City for Another Life'.[20] Nev iabylon is a proposal for new situations and new forms, and concerned with how on ffects the other; its rapidly changing elements capable of swift and subtle reaction t nexpected events. As much as New Babylon is an example of situationism, it is also a xample of the three types of flexibility by technical means: intricate moving element: emountability and cybernetics. In 1960, only 2 years after his first involvement with th ituationists, Constant departed from the movement for 'colluding with an urbanisti leology and daring to visualize and give material substance to a future city'.[21]

In May 1871 the Vendôme Column, Paris, 'a monument to Napoleonic imperialism 'as demolished 'under the auspices of the Paris Commune's Federation of Artist: haired by the painter Gustave Courbet. Situationists applauded this brilliantly radica esture.'[22] A clearer example of situationism than New Babylon, and comparable to th estruction of the Vendôme Column, occurred in 1968. Influenced by détournemen tudents in Paris led the attack on the state. The ordered linearity of Haussmann' oulevards facilitates the speedy movement of soldiers around the city. In a memorabl ction protesters dug up cobbles from the streets and hurled them at the police, turning 'eapon of the state against the institutions it represented. The government responded b irmacking over the cobbles. As Robert Hewison writes: 'Cars, trees and cafe tables wer détourned" into barricades … a month-long dérive that rediscovered the revolutionar sychogeography of the city.'[23]

The influence of situationism on architects, and the education of architects, i xtensive. One of its most convincing examples is the work of Diploma Unit 10 at th .A. It is a tradition at the AA for a unit to be passed from tutor to student. Tschum ught with his former student Nigel Coates, who assumed the leadership of the unit whe 'schumi left the AA. Coates in turn founded NATO (Narrative Architecture Today) wit number of his ex-students, two of whom, Robert Mull and Carlos Villanueva Brand ter took over the unit from Coates. Tschumi, who I will discuss in detail later in this

8 Forty, *Words and Buildings*, p. 170.
9 Kofman and Lebas, p. 88.
0 Constant.
1 Kofman and Lebas, p. 82.
2 Sadler, p. 100.
3 Hewison, p. 28.

hapter, was influenced by situationism, but Mull and Villanueva
Brandt's version of Unit 10 most directly addresses its roots in situationism, formulating
prehistory of the unit and applying situationist tactics to new targets such as th
lanning process. Villanueva Brandt describes a constructed situation by Robert Bishop
ypical of the unit:

> *A situation was set up consisting of a 24-hour intervention in a public space,*
> *Leicester Square. The author inhabited the square with chair and table,*
> *creating his own space, and communicated exclusively by means of a*
> *typewriter. All social exchanges were carried out through writing, all*
> *institutional exchanges and confrontations were also carried out through*
> *writing. Observations, narratives and the author's dialogue were typed in lower*
> *case and all external dialogues or contributions were typed in the upper case.*
> *The beginning and end of the text was determined by the 24-hour cycle.*[24]

ituationist practice is of considerable value to architecture because of the importance i
ives to the creative user. In situationism, as defined by its original members, one of th
aditional roles of the architect, the design of form expected to last for a number of years
s absent and even irrelevant; the only role for the architect is as the creator of objects fo
ppropriation. It is possible for architects to incorporate situationist practices in their ow
ractice, but situationists' comparative lack of interest in form limits their relevance t
rchitects, unless other practices, which value the construction of forms as well a
ituations, are added to situationist ones.

THE DEATH OF THE AUTHOR

My understanding of the user is particularly indebted to Roland Barthes' text 'The Deat
f the Author', published in 1968. Referring to the fact that French classical literatur
vas considered to be not a style of writing but the correct and proper way to write
erence Hawkes states: 'Barthes sees this process as a characteristic act of bourgeoi
xpropriation, part of a grand design whereby all aspects of bourgeois life silently acquir
ne air of naturalness, of rightness, of universality and inevitability.'[25]
  Barthes does not propose the death of writing but the death of the author who propose
uniform, natural system of meaning based upon mimesis, the belief that an image, wor
r object is the carrier for a fixed message determined by the author. Barthes states tha
ne text often contradicts the intentions of the author; the importance of the author i
ver-rated because the journey from author to text to reader is
ever seamless, direct or one-way.[26] He states that 'the birth of the reader must be at the

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24 Villanueva Brandt, p. 113.
25 Hawkes, p. 107.

26 Barthes, 'The Death of the Author', p. 142.

ost of the death of the Author.'[27] The reader may be passive, and respectful of the tex
r reactive, to some degree allowing personal concerns to affect what is read, but Barthe
ocuses on the creative reader constructing a new text in the act of reading.

In 'The Death of the Author' Barthes is as dismissive of the author as situationists ar
f the architect. But, while situationists concentrate on the user and producer-use
arthes recognizes two distinct figures: the writer and the reader. In place of the autho
e argues for the creation of the writer, or scriptor, aware of the limits of writing and th
nportance of the reader.[28] He writes: 'Succeeding the Author, the scriptor no longe
ears within him passions, humours, feelings, impressions but rather this immens
ictionary.'[29] However, Barthes' own writing suggests a rather different writer who
hile recognizing the profusion of ambiguities and interpretations that inhabit the ga
etween writing and reading, is not without passions and ideas. Barthes' writing suggest
new writer as much as a new reader, both having a role in the creation of a text.

THE DEATH OF THE ARCHITECT

arthes does not refer to architecture in 'The Death of the Author'. In 1967 he presente
paper, titled 'Semiology and Urbanism', to the Institute of Architectural History at th
niversity of Naples. Ben Highmore writes:

> In places, 'Semiology and Urbanism' reads like a spatial version of his more
> famous essay 'The Death of the Author', an essay that ends with the words: 'the
> birth of the reader must be at the cost of the death of the Author'. 'Semiology
> and Urbanism' offers a version of this theme adapted to an urban setting: the
> birth of the urban reader must be at the cost of the Planner.[30]

However, 'Semiology and Urbanism' is not a convincing 'translation' of 'The Death of
the Author' to architecture because it considers the city as a text to be read. Instead, I
suggest another translation of 'The Death of the Author' which acknowledges the
complex bodily experience of buildings and cities.

In 'The Death of the Author' Barthes discusses the creative reader constructing a new
text, and situationists identify the creative user constructing a new urbanity. Through
appropriation the creative reader makes the text and the creative user makes the city. It
might seem that the reader described in 'The Death of the Author' is closer to the user in
the dérive than the user in the constructed situation, but cities are different from books. It
is possible, but not necessary, to physically rearrange a book. The ink on the page is not
equivalent to the fabric of a city. Making a book in the mind of the reader is analogous to
the mental, bodily, physical, constructional and conceptual creativity

27 Barthes, 'The Death of the Author', p. 148. One year after the publication of Barthes' text,
Foucault argues for an historical investigation of the author not just a record of his supposed
disappearance. Foucault, 'What is an Author?', p. 105.
28 Barthes gives Mallarmé as an example of such a writer. Barthes, 'The Death of the Author', p.
143.
29 Barthes, 'The Death of the Author', p. 147.
30 Highmore, p. 157.

f the user in the constructed situation as well as the mental and bodily creativity of th ser in the dérive.

The building is not directly comparable to the text. Instead, I suggest that writer– text eader relations as a whole are analogous to architect–building–user relations.31 Barthes eformulation of the author and the reader suggests a model for architecture in whic here is not a clear linear route from the architect to the user. To use a building is also t nake it, either by physical transformation, such as moving walls or furniture, using it i vays not previously imagined, or by conceiving it in a new way. Just as the reader make new book through reading, the user makes a new building through using. Certain text re more resistant to the reader because they are of social or cultural importance. Fo xample, the reader may remake a religious text but if his or her reading is made public nay be suppressed. It is also more difficult for the user to transform some buildings tha ther ones. It is usually harder to transform a workplace than a home, whether through hysical transformation, change of use, or new conception.

Barthes does not refer to art in 'The Death of the Author'. Although the difference etween art and literature are acknowledged by artists, his text remains an importan nfluence on artistic production, in part because similar ideas are implicit in artwork uch as Marcel Duchamp's readymades.32 'The Death of the Author' encourages les idactic subject–object and artist–viewer relations than ones familiar in the traditional a allery. As the relevance of 'The Death of the Author' to architecture is equally strong, obvious to ask why it is largely unrecognized by architects. One possible reason is tha ney are simply unaware of the text. Another is that it is unlikely to find favour wit nany architects because, at first glance, 'The Death of the Author' implies the death o ne architect. However, according to my application of 'The Death of the Author' t rchitecture, it suggests the death of a certain type of architect, one who claims sol uthority of the creation of architecture. 'The Death of the Author' implies a nev rchitect who, first, acknowledges that architecture is made by design and use and econd, considers the creativity of use to be the central issue of design.

ACTIONS AND SPACES

1 selecting an architect who recognizes the creativity and pleasure of use it is obvious t ocus on Tschumi. His relevance to this chapter depends on the value he gives to event: To really appreciate architecture you may even need to commit a murder. Architecture i efined by the actions it witnesses as much as by the enclosure of its walls.'33 In 1981, i he Manhattan Transcripts, he first outlined in detail ideas that he subsequentl eveloped in a number of related texts.

Determinism is unusual in Tschumi's writings but sometimes he suggests that th rchitect can design spaces and events:

31 Here I include architects and other designers of buildings, public spaces and cities.
32 Newman, pp. 38–42.

33 Tschumi, 'Illustrated Index', p. 66.

For if architects could self-consciously use such devices as repetition, distortion or juxtaposition in the formal elaboration of walls, couldn't they do the same thing in terms of the activities that occurred within those very walls? Pole-vaulting in the chapel, bicycling in the laundromat, sky-diving in the elevator shaft? Raising these questions proved increasingly stimulating: conventional organisations of spaces could be matched to the most surrealistically absurd sets of activities. Or vice-versa: the most intricate and perverse organisation of spaces could accommodate the everyday life of an average suburban family … Architecture ceases to be a backdrop for actions, becoming the action itself. All this suggests that 'shock' must be manufactured by the architect if architecture is to communicate.[34]

Usually Tschumi distances himself from functionalism: 'Moreover, the cause-and-effect relationship sanctified by modernism, by which form follows function (or vice versa) needs to be abandoned in favor of promiscuous collisions of programs and spaces, in which the terms intermingle, combine and implicate one another in the production of a new architectural reality.'[35] He writes that 'architecture is regarded as no longer concerned with composition or the expression of function.'[36] Tschumi often aligns use with function but in terms such as action, event and uselessness, he recognizes another, unpredictable, aspect to use that focuses on the user's lived experience rather than the architect's abstractions.

Tschumi does not present a single understanding of the relations between actions and spaces. Instead different ideas appear sporadically in his work. His most common assumption is that actions and spaces can be either independent or interdependent depending upon the circumstances: 'One does not trigger the other: they exist independently. Only when they intersect do they affect one another.'[37]

34 Tschumi, 'Spaces and Events', pp. 93–95.
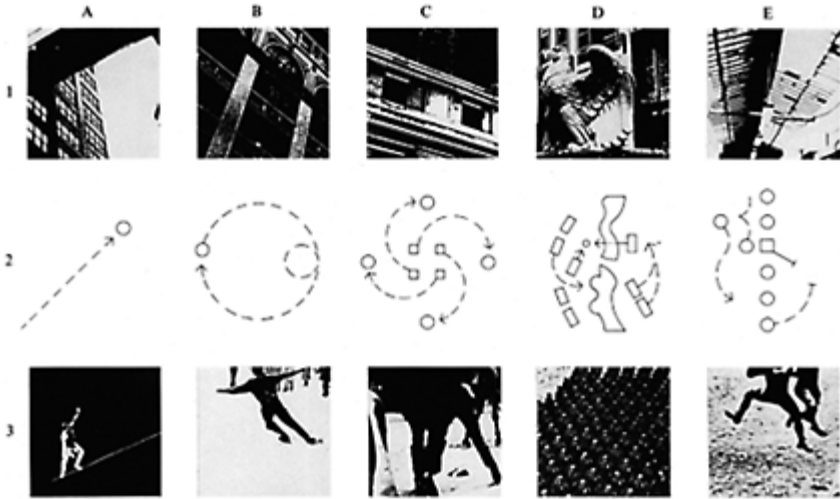35 Tschumi, *Event-Cities*, p. 13.
36 Tschumi, *Cinégramme Folie*, p. 26.
37 Tschumi, 'Index of Architecture', p. 105.

1.3.2 Bernard Tschumi, Advertisements for Architecture, 1975. © Bernard
    Tschumi Architects.

1.3.3 Bernard Tschumi, The Manhattan Transcripts, 1981. Extract from MT4, The Block. © Bernard Tschumi Architects.

THE PLEASURE OF ARCHITECTURE

Functionalism advocates 'the general philosophical notion that an object which fulfils its function properly is automatically beautiful',[38] implying that the degree of satisfaction derived from a form is in proportion to its efficiency for a task. As a critique of function Tschumi suggests that pleasure is derived especially from two types of misuse: uselessness, which contradicts societal expectations of usefulness in terms both of specific buildings and spaces and architecture as a whole,[39] and disjunction, the intentional or accidental appropriation of a space for a use for which it was not intended.[40] Tschumi rejects determinism but to designate a space as useless, or in disjunction with events, is an attempt to suggest, if not determine, future use. But uselessness and disjunction are unlike determinism in that the architect accepts the divergence of his or her idea of the use of a space and its actual use.

Tschumi's understanding of pleasure depends on his interpretations of Barthes and Georges Bataille. The title of Tschumi's article 'The Pleasure of Architecture'[41] is a reference to Barthes' book *The Pleasure of the Text*, in which Barthes distinguishes *plaisir* (pleasure) from *jouissance* (bliss or ecstasy):

38 Collins, p. 218.
39 Tschumi, 'The Pleasure of Architecture', p. 51.
40 Tschumi, 'Index of Architecture', pp. 105–106.
41 Tschumi, 'The Pleasure of Architecture', pp. 47–60.

> *Text of pleasure: that contents, fills, grants euphoria; the text that comes from culture and does not break with it, is linked to a comfortable practice of reading. Text of bliss: the text that imposes a state of loss, that discomforts (perhaps to the point of a certain boredom), unsettles the reader's historical, cultural, psychological assumptions, his tastes values, memories, brings to a crisis his relation with language.[42]*

erence Hawkes writes: '*Plaisir* seems to come from the more straightforward processe
f reading, *jouissance* from a sense of breakdown or interruption.'[43] *Jouissance* recall
ie concept of interruption in early twentieth-century avant-garde art, which I discuss i
Montage After Shock'.

   Barthes makes a further distinction between the readerly and the writerly text. In th
eaderly text the reader is given comparatively little opportunity for interpretation, whil
i the writerly text the relationship between signifier and signified is loose.[44] Barthes doe
ot make a direct correlation of pleasure to readerly and bliss to writerly in *The Pleasur*
f the Text. Rather, as Jonathan Culler writes:

> *The book explores the relations (historical, psychological, typological) between these two sorts of text or aspects of text and, while maintaining the importance of a distinction, seems frequently to suggest that textual pleasure and textual effects depend upon the possibility of finding ecstatic moments in the comfortable texts of pleasure or of making ecstatic post-modern writing sufficiently readable that its disruptive, violent orgasmic effects can be generated.[45]*

Tschumi writes: 'The ultimate pleasure of architecture is that impossible moment when an architectural act, brought to excess, reveals both the traces of reason and the immediate experience of space … The architecture of pleasure lies where concept and experience of space abruptly coincide.'[46] In its juxtaposition of two forms of pleasure this statement is comparable to Culler's interpretation of *The Pleasure of the Text*, but Barthes offers a more complex understanding of pleasure than Tschumi in that he allows concepts of pleasure, *plaisir* and *jouissance*, and types of text, writerly and readerly, to overlap. An intellectual pleasure in the creation and breakage of bonds predominates in Tschumi's writings: 'What matters is that there is no simple bondage technique: the more numerous and sophisticated the restraints, the greater the pleasure.'[47] He defines eroticism as a 'theoretical concept'[48] and, recalling De Sade, states: 'The most excessive passion is

42 Barthes, 'The Pleasure of the Text', p. 14.
43 Hawkes, p. 115.
44 Barthes, *S/Z*, p. 4.
45 Culler, p. 98.
46 Tschumi, 'The Pleasure of Architecture', pp. 54–56.
47 Tschumi, 'The Pleasure of Architecture', p. 53.
48 Tschumi, 'The Pleasure of Architecture', p. 54.

lways methodical.'[49] The best example of such a space is House VI rather than a proje
y Tschumi.

THE PLEASURE OF USELESSNESS

schumi's positive reference to the uselessness of architecture recalls Barthes' equall
ositive description of the uselessness of the text. Tschumi and Barthes link uselessnes
 pleasure and a resistance to the market.[50] The correlation of uselessness to pleasure
ot new. It is found in the appreciation of the autonomous artwork, the drifting movemer
f the flâneur, and in an example to which Tschumi refers: 'Built exclusively for deligh
ardens are like the earliest experiments in that part of architecture that is so difficult t
xpress with words or drawings: pleasure and eroticism. Whether "romantic"
lassical", gardens merge the sensual pleasure of space with the pleasure of reason, in
ost "useless" manner.'[51]

In defence of uselessness Tschumi writes: 'Hegel concluded in the affirmativ
rchitecture was a sort of "artistic supplement" added on to the simple building. But

1.3.4 Bernard Tschumi, Fireworks at Parc de la Villette, 1991. © Bernard
Tschumi Architects.

[49] Tschumi, 'The Pleasure of Architecture', p. 53.
[50] Martin, pp. 64–65.
[51] Tschumi, 'The Pleasure of Architecture', p. 51.

he difficulty of such an argument appears when one tries to conceive of a building th
scapes the utility of space, a building which would have no other purpose bi
architecture".'[52] Tschumi, however, accepts Hegel's distinction between building an
rchitecture: 'As opposed to building, making architecture is not unlike burning matche
ithout a purpose.'[53]

Tschumi's understanding of the pleasure derived from uselessness is a critique o
inction and the role functionalists propose for architecture. By uselessness, Tschun
leans use without purpose. He argues that the most extreme misuse negates 'the forn
lat society expects of it'.[54] As Tschumi believes that architecture is usually coupled wit
tility, he argues for the denial of usefulness and the celebration of uselessness: 'Th
reatest architecture of all is the fireworker's; it perfectly shows the gratuitou
onsumption of pleasure.'[55] The fireworker's actions accord to the five types of use
reativity.

Quoting Adorno's request to 'produce a delight that cannot be sold or bought, that ha
o exchange value and cannot be integrated in the production cycle', Tschumi says tha
selessness resists the cycles of production and consumption, which usefulness affirms.
. useless factory contradicts societal expectations but does a useless park or firework
nd what does useless mean in this context? Tschumi implies that parks and fireworks ar
leasurable, useless and outside the production cycle. A park is a site of production an
onsumption, but of social behaviour rather than objects. Signs, actions and pleasures ar
ommodities just as much as kettles and cars. Certain products, such as fireworks, ar
ighly profitable, commanding a price far above their production costs precisely becaus
ley are produced for pleasure. To resist the cycles of production and consumption,
uilding or a park would have to negate all the roles expected of it.

USELESS ARCHITECTURE

schumi's understanding of uselessness is dependent on Bataille as well as Barthe
ataille denounces architecture as the prison warder of society because i
nthropomorphism orders and incarcerates the body. He interprets the storming of th
astille as a literal and symbolic attack on architecture's authoritarian role in society.
s Tschumi remarks: 'In the "Dictionnaire Critique: Architecture" Bataille explained tha
rchitecture is not only the image of the social order but what preserves, and eve
nposes, such order.'[58] However, as Louis Martin writes: 'Bataille's eroticism did hav
n architectural equivalent in the ruin, which he presented as both the most erotic of

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52 Tschumi, 'The Architectural Paradox', p. 15.
53 Tschumi, 'The Pleasure of Architecture', p. 52.
54 Tschumi, 'The Architectural Paradox', p. 26.
55 Tschumi, 'Fireworks', 1974, extract from 'A Space: A Thousand Words', quoted in Tschumi,
'The Architectural Paradox', p. 26.
56 Tschumi, 'The Architectural Paradox', p. 26.
57 Bataille, p. 21.
58 Tschumi, 'Architecture and its Double', p. 72.

ojects and the symbol of architecture's resistance to society.'[59]

In 1982, shortly after the publication of the *Transcripts*, Tschumi won the competition to construct a park at La Villette in Paris, one of the Grands Projets initiated by President Mitterand. The park is on the site of a disused abattoir, a poignant location for Tschumi given his interest in Bataille, who referred to architecture, the slaughterhouse and museum.[60] Denis Hollier discusses the influence of Bataille on Tschumi in *Against Architecture*, characterizing La Villette as the attempted construction of a non-authoritarian architecture.[61] Although Tschumi intends La Villette to be useless like a ruin, many of its buildings accommodate a specific function, even if they were not designed for one.

Tschumi's La Villette consists of three independent, abstract systems – points, lines and surfaces – overlaid onto the site.[62] The points, red follies at the intersections of a regular grid, are formally similar to Russian constructivism. However, Tschumi implies an earlier precedent:

> *William Kent's park displays a subtle dialectic between organised landscape and architectural elements ... But these 'ruins' are to be read less as elements of a picturesque composition than as the dismantled elements of order. Yet, despite the apparent chaos, order is still present as a necessary counterpart to the sensuality of the winding streams. Without the signs of order Kent's park would lose all reminders of 'reason'. Conversely, without the traces of sensuality – trees, hedges, valleys – only symbols would remain, in a silent and frozen fashion.*[63]

Martin, p.73.

Bataille, pp. 21–23.
Hollier, p. xi.
Buchanan, p. 72
Tschumi, 'The Pleasure of Architecture', p. 51.

1.3.5 Bernard Tschumi, Parc de la Villette, Paris, 1985. Photograph, Peter
Mauss/ESTO. © Bernard Tschumi Architects.

1.3.6 Bernard Tschumi, Parc de la Villette, Paris, 1985. Photograph, Peter
Mauss/ESTO. © Bernard Tschumi Architects.

schumi's description of the eighteenth-century gardens at Stowe could also be
escription of La Villette. At Stowe the occupant of the artificially natural landscap
elects a route from folly to folly, frame to frame, only understanding the logic of th
ark, and experiencing a series of precisely composed views, when the landscape
iewed from the follies. Tschumi has written that the structure of film is analogous to tha
f architecture. Calling La Villette a 'series of cinegrams', he intends the lines of trees
a Villette to 'cut' one scene from another.[64] However, the uniformity of the follies an
paces of the park render movement from one space to another absent of juxtaposition. I
iat La Villette is an example of flexibility by spatial redundancy, it suggests mental an
odily, but probably not physical, user creativity. Tschumi's analogy of architecture t
lm suggests the passive user as film actor, directed by the architect. If the possibl
hronologies and juxtapositions at La Villette were more extensive, composing
inegram would suggest the creative user, or at least the reactive user.

1.3.7 William Kent, Temple of Venus across the Eleven-Acre Lake, Stowe,
1729. Photograph, Adrian Forty.

THE PLEASURE OF DISJUNCTION

schumi refers to the pleasure obtained from the disjunction of spaces and events, whic
e contrasts to the rigid separation of activities in authoritarian architecture:

64 Tschumi, *Cinégramme Folie*, p. vi.

Central to the aims of the Transcripts, the three levels of space, event and movement are involved with one another, i.e. in external relations ... This relation can, of course, be continuous and logical (the skater skates on the skating rink), but it can also be unlikely and incompatible (e.g. the quarterback tangoes on the skating rink; the battalion skates on the tightrope) ... Further scrambling can be applied in the guise of a sort of post-structuralist questioning of the sign, whereby movement, object and event become fully interchangeable, whereby the people are walls, walls dance and tango and tangoes run for office.[65]

It is unclear whether Tschumi considers the montage of spaces and events he describes in the *Transcripts* to be intended or accidental. At La Villette there is little sign of either.

As the competition for La Villette was won soon after the publication of the *Transcripts*, it is possible to assume that La Villette is the physical manifestation of the theories outlined in the book. But the disjunctions described in the *Transcripts* depend on the seductive, congested conditions in which they occur. As Evans remarks: 'Tschumi's La Villette is far less intensely transgressive than Haussmann's planned butchery which it replaces.'[66]

In 1997 Tschumi completed Le Fresnoy National Studio for Contemporary Arts at Tourcoing in France, a building which addresses the disjunction of spaces and events. Rather than demolish the former industrial buildings which occupy the site, Tschumi removed just a few, placed a number of new buildings next to the old, and covered them all with a large roof that leaves the buildings untouched and turns downwards to form a wall along the length of the rear elevation. Rising from the main entrance, a long flight of stairs leads up to a series of walkways that thread through the gap between the roofs of the buildings and the larger roof above. Tschumi writes: 'What interested us most was the space generated between the logic of the new roof (which made it all possible) and the logic of what was underneath: an in-between, a place of the unexpected where unprogrammed events might occur, events that are not part of the "curriculum".'[67] In a statement that recalls the combination of useful and useless spaces in the traditional Japanese house, Tschumi writes that Le Fresnoy considers how 'programmed activities, when strategically located, can charge an unprogrammed space (the in-between)'.[68] However, the elements within it are rather too obviously walkways and stepped seating for the in-between space to be described as completely un-programmed.

65 Tschumi, 'Index of Architecture', pp. 105–106.
66 Evans, *The Projective Cast*, p. 87.
67 Tschumi, *Event-Cities*, p. 399.
68 Tschumi, *Architecture in/of Motion*, p. 21.

1.3.8 James Gibbs, Fane of Pastoral Poetry, Stowe, c.1726. Photograph, Adrian
      Forty.

Tschumi comments: 'Since this space was not included in the client's program and ha
o measurable cost, we were free to do whatever we wanted.'**69** Tschumi implies that th
leasure of the in-between space is as much that of the architect to design freely as th
ser to use freely. Barthes' statement that the writerly text leaves more space fo
iterpretation than the readerly one is comparable to Tschumi's assertion that the in
etween space at Le Fresnoy offers both the architect and the user freedom of expression
9 Tschumi, *Event-Cities*, p. 399.

arthes' assertion that the writerly text resists the reader recalls, however, House V
ither than Le Fresnoy.

Like the work of most architects, the majority of Tschumi's designs are intended t
omfortably accommodate a series of defined uses. Tschumi proposes two other roles fo
ie architect, one in which the architect makes spaces and leaves occupation to chanc
nother in which the architect makes spaces that encourage but do

1.3.9 Bernard Tschumi, Le Fresnoy National Studio for Contemporary Arts, Tourcoing, 1997. Exterior. Photograph, James Madge.

1.3.10 Bernard Tschumi, Le Fresnoy National Studio for Contemporary Arts,
Tourcoing, 1997. The space between the new and old roofs.
Photograph, Victoria Watson.

not determine the disjunction of spaces and events. Le Fresnoy, not La Villette, is closest to the spirit of Tschumi's and Barthes' writings as it addresses uselessness and disjunction. Uselessness suggests the user who displays mental, bodily and physical creativity. Disjunction suggests the user who also displays constructional and conceptual creativity. Tschumi's statement, however, that useless and disjunctive spaces generate creative use suggests the passive user.

Tschumi's work is of interest because he acquires understanding of use from writers, theorists and users as much as architects, indicating that architects need to expand the range of their influences if they are to understand more fully the creativity of the user.

1.4
conclusion

he passive user is consistent, predictable and transforms neither use, space nor meaning
hether performing useful tasks according to functionalist principles, following
equence of spaces directed by the architect, or contemplating a building as an artwork
he reactive user modifies the physical characteristics of a space as needs change, but
ust choose from a narrow and predictable range of configurations largely defined by th
rchitect. The passive and reactive users are dependent upon existing conditions, which
ey are unable to fundamentally transform. With a role as important in the formulatio
f architecture as that of the architect, the creative user either creates a new space o
ives an existing one meanings and uses contrary to established behaviour. I identify fiv
ypes of user creativity, which can be accidental or intentional, and occur singly or i
ombination: mental, a change in understanding, such as renaming a space or associatin
 with a particular memory; bodily, a movement or series of movements, independent o
r in juxtaposition to a space, such as a picnic in a bathroom; physical, a rearrangemen
f a space or the objects within it, such as locking a door; constructional, a fabrication o
 new space or a physical modification of an existing form, space or object, such a
emoving the lock from a door; conceptual, a use, form, space or object intended to b
onstructed, such as a door. Creative use can either be a reaction to habit, result from th
nowledge acquired through habit, or be based on habit, as a conscious, evolving
eviation from familiar behaviour.

The richness and complexity of the user's experience depends on awareness of all th
enses; the experience of one sense can add to the understanding of another. A
allasmaa writes: 'Instead of mere vision … architecture involves realms of sensor
xperience which interact and fuse into each other.'[1] Buildings can be experienced i
any ways at the same time. The composite of these experiences is a particular type o
wareness in which a person performs, sometimes all at once, a series of comple
ctivities that move in and out of conscious focus. Passive, reactive and creative use ca
ccur together.

Lefebvre writes: 'The user's space is lived – not represented (or conceived). Whe
ompared with the abstract space of the experts (architects, urbanists, planners), the spac
f the everyday activities of users is a concrete one, which is to say subjective.'[2] H
ates that, as architects' space is conceived, not lived, and just one space among man
rchitects have no authority over lived space and no part to play in the formulation of us
hich appropriates buildings and public spaces. However, the architect's experience o
ace, like the user's, can combine the objective and the subjective, the concrete and th
onceptual.

Lefebvre believes that design cannot engage issues of use. But, contrary to his

[1] Pallasmaa, p. 29.
[2] Lefebvre, p. 362.

argument, it is essential that architects understand the type of user a design strategy and building suggest. Use can be creative even if the architect predicts it; to suggest otherwise would make the opinions of the architect the arbiter of questions of use. The user can be passive, reactive or creative whatever the character of the space he or she inhabits. However, space and use often inform, if rarely determine, each other. None of the design strategies that recognize the creative user is necessarily more effective than another as many circumstances influence use, and one strategy may be appropriate in one situation but not in another. Rather they suggest an expanding vocabulary available to architects who accept that architecture requires the creativity of the architect and the user. In the formulation of architecture, when the role of the creative user is considered to be as important as that of the architect, neither is superior to the other. Contrary to expectations, recognizing the user as creative may augment, not diminish, the status and value of architects' skills.

SECTION 2
montage after shock

2.1
the montage of fragments

THE AUTONOMY OF ART

In *Theory of the Avant-Garde* Peter Bürger describes the transformation of art from sacral, to courtly, to bourgeois.[1] Art is autonomous in bourgeois society in the sense that autonomy 'defines the functional mode of the social subsystem "art": its (relative) independence in the face of demands that it be socially useful.'[2] Bürger states that art in bourgeois society depends upon the individual contemplation of a single artwork made by a single artist because its purpose is the 'portrayal of bourgeois self-understanding'.[3] Art in bourgeois society satisfies needs and cultivates a sense of individuality suppressed by the demands of praxis: 'The citizen who, in everyday life has been reduced to a partial function (means-ends activity) can be discovered in art as "human being". Here one can unfold the abundance of one's talents, though with the proviso that this sphere remain strictly separate from the praxis of life.'[4] The separation of art from life in bourgeois society permits 'non-productive' intellectual speculation excluded in other areas of society, which can later be applied beyond art and exploited for profit.

The early twentieth-century avant-garde movements proposed the destruction of the autonomy of art because they considered it to be a construct of bourgeois society intended to contain and exploit art. Bürger identifies two types of avant-garde art: the expansion of formal conventions, such as cubist collage, and the demythification of the institution of art and its ideology of autonomy, such as Benjamin's advocacy of montage. He writes:

> The concept of 'art as an institution' … refers to the productive and distributive apparatus and also to the ideas about art that prevail at a given time and that determine the reception of works. The avant-garde turns against both – the distribution apparatus on which the work of art depends, and the status of art in bourgeois society as defined by the concept of autonomy.[5]

Bürger confines the avant-garde to the early twentieth century. In the post-war era he recognizes only a neo-avant-garde which 'institutionalizes the avant-garde as art and thus negates genuinely avant-gardist intentions'.[6] However, his characterization of the early twentieth-century avant-garde as the original and the post-war neo-avant-garde as the

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1 Bürger, p. 48.
2 Bürger, p. 24.
3 Bürger, p. 48.
4 Bürger, pp. 48–49.
5 Bürger, p. 22.
6 Bürger, p. 58.

opy is pessimistic and unexplained. Avant-gardism takes different forms at differe
imes and, as Benjamin Buchloh asserts, the repetition of an early twentieth-centu
avant-garde artwork is not simply a copy if its context is significantly different.

COLLAGE AND MONTAGE

he application of material 'life' fragments to a surface was introduced into the high ar
st before the first world war by the cubists Pablo Picasso and Georges Braque. Picass
particular explored the potential of the procedure, using one substance to represe
nother. Referring to a work produced in 1912, Edward Fry writes: 'In a still-life scene
café, with lemon, oyster, glass, pipe, and newspaper (*Still Life with Chair Canin*
912), the first cubist collage) Picasso glued a piece of oilcloth on which is printed th
ttern of woven caning, thus indicating the presence of a chair without the slightest us
traditional methods.'[8] However, Picasso's paintings of the time present the illusion o
aterial fragments even when the whole work was actually painted, as in *Violin*, 1913.[9]
Benjamin's advocacy of montage developed from his investigation of allegory
arthes' denunciation of the symbolic purity of language in 'The Death of the Autho
calls Benjamin's criticism of the long accepted priority of the symbol over allegory
he Origin of German Tragic Drama.[10] Benjamin states that Baroque allegory avoids th
ligious didacticism of Medieval allegory. In Baroque allegory he recognizes th
otential for an artistic practice that stresses the discursive and critical rather than th
ormal and aesthetic. Benjamin argues that the Baroque *Trauerspiel* exploits th
alectical potential of allegory, in which meanings are not fixed but endlessly changin
d open to appropriation and revision. However, he suggests that the emphasis on th
erishable nature of the world in the Baroque infuses the *Trauerspiel* with melanchol
e suggests, therefore, that the contemplative stance of Baroque allegory should b
xchanged for the political action of montage. Stanley Mitchell writes:

> *Benjamin saw an affinity between the allegorical imagination of the German
> Baroque dramatists and the artistic needs of the twentieth century; first in the
> melancholy spirit of the former, with its emblematic and inscrutable insignia,
> which he discovered in Kafka; then in the cognate principle of montage which
> he found in the work of Eisenstein and Brecht. Montage became for him the
> modern, constructive, active, unmelancholy form of allegory, namely the ability
> to connect dissimilars in such way as to shock people into new recognitions and
> understandings.*[11]

Buchloh, 'The Primary Colors', p. 43.

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[8] Fry, p. 27.
[9] Bürger, pp. 73–74.
[10] Benjamin, '*The Origin of German Tragic Drama*', pp. 159–161.
[11] Mitchell, p. xiii.

Montage deploys all the techniques of allegory: the depletion of previous meanings and the formulation of new ones by the appropriation and dialectical juxtaposition of fragments set in a new context. It is a procedure in which one 'text' is read through another. The importance of montage since the beginning of the twentieth century depends upon its dual character as the principal artistic strategy of the avant-garde and the technical procedure of mass-production, including film.

Technically, a collage may be little different from a montage but collage is primarily a formal procedure used in painting, while montage is a language and technique associated with critical intent and used in a number of media. Montage is affected by the medium in which it operates. Film and photography are mimetic replications of 'reality', while montage in painting and sculpture is distinct from other artistic techniques developed since the Renaissance in that it enables material fragments to be incorporated in an artwork without modification by the artist, so producing a new relationship between art and life. The juxtapositions and contradictions in a montage can be gentle or violent depending on the location and compatibility of the parts. If the fragments are of a similar character, and absorbed into the composition, the effect is comparatively harmonious. If the fragments are significantly different, the tensions between them are especially evident.

Burger writes: 'The organic work of art seeks to make unrecognizable the fact that it has been made. The opposite holds true for the avant-gardist work: it proclaims itself an artificial construction: an artefact. To this extent, montage may be considered the fundamental principle of avant-gardist art.'[12] In the organic work of art the individual parts are subordinate to and in harmony with the overall composition, while in the non-organic work of art, such as montage, the parts, setting and context contradict each other. Colin Gardner writes: 'Opposing the organic symbol with the material fragment, montage seeks to demonstrate that meaning does not emanate organically from within the given object, but is instead created, constructed or construed in the relationship of seemingly isolated parts.'[13] Montage exhibits a dialectic, internally within itself and externally to its context. Each element of the montage has to be compared to the others. As the complexity of the procedure denies a simple resolution of the whole, the reader, viewer or user has a constructive role in the formulation of the work, and meaning is seen to be transitory and cultural. In a statement applicable to montage and allegory Michael Newman writes: 'Allegory, instead of pre-supposing a self-identical, transcendental subject, allows for the constitution of subject positions which are dynamically entered into, or even repudiated by the viewer/reader/interpreter, who participates with the "author" in the creation of the work.'[14]

12 Bürger, p. 72.
13 Gardner, pp. 108–109.
14 Newman, p. 45.

SHOCK

Benjamin articulates a theory of art in an industrialized society in 'The Work of Art in the Age of Mechanical Reproduction'.[15] He states that the traditional work of art manifests an aura, which is a result of its uniqueness. Benjamin argues that mechanical reproduction, which substitutes a plurality of copies for a unique existence, redefines the boundaries of culture, eliminates the aura of art and frees art from its dependence on ritual and tradition. He states that mechanical production transforms the purpose of art from the representation of myths to the analysis of illusions and the experience of art from the ritualistic contemplation of the individual to the political perception of the masses. In contrast to the individual production and reception of bourgeois art, he states that industrialization offers collective production and reception on a massive scale without precedent. According to Benjamin, the author should no longer be a purveyor of aesthetic goods but an active force in the transformation of ideological processes.[16]

Benjamin believes that the value of montage depends upon its ability to shock, a quality he ascribes particularly, but not exclusively, to film. From Karl Marx, Benjamin appropriates the idea of a historically generated, collective dream. He aims to dispel the mythic power of the dream by revealing its origins, thereby transforming dream-images into dialectical images which shock the masses into wakefulness and place the positive aspects of the collective dream at the disposal of political action. With reference to Brechtian epic theatre he writes: 'Here – in the principle of interruption – epic theater, as you see, takes up a procedure that has become familiar to you in recent years from film and radio, press and photography. I am speaking of the procedure of montage: the superimposed element disrupts the context in which it is inserted.'[17] Bertolt Brecht writes: 'It is conceivable that other kinds of artists, such as playwrights and novelists, may for the moment be able to work in a more cinematic way than the film people.'[18] Brecht intends, through interruption, to encourage a degree of critical detachment from the audience. As Benjamin writes: 'To put it succinctly: instead of identifying with the characters, the audience should be educated to be astonished at the circumstances under which they function.'[19]

Benjamin's own work, as well as that of Duchamp and John Heartfield, illustrates the type of montage he advocates. Benjamin's principal attempt to dispel the mythic power of the collective dream is *The Arcades Project*, an analysis of the nineteenth-century Parisian arcades indebted to Louis Aragon's study of the Passage de l'Opéra, *Paris Peasant*. While Aragon, a surrealist, evokes the arcades, Benjamin traces the history of their production and identifies their importance as an early space of consumer capitalism. Benjamin initially intended to construct *The Arcades Project* from the juxtaposition of fragmentary quotations from the nineteenth century. His second draft, written in 1935,

15 Benjamin, 'The Work of Art'.
16 Benjamin, 'The Author as Producer', p. 230.
17 Benjamin, 'The Author as Producer', p. 234.
18 Brecht, p. 48.
19 Benjamin, 'What is Epic Theater?', p. 150.

splays a number of the characteristics of montage: the construction of visual image om verbal fragments, focus on detail, independence of the parts, and a discontinuou ructure.[20] The draft is divided into six sections, each centred on a dialectic, for examp 'ourier or the Arcades' in the first section. The use of the dialectic is evident througho e draft but is not applied consistently. In the final section, 'Haussmann or th arricades', the opposition between two ideas is more obvious than in the third on Grandville or the World Exhibitions'. Consequently, a dialectic exists within eac ction and between sections.

Although the depletion of previous meanings is a characteristic of montage, rarely e new purpose, meaning and location of an appropriated fragment completely displa e previous ones; more often both are resonant. In 1917 Duchamp exhibited a mas oduced urinal which he signed 'R. Mutt' and titled *Fountain*. In renaming and signi everyday object, and placing it in a gallery, Duchamp questioned the autonomy of a well as the nature of individual creation and the economic circulation of artworks e concept of originality. He raised the status of the urinal to that of art and devalued a the level of the everyday. A ready-made, such as *Fountain*, is a very direct form ontage because the artist inserted it into the gallery with little modification.

Heartfield's photomontages were produced first for publication and only second f hibition. When one was exhibited, he insisted that it be placed alongside a copy of th wspaper in which it first appeared, thereby illustrating that it was not intend imarily for a gallery. Using montage as a political tool, first, against the Weim public and, second, to contend the rise of Nazism in Germany, Heartfield turned t ords, actions and images of political leaders against themselves. In *Hurrah, the Butter inished*, dated 19 December 1935, a quotation from a speech by Goering, 'Iron alwa akes a country strong, butter and lard only fat', is

20 Benjamin, 'Paris, Capital of the Nineteenth Century'.

2.1.1 Marcel Duchamp, *Fountain*, 1917/1964. © Succession Marcel Duchamp/ ADAGP, Paris and DACS, London 2002/San Francisco Museum of Modern Art. Photograph, Ben Blackwell.
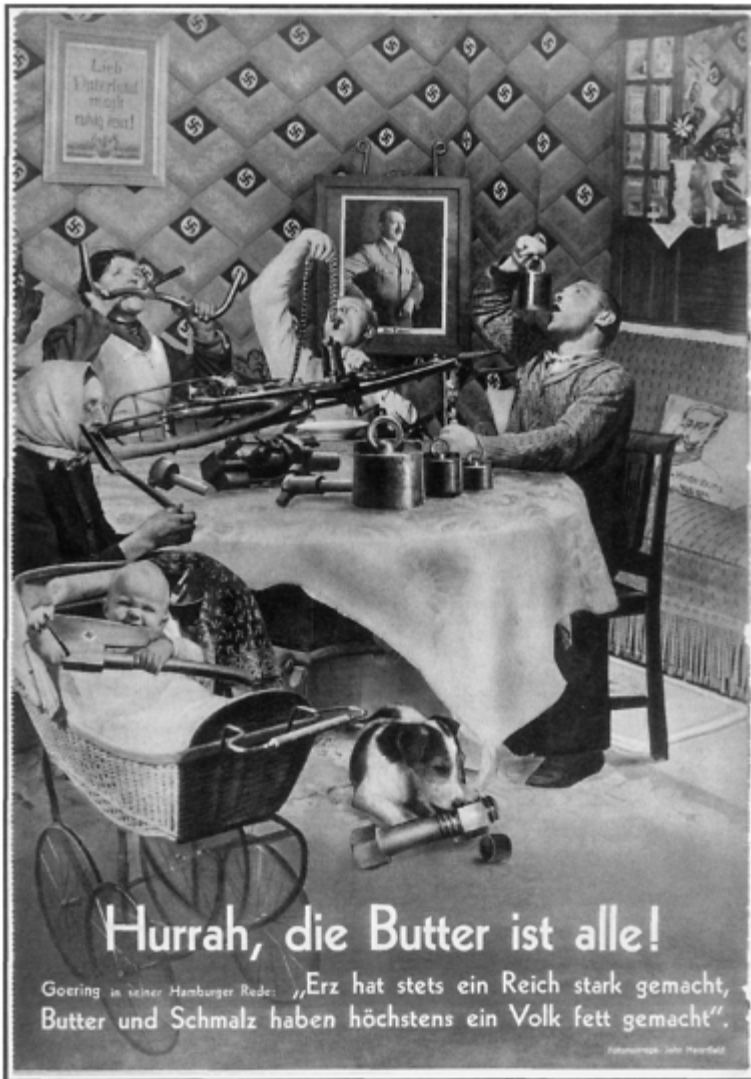
2.1.2 John Heartfield, *Hurrah, the Butter is Finished*, 19 December 1935. ©
DACS 2002/George Eastman House. Photograph, Barbara Puorro
Galasso.

juxtaposed with the image of a family chewing iron. A photograph of Hitler hangs on the
wall behind. In Heartfield's photomontages the conflict between the fragments and their
setting is minimized, and a clear idea expressed. Benjamin's emphasis on montage's
ability to shock and waken sometimes led him to support a particularly didactic type of

montage, such as that of Heartfield, which does not fully exploit the potential of montage to involve the reader, viewer or user as an active participant in the creation of a work.

MONTAGE AND ARCHITECTURE

So far I have discussed montage in art rather than architecture. Aalto's Paimio Sanatorium and Le Corbusier's 1931 rooftop apartment for Charles de Beistegui on the Champs-Elysées in Paris are examples of montage as a strategy of architectural composition, if not use. The widely publicized entrance façade of the Sanatorium, with alternate horizontal rows of solid walls and windows, conforms to the tenets of func

2.1.3 Alvar Aalto, Tuberculosis Sanatorium, Paimio, 1933. Front elevation.
Photograph, Murray Fraser.

tionalism. The less photographed, and less homogenous, rear facade consists of distinct fragments. The Sanatorium is a montage in which both halves of the building are crucial because montage combines dissimilars that have no connection except their adjacency.

While Aalto developed contradictions within one project, Le Corbusier produced contradictory projects within one architect. The de Beistegui apartment was a departure from the architect's more rationalist projects of the 1920s. Intended for parties and not for everyday occupation, the forms and surfaces of the apartment and the elements of the city were distorted and juxtaposed. The high walls of the upper terrace isolated important urban fragments – the Arc de Triomphe, Eiffel Tower, Sacré Cœur and Notre Dame – from the rest of the city below, twinning the fireplace in the foreground with the Arc de Triomphe in the distance. The apartment was lit by candle. Electricity powered sliding

alls and sliding topiary to reveal selected views. Only from the periscope within the
terior could the whole spectacle of the city be seen.

2.1.4 Le Corbusier, Charles de Beistegui Apartment, Paris, 1931. La chambre à
ciel ouvert. © FLC/ADAGP, Paris and DACS, London 2002.

Bürger discusses artistic montage in *Theory of the Avant-Garde*, and does not indicate
s reasons for ignoring architecture. Colomina states that Bürger's description of avan
ardism does not directly apply to architecture because it centres on attempts to annul the
ialism of art and life:

> *While Bürger's theory undoubtedly represents a major step towards*
> *understanding the historical avant-garde … The limits of his theory, when*
> *addressing the specific problems of architecture, derive from architecture's*
> *double condition: its existence as a form of 'high' art granted by the admission*
> *of its intermediate elements (drawings, models) into museums, exhibitions,*
> *galleries and publications, and at the same time, its involvement in the world of*
> *everyday life.*[21]

Colomina's description of 'architecture's double condition' is flawed in that she
considers its 'intermediate elements' as high art but ignores the importance of artistic
contemplation with regard to the experience of the building. Furthermore, as Bürger
states, the autonomy of art from life is partial; the double condition of 'high' art and
everyday life is evident in art as well as architecture.

[21] Colomina, 'More About Reproduction', p. 238.

The de Beistegui Apartment is equivalent to the first type of avant-gardism Bürger identifies: the expansion of formal conventions. In its combination of functionalism and montage, Paimio sits uneasily in Bürger's definitions. In 'Reproduction and Negation', Michael Hays claims that, in defying the formal conventions and autonomy of 'architecture as an institution', the work of one functionalist architect, Hannes Meyer, conforms to both of Bürger's definitions of the avant-garde, even though Meyer's involvement in formal speculation was unwitting and denied by the architect.[22] However, Hays' argument is unconvincing.[23] Although Colomina cites the manipulation of mass media as characteristic of modernism, early twentieth-century functionalists concentrate on the mass-production of objects, while Benjamin, for example, praises the mass production of signs. Meyer's concern is industrialized assembly rather than montage. He does not consider his work to be a language of mass communication: 'Our League of Nations Building symbolizes nothing. Its size is automatically determined by the dimensions and conditions of the programme.'[24]

The early twentieth-century attacks on the institutional autonomies of art and architecture are not equivalent to each other because of the differences between the two disciplines. This does not suggest that the early twentieth-century architectural avant-garde did not exist but that it must, at least in part, be defined in terms other than those identified by Benjamin and Bürger.

MONTAGE AND MYTH

A renewed interest in montage and allegory occurred in the 1970s and 1980s. In respectively 'Allegorical Procedures: Appropriation and Montage in Contemporary Art' and 'The Allegorical Impulse: Towards a Theory of Post-Modernism', Buchloh and Craig Owens discuss work by Robert Rauschenburg, Hans Haacke, Robert Longo and Cindy Sherman among others. The primary source of their interpretations of allegory is *The Origin of German Tragic Drama*, and they identify Duchamp as being of particular importance in the debate between the formal and critical tendencies in art. Barthes' analysis of myth in the 1950s is a further influence. Published in 1957, *Mythologies* considers how myths associated with everyday objects and situations present social and cultural values as deceptively natural. Barthes suggests that the original process of mythification can be contended by a further stage of mythification, a strategy with clear

22 Schnaidt, p. 95.
23 Colquhoun, 'Response to Michael Hays', pp. 215–216. Hubert, 'In Response to Michael Hays', pp. 217–218. McLeod and Ockman, 'Some Comments on Reproduction', pp. 229–230. In *Modernism and the Posthumanist Subject*, p. 146, Hays revises somewhat his assessment of Meyer's avant-gardism but still concentrates his argument on what he considers to be the communicative abilities and formal exploration of Meyer's work.
24 Meyer in Schnaidt, p. 25.

rallels to Benjamin and Lefebvre.[25] As Buchloh writes: 'Barthes' strategy of seconda
ythification repeats the semiotic and linguistic devaluation of primary language b
yth and structurally follows Benjamin's ideas on the allegorical procedure th
iterates the devaluation of the object by commodification.'[26]

PUBLIC PROJECTIONS

rzysztof Wodiczko's *Public Projections*, begun in the early 1980s, are examples of th
e of montage advocated by Benjamin, Buchloh and Owens. Wodiczko concentrates h
tentions on the buildings and monuments of institutions, whether financial, cultura
ligious, military or political. High-powered slide projectors cast photographic images
agments of the body onto the exterior of a building or monument, to represent the soci
lations it conceals and the authoritarian power of buildings in general:

> *Imposing our permanent circulation, our absent minded perception, ordering*
> *our gaze, structuring our unconscious, embodying our desire, masking and*
> *mystifying the relations of power, operating under the discreet camouflage of a*
> *cultural and aesthetic 'background', the building constitutes an effective*
> *medium and ideological instrument of power.*[27]

odiczko obtains permission to project on to an institution; an exception is h
announced projection of a swastika onto South Africa House in London on 30 Augus

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25 Barthes, *Image-Music-Text*, p. 167. Benjamin, 'The Work of Art', p. 240. Lefebvre, pp. 368–369.
26 Buchloh, 'Allegorical Procedures', p. 48.
27 Wodiczko, 'Public Projections', unpaginated.

2.1.5 Krzysztof Wodiczko, *South Africa House Projection*, 30 August 1985.
Projection and projection equipment. Photograph, Jonathan Hill.

85. In February 1983, Stuttgart Railway Station was the subject of one of the earlie
rojections. The clock tower of the station dominates one of Stuttgart's main streets. (
p of the tower is the rotating corporate symbol of Mercedes-Benz, one of the large
nployers in the city.[28] Anthropomorphizing the tower, Wodiczko projected onto i
orso' a pair of clasped hands within the cuffs of a business suit, turning the Mercede
enz symbol into the head of the body watching over the city.

Between 12 and 14 April 1985, Wodiczko projected a disembodied eye onto t
diment of the Swiss National Parliament Building in Bern. The direction of the ga
anged as it surveyed the Bundesplatz in front of the Parliament, moving from t
tional bank, to the cantonal bank, then to the city bank, down to the square under whi
located the national gold vault, and finally up to the sky. The projection allegorized t
ocess of surveillance the Swiss government exerts over its assets.

Like many other contemporary artists working in the public realm, Wodiczl
estions the value of contemplation and attempts to expand the ways in which art
perienced. The *Projections* are comparable to Brechtian epic theatre, in that they are a
terruption in which the means of production is apparent. The presence of Wodiczko, l
chnical assistants and the projectors in the same space as the audience redefines to son
gree the role of the artist and the artwork, and is in contrast to the concealed artifice
e gallery and the separation of production from

28 In 1998 Daimler-Benz merged with Chrysler to form Daimler Chrysler.
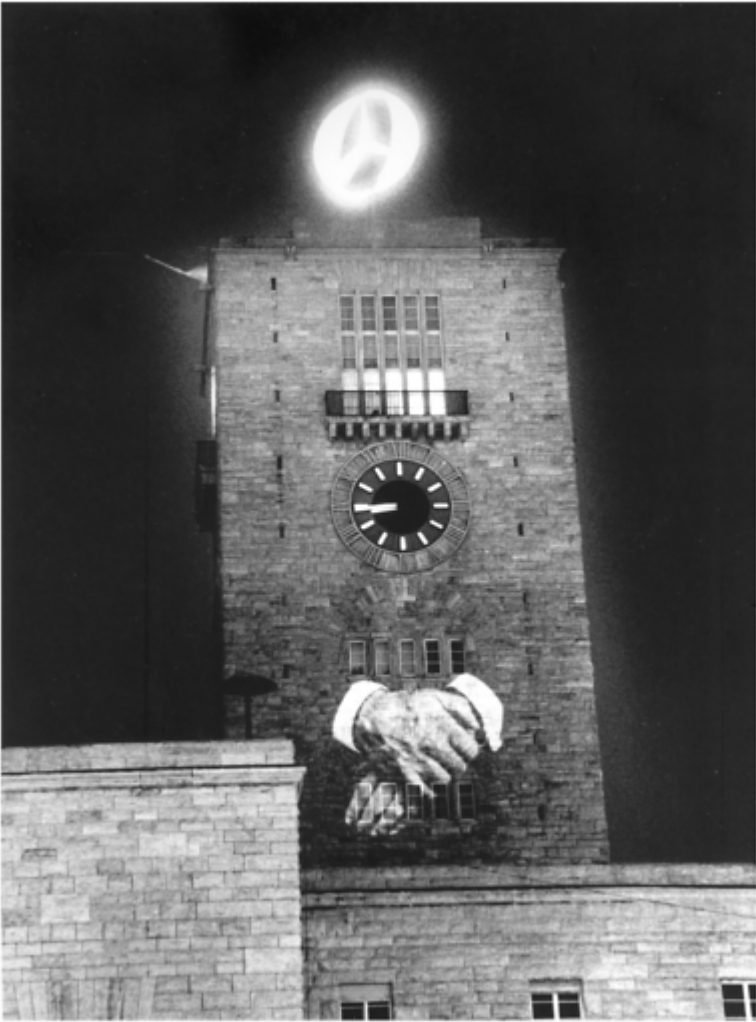
2.1.6 Krzysztof Wodiczko, *Stuttgart Railway Station Projection*, February
1983. Courtesy of Galerie Lelong, New York.

exhibition in most art. The slides are prepared beforehand, and neither the audience nor
the occupants of a selected building affect a *Projection*. But all adjustments are made in
full view of the audience and efforts are made to diminish the aura of the event and to
increase the possibility of dialogue between the artist and the audience. Wodiczko does
not prevent the *Projections* being photographed. At the *South Africa*

2.1.7 Krzysztof Wodiczko, *Swiss National Parliament Building Projection*,
Bern, 12–14 April 1985. Courtesy of Galerie Lelong, New York.

ouse Projection, the projectors were placed on packing cases. Each *Projection* lasts
w hours, during which the images are usually static, so as to fix the image to t
ilding and reduce the possibility of the *Projections* being read as a spectacle:

   Part of the public was disappointed that the slides didn't change. Slide

*projection means for most people a 'slide show', a multi-image spectacle.
Because the public had to look for other aspects of the image than those of
relationships between the images, they had to try to see the relation between the
image and the architectural form. At first people don't see architectural
structures as images in themselves; they see them as physical structures, as
screens for the projection. But keeping the image static helps to integrate it with
the architecture.* [29]

odiczko tries to bring his audience to a state of awareness: 'The absent-mind
pnotic relation with architecture must be challenged by a conscious and critic
scourse taking place in front of the buildings.' [30] The purpose of the *Projections* is not
ansform the authoritarian power of buildings and monuments, but to ensure that it
ecognized. However, it is unlikely that the *Projections* revealed anything that the citize
London, Stuttgart and Bern did not already know about the powerful institutions with
eir cities. Wodiczko rarely projects onto three-dimensional forms, using a building
onument as an unoccupied flat screen. He ignores use, except in terms of the pow
ildings and monuments wield over users as symbols and instruments of authority.
lling to consider the sites of the *Projections* as lived spaces, Wodiczko affirms what
ticizes, the institutional authority of buildings and monuments that everyday li
srupts. The *Projections* are similar to early twentieth-century montage, but Wodizc
es not share Benjamin's belief in montage's emancipatory qualities. He does not expe
awareness of existing power relations to lead to constructive action against them.

CUT AND PASTE

reducing the distinction between art and everyday life, the early twentieth-centu
ant-garde unintentionally helped to increase the number, type, location and financi
lue of objects and practices identified as art. The continuing relevance of montage as
tical and creative tool and the effectiveness of shock and interruption are questionab
w that montage is an accepted strategy of art, advertising and music videos. Benjam
erstates the consequences of montage and his predictions, the demise of the aura of a
d the politicization of art through mass production, have

oved incorrect. A film is no more likely than a building or an artwork to stimula
tical detachment from its audience. The montage of one shot to another is conceal
ore often than revealed in most films. In recognizing that film has superseded paintin
the major technique for the mimetic replication of 'reality', Jean-François Lyota
ites: 'photographic and cinematographic processes can accomplish better, faster, a
th a circulation a hundred thousand times larger than narrative or pictorial realism, t
sk which academicism had assigned to realism: to preserve various consciousnesses

Wodiczko in Crimp, Deutsche and Burcharth, p. 25.
Wodiczko, 'Public Projections', unpaginated.

om doubt.'**31**

Benjamin claims that the montage of experiences is the essential structure of film a e contemporary world because they share a sense of increased speed and fragmente ace. Jean Baudrillard instead recognizes today the seamless networks mmunication he associates with the television and computer.**32** Baudrillard's rejecti montage is unconvincing, however. That montage is the technical principle levision and the computer indicates its continued importance. The computer is ntage machine in which material is scanned, collected, stored, combined a sseminated. However, montage needs re-evaluation if it is still to contain juxtapositio at resist a clear resolution and allow a work to be remade anew by each reader, view user.

31 Lyotard, p. 74.
32 Baudrillard, 'The Ecstasy of Communication', pp. 126–127.

2.2
the montage of gaps

GAPS

One of the principles of montage, the ability of 'fragments of reality' to surprise, does not necessarily apply to architecture because fragments of reality are expected in the building, and often a fragment must be unusual to be noticed. A building may be shocking when first seen but shock wears off very quickly, and is comparatively unimportant in architecture as most buildings are experienced many times. Montage is, however, applicable to architecture because the experience of the building depends upon complex reading of many conditions at the same time. Just as the juxtaposition of the parts of the artistic or literary montage can resist easy resolution, the juxtaposition of the surfaces and the spaces of the building can be rich in ambiguity.

A montage is familiarly understood to consist of discrete, material fragments brought together in a new site: the montage of fragments discussed in the previous chapter. But in this chapter there are three elements to a montage: the fragments, gaps and site. Montage is associated with the tactics of the early twentieth-century avant-garde, which are now too familiar to evoke much surprise. The aim of this chapter is to formulate a theory of montage no longer based on shock, appropriate to architecture and to habitual experience, in which the gaps are as important as the fragments. The aim of the montage of gaps is not to grab attention, and then sink to acceptability, but to have a more gradual influence, remaining unresolved to be remade anew by each user.

One stereotypical conclusion of a prisoner-of-war movie, when the heroes and villains fight for supremacy, occurs in the bend of a mountain road between two national borders. The characters are literally out of sight and out of mind. The border guards of the first country have forgotten the protagonists, while the guards of the second do not expect their arrival. Consequently, the fight between the characters is unrecognized.[1] A gap is an opening, possibly for a period of time, between seemingly more substantial conditions known in montage as fragments. A gap indicates that something is either unnoticed or missing. Signifying incompletion, a gap invites the viewer or user to attempt to complete the montage.

In this chapter I discuss three gaps with a relevance to architecture – spatial, sensual and semantic – but there are undoubtedly many more to be found. I consider each type of gap in turn through the example of specific artworks, films and buildings. I mostly identify one work with one type of gap, even if it is also an example of another type.

1 Michael Winner, dir., *Hannibal Brooks*, UA/Scimitar, UK, 1968.

SPATIAL GAPS

ke all words, those regularly used in architectural discourse have a number of comple
d sometimes contradictory meanings. For example, Forty writes that 'there we
oadly three different senses in which "space" was used by architects and critics in t
'20s: space as enclosure; space as continuum; and space as extension of the body.
rly twentieth-century modernists considered space to be malleable to the order of t
chitect, only rarely was it recognized as an entity made or transformed by experienc
r example in László Moholy-Nagy's *The New Vision*, first published in 1929. In th
apter I focus on an understanding of space that has a long history. In the fourth-centu
C Lao Tzu stated:

> *We make a vessel from a lump of clay;*
>   I*t is the empty space within the vessel that makes it useful.*
>   W*e make doors and windows for a room;*
>   B*ut it is these empty spaces that make the room habitable*
>   T*hus while the tangible has advantages;*
>   I*t is the intangible that makes it useful.*[3]

o Tzu describes a space, a gap, that is not so much empty as waiting to be filled a
nsformed by experience, a quality also evident in flexibility by spatial redundanc
ditional Japanese and Korean houses, and the open plan. My discussion of spatial ga
cuses, first, on artworks, texts and drawings by Jacques Derrida, Eisenman, Joh
ldessari, Mies and Moholy-Nagy. I concentrate my discussion of the architectu
ssibilities of spatial gaps in the project descriptions that conclude 'Montage Aft
ock'.

The idea that the absence of material is not necessarily the same as the absence
eaning is developed in *Chora L Works: Jacques Derrida and Peter Eisenman*. Derrid
senman and the editors attempt to destabilize authorship and readership. The book do
t start at the beginning or finish at the end. It is divided into three sections. The twel
ges that form the contents and the credits are located near the middle of the boo
eceded by 112 pages, and followed by 88 pages. Nine holes of two sizes, at an obliq
gle to the front cover, are cut from each page in the first section, and two rows of fi
les, parallel to the back cover, are cut from each page in the last section. The midd
ction has no physical holes, only conceptual ones. Closed, the book has 1888 separa
les combined to form 19 deep

ones. The presence of the holes is formed by the absence of paper. Each hole marks the
absence of a section of the text but not an absence in meaning because the reader can
either identify the missing word or select a new one. The holes in *Chora L Works* recall

2 Forty, 'Space', pp. 265–266.
3 As quoted in van de Ven, p. 3; a (different) translation is available in Lao Tzu, Chapter XI, p. 15.

e slot dividing the marital bed in House VI. They are incitements to the reader and use *hora L Works* invites the reader's games. In conversation with Derrida, Eisenman says

> *To take another example, traditionally in architecture presence is solid and absence void whereas in textual terms – that is in a system of presences and absences – a void is as much a presence as a solid … For me this system of presences represses what I believe you call difference, which requires the simultaneous operation of both presence and absence.*[4]

SPACE BETWEEN

ontage is a spatial practice in that fragments of other sites are brought together in a ne cation, while still, to some extent, evoking their previous settings. Coosje van Brugge entifies montage as the underlying strategy of Baldessari's artworks:

> *After studying the way we perceive video and cinema through the reselection and rearrangement of the components of these media, the artist's next step was to declare the stages in that process to be as important as the end result itself. Opposing film's usual linear, hierarchical system of individual parts, which predict and determine the outcome of the whole, Baldessari juxtaposed unrelated components of what seems at first sight completely irrelevant content.*[5]

acing the origins of Baldessari's interest in absence, van Bruggen writes:

> *This rupture of the continuity in the composite photoworks, the breaking up or blotting out of parts of their surfaces, turns out to be inspired by Baldessari's memories of the plaster fillings for missing shards in the Greek vases at The Metropolitan Museum of Art in New York … his imagination was fired by what was missing in the white spaces of the Greek vases.*[6]

1980 Baldessari produced *Baudelaire Meets Poe* and *Fugitive Essays (Wi terpillar). Baudelaire* consists of three fragments – two black-and-white photograp d one colour photograph – mounted on a white board nearly 3m square. The three

4 Eisenman in Derrida and Eisenman, p. 7.
5 van Bruggen, p. 84.
6 van Bruggen, p. 184.

2.2.1 John Baldessari, *Baudelaire Meets Poe*, 1980. Two b + w photographs
and one colour photograph, 9'6" × 9'6". © John Baldessari Studio.
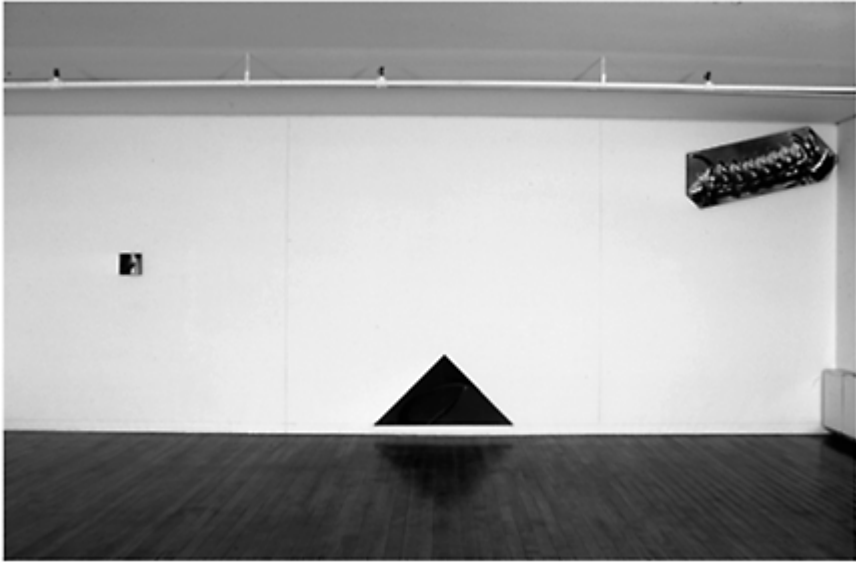
2.2.2 John Baldessari, *Fugitive Essays (With Caterpillar)*, 1980. One colour
photograph (triangle), two b + w photographs (square and irregular),
9'6" × 26'10". © John Baldessari Studio.

agments, of a snake, a snake-shaped ring and a colour photograph of a frog, occupy
nall fraction of the whole, the largest part of the artwork consisting of white space, tl
urth 'image'. The fragments are each about the same size and importance, and locate
ong a diagonal line from the bottom left to top right of the artwork. One fragment, tl
ng, is at the centre of the composition. The other two are each separated from a differe
ge of the board by a narrow area of white space. Although *Baudelaire* has no frame
e traditional sense, the gallery in which it is displayed forms a conceptual frame.

In *Fugitive Essays*, three fragments – two black-and-white photographs and one colo
notograph – are mounted on separate boards and placed on a gallery wall. The smalle
agment, located to the left of, and half way up, the composition is a squa
hotography-salon image of a female torso'.[7] Near the centre line, and at the base of tl
mposition, is the second fragment, a larger triangular colour photograph of a woman
d purse. The third fragment, slightly larger than the second, is a photograph of
terpillar, tilted at an angle to the orthogonal geometry of the other fragments.

7 van Bruggen, p. 118.

2.2.3 John Baldessari, *Space Between (24 Photographs of Middelburg Residents)*, 1985. Installation, Vleeshall, Middelburg, The Netherlands. © John Baldessari Studio.

aldessari describes what *Baudelaire* and *Fugitive Essays* mean to him but does n ioritize his interpretations over others.[8] Instead his descriptions explain why and ho made the two artworks. He plays, however, with the audience's desire for a logic ucture and coherent meaning: 'Looking for the truth implies that there is a truth. If v eren't looking for a truth maybe we wouldn't be so frustrated. But I guess we can nev t rid of the idea that there must be a secret of some sort. I want that idea to be built o.'[9]

Fugitive Essays is more interesting than *Baudelaire* for a number of reasor onsidered on its own, each element in *Fugitive Essays*, whether a fragment or a gap, is emingly unambiguous signifier, but the meaning of each element, and the whole, rticularly elusive. The three fragments in *Fugitive Essays* do not form a distin ometry and none is at the centre of the composition. They are not contained within ume but are placed directly onto the gallery wall so that the

8 van Bruggen, pp. 115, 118–119.
9 Baldessari quoted in van Bruggen, p. 142.

ges of *Fugitive Essays* are undefined and the rest of the space, such as the pipewo
ounted on the ceiling, is absorbed into the artwork. In *Baudelaire* the white space of t
ard is the lesser of the four elements of the artwork but in *Fugitive Essays* the whi
ll is both literally and metaphorically at the centre of the work. In *Baudelaire* the la
a conventional frame creates a tension between the inside and outside of the artwo
t the limit and character of the white space in *Fugitive Essays* are more uncertain a
erefore more provocative. The viewer is tempted to interpret the fragments an
essing what is missing, reconstruct or make anew the gaps, the relationship of o
ement to another, and the whole artwork. *Baudelaire* and *Fugitive Essays* suggest
ontage of gaps as well as a montage of fragments. In a reversal of the relationsh
tween fragments and gaps, the white spaces can also be understood as the fragmen
d the photographs as the gaps.

In 1985 Baldessari installed *Space Between (24 Photographs of Middelburg Residen*
the Vleeshall in Middleburg. Photographed in black-and-white and mounted on boar
row of twelve male faces looked across the hall at a row of twelve female faces. On t
eme of the exhibit Baldessari writes: 'People apart, either by attraction or repulsio
he subject is the space between, the magnetic field created by the peripheral poles.
ay to scrutinize relationships.'**10** Van Bruggen writes: 'What is featured is not t
oment of two people being together – a moment of arrested motion – but the moment
eir implied intention to be together, injecting new life and intensity into the stills.'
ven when the elements of an artwork do not move, Baldessari is interested in t
ovements they imply. The organization *of Space Between* was simpler than that
igitive Essays but the viewer was incorporated within the space of the artwork. Walkin
tween the two rows of faces, the viewer interrupted the gaze from one face to anothe
become another element of the artwork and the subject of both gazes.

DRAWING THE RESOR HOUSE

he project that in 1937 first brought Mies to the United States was a vacation house f
elen and Stanley Resor on a site straddling the Snake River near Jackson Ho
yoming. Neil Levine writes: 'Almost axiomatic to any analysis of Mies's architectu
the idea that his career can be divided into two halves, the first ending in 1937.'
evine distinguishes the 'open spatial composition' of Mies' earlier German work fro
e 'static' configuration of his later American projects.**13** However, in Chapter 1.1, 'T
ssive User', I wrote that recent interpretations of the Pavilion suggest that it

prescribes movement, in contrast to earlier interpretations that suggest the opposite.**14**
Jose Quetglas suggests that Mies' concern with the construction of visual perspectives as
10 Baldessari quoted in van Bruggen, p. 198.
11 van Bruggen, p. 198.
12 Levine, p. 73.
13 Levine, p. 73.

14 Bonta, pp. 139–140. Tafuri, 'The Stage as "Virtual City"', p. 111.

guide to movement is apparent in both the Pavilion and the Resor House, undermini͏
͏vine's separation of Mies' work into two distinct phases. He writes that the Res
͏ouse:

> *can be simply explained as the intersection between the visual cone of someone*
> *looking toward the exterior and the glass surface. The exterior never manages*
> *to be present, to be perceived as material reality, not even at its most imposing,*
> *as in the mountains of Wyoming – only its representation is permitted.*[15]

͏vans also identifies the construction of visual perspectives in the Pavilion, suggesti͏
͏at 'the Miesian "free" plan, as experienced, has far more to do with the composition
͏scoveries of perspective painting than the anti-perspectival ambitions of the De St
͏tists.'[16]

͏ A perspective, such as Paolo Uccello's fifteenth-century study of a chalice, defines t͏
͏nits of an object or space through a system of interconnecting lines. We are expected
͏nderstand a perspective in a single concentrated look. The eye of the viewer is direct͏
͏ong the lines and planes of the perspective from a static viewpoint, an experience ra
͏the building. However, recent research suggests that it is also unusual for an artwo͏
͏en a perspective, to be apprehended in a single glance. Commenting on analys͏
͏nducted by the Applied Visual Research Unit at the Institute of Behavioural Scienc
͏Derby University, Jonathan Jones writes:

> *The most interesting thing that the research has so far confirmed is that it is*
> *impossible to take in the whole of a painting at once. There is no such thing as*
> *the totalising gaze – the look that comprehends everything – because the nature*
> *of visual perception is momentary, partial and fragmentary. Our visual field is*
> *very small and precise. Look at someone's face and you are aware of their*
> *surroundings only as blurred secondary information. ... Like a film camera*
> *wielded by a Soviet montage director, you take in the world (the real world as*
> *well as that of the painting) in a series of glances.*[17]

͏e Resor House was not built. Rather than the plans, or speculations on the building, ͏
͏terest is one of the drawings Mies produced in 1939 of the views up and down the riv
͏͏m the interior. The drawing of the view to the south combines a black-and-whi͏
͏otograph of a rugged landscape with two riders, a 1928 Paul Klee painting owned ͏
͏e Resors, *Colorful Meal*, wood veneer representing a wall, and ink lines

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[15] Quetglas, p. 134.
[16] Evans, 'Mies van der Rohe's Paradoxical Symmetries', p. 253.
[17] Jones, p. 12.

2.2.4 Ludwig Mies van der Rohe, with George Danforth and William Priestley, delineators. *Resor House: montage with reproduction of Paul Klee's Colorful Meal*, 1939. © The Museum of Modern Art/Foto Scala, Firenze.

marcating a column and window frame, insubstantial in comparison to the oth agments of the drawing.[18] The Resor House drawing describes a flattened perspectiv ace, defined by overlaid and receding planes leading from the interior to the riders e landscape at the centre of the composition.[19] It also describes an anti-perspectiv ace of juxtapositions undefined by edges in the manner of the perspective, ar aracteristic of montage rather than the orthogonal geometries of De Stijl.[20] Tl search at Derby University indicates that an artwork is understood over time ar ough movement, an experience montage makes evident, and comparable to tl perience of the building. The eye roams backwards and forwards, and up and dow tween the fragments and the gaps in a montage in a manner analogous to the way tl dy, and the eye, occupies the building, forming an understanding of the whole throu movement.

For the Resor House drawing to be translated into a building with similar qualities, tl ps in the drawing would need to appear insubstantial when built. The slot dividing tl ouble bed' in House VI is an example of a spatial gap made through the absence aterial. As buildings are experienced over time and through movement, the spatial g; a building may need to be temporal and transformable by use. For example, differe alities of artificial and natural light, used to flatten one fragment in the Resor Hou hile giving others varying degrees of substance and shadow, could create spatial ga tween the various fragments, suggesting different times of the day within the san oment, and heightening the anti-perspectival dislocation apparent in montage.

18 Mies van der Rohe, *Drawings*, fig. 18.
19 Levine, pp. 78–79.
20 It is possible to produce a perspective by montage but montage involves the juxtaposition of

gments and is, in principle, anti-perspectival.

DRAWING ROOMS

though the Resor House drawing describes a space compressed either side of a pictu
ndow it suggests greater spatial depth than either *Baudelaire* or *Fugitive Essay*
owever, the gaps in the Resor House drawing are less important than the ones
ldessari's photoworks, in which the gaps are as important as the fragments. T
lations between the elements in *Baudelaire* and *Fugitive Essays* are complex and t
eaning of the whole is particularly slippery. In part, this is because the artwork and t
chitectural drawing have different purposes. Whether a picture, as in the perspective,
instrument, as in the production drawing, the architectural drawing is expected to ref
something outside itself. Its value as a drawing is considered secondary to its prima
rpose to describe a building. Even if it only shows a part of a building, the architectu
awing refers to a whole structure. The artwork has no such purpose. It need not conv
herence or refer to a single object.

Moholy-Nagy's montages combine a number of the qualities found in those
ldessari and Mies. Though interested in the subject matter of his montages, Mohol
agy considers their principal purpose to be the depiction of space.[21] Moholy-Na
nceived space as a dynamic entity capable of transformation by its occupants. For
ites that Moholy-Nagy 'has the idea that space is a product of motion, and that
anges as man himself moves in space.'[22]

Describing his montages, Moholy-Nagy writes: 'Linear elements, structural patter
ose-up, and isolated figures are here the elements for a space articulation. Pasted on
hite surface these elements seem to be embedded in infinite space, with cle
ticulation of nearness and distance. The best description of their effect would be to s
at each element is pasted on vertical planes, which are set up in an endless series ea
hind the other.'[23] Although it has distinct edges and is only 12.9×17.9cm, t
mposition of *Der Wasserkopf* (The Water Head), a montage Moholy-Nagy produced
25, is similar to that of *Fugitive Essays*. Like the Resor House drawing, *D*
asserkopf incorporates lines as well as photographs. Thin lines connect thr
otographs: a small image of a diver on the left, a larger image of a diver's helmet in t
ntre and an image of a water tower seen from below on the right. As in Baldessar
ork, the white space is as important as the other elements. However, *Der Wasserko*
rpasses the montages of Baldessari and Mies in its depiction of space. In *Baudelai*
d *Fugitive Essays* space is two-dimensional. The Resor House drawing represen
ree-dimensional space through flattened perspective and anti-perspectival juxtapositic
the Resor House drawing the black-and-white photograph of a rugged landscape sto
e viewer's gaze, while

Ades, *Photomontage*, p. 151.
Forty, 'Space', p. 267.
Moholy-Nagy, 'Space, Time', p. 65.
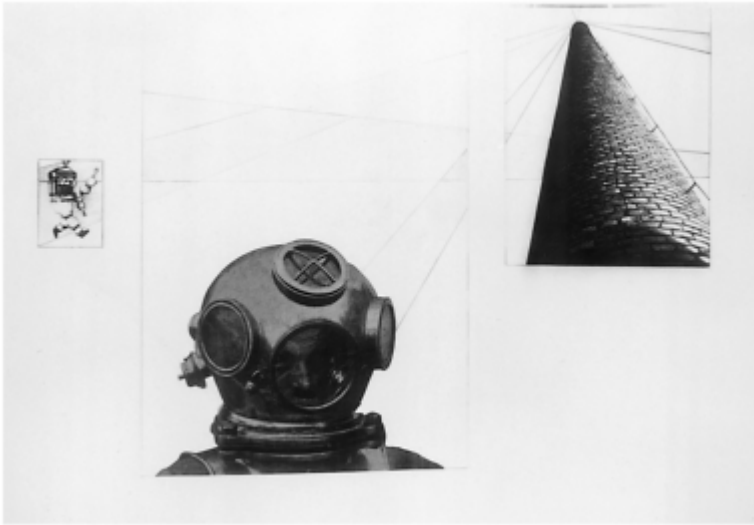
2.2.5 László Moholy-Nagy, *Der Wasserkopf* (The Water Head), 1925. © Estate of László Moholy-Nagy/DACS 2002/The J. Paul Getty Museum, Los Angleles.

er Wasserkopf describes a complex and dynamic space of greater depth. In *D asserkopf* the diver and helmet are seen frontally while the tower is viewed from belo *er Wasserkopf* does not focus on a single viewpoint, as in the perspective, but sugge ultiple viewpoints, as in montage. In that it is transformed by experience, Mohol agy's understanding of space is compatible with a principle of montage.

SENSUAL GAPS

A naked body is less erotic than the spot 'where the garment leaves gaps'.[24]

nsual gaps occur in a number of ways. One is based on the juxtaposition of the sens r instance the sight of an aeroplane with the smell of sawdust.[25] The user perceives t p between the sight and the smell, recognizes the absence of the corresponding sm d sight, such as the smell of the aeroplane and the sight of sawdust, and forms a ment

[24] Barthes, *The Pleasure of the Text*, p. 9, quoted in Culler, p. 99.

[25] Ai, p. 89.
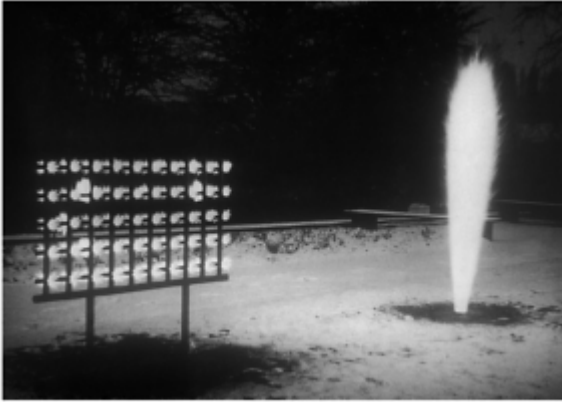
2.2.6 Yves Klein, *Fire Wall and Fountain,* Krefeld, 1961. © ADAGP, Paris
and DACS, London 2002.

image of the sensations present. In this instance a wooden plane is one possibility. The complexity of the whole experience depends upon the user's awareness of both the sensations present and absent. To experience the full character of the juxtaposition requires, therefore, an understanding of the conflict, whether pleasurable or not, an attempted reconstruction of each of the absent elements, and the formation in the imagination of a new hybrid object formed from the sensations present. In the late 1950s and early 1960s, the artist Yves Klein, working with the architect Claude Parent, proposed alternating columns of fire and water of equal height and volume. The resulting experience would have been complex. Although of contrasting temperatures, the fountains would have looked somewhat similar. A sensual gap would have existed between the similar forms but distinct qualities of the two columns. For his exhibition at the Museum Haus Lange in Krefeld in 1961 Klein constructed a fire wall with a grid of 50 Bunsen burner flames. Each flame was flower-shaped, its six 'petals' whipped by the wind. Adjacent to the fire wall was a fountain of fire gushing directly from the snowy earth.

In the traditional Korean house, discussed in Chapter 1.2, 'From the Reactive User to the Creative User', the windows, faced in thick rice paper, reduce visual perception but increase perception of the other senses. They create a sensual gap between what the user can see and what he or she can hear, feel and smell, heightening awareness of visual interpretation.

TRICYCLE AND WHITE PAINT

The sensual gap is also present when all but one of the senses expected of an experience are present.[26] I once heard half-a-dozen Swiss attempt to define Switzerland in a single
26 An idea suggested to me by Ravin Ponniah.

event. They concluded that an absence, rather than a presence, best represents their country: bus doors in Switzerland close silently. The sensual gap produced by the depletion of one of the senses in a whole work or fragment is evident in work by Stanley Kubrick, Robert Ryman and Sverre Fehn.

The suppression and then release of a single sense, such as sound, is a familiar strategy in horror films. The depletion of one sense heightens awareness of it and the other senses. Kubrick's *The Shining* opens with an overhead shot, the camera following a car on a long drive into the mountains.[27] The destination of the vehicle, carrying a mother, father and child, is a large hotel open to visitors only in the warmer months. The father, a writer, is to be its winter caretaker. On the family's arrival, the staff scurries around. Their departure is sudden, resulting in not just less sound but more silence. In an instant the size of the spaces and the silence of the hotel loom large and threatening, as though one were a register of the other. As is often the case in film, silence is linked to malevolence and previously insignificant and familiar sounds assume importance. At low level, the camera follows the child on his tricycle taking a solitary journey around the hotel. The presence of the one fluctuating sound, the wheels of the tricycle as they travel over the different floor surfaces of the hotel corridors, is deafeningly loud and full of fore-boding because of the absence of other sounds. The most disturbing parts of the child's journey occur where there is least sound, when the wheels cross the smoothest sections of the floor, implying that a sudden event, and sound or sight, will fill the void.

The purpose of the horror film is to shock but the recurring suppression and then release of a single sense, evident in the tricycle's habitual journey, is applicable to the experience of the building because it is repeated through the film, inducing lingering but fluctuating tension, rather than instantaneous shock. The viewer finds or creates the horror in his or her mind rather than on the screen.

A comparable use of sensual gaps is evident in the work of Robert Ryman, who in 1993 exhibited at the Tate Gallery, London. At first glance the two components of a major exhibition – art and viewers – were absent. The absence of people was undoubtedly connected to the apparent absence of art. Ryman writes: 'White paint is my medium.'[28]

The white walls of the contemporary art gallery are intended to provide a neutral background to the artworks and to conceal the artifice of the gallery. On close inspection, neither the walls of the gallery nor Ryman's paintings were just white. By appearing to remove colour from his paintings, Ryman increases awareness of both the colour and siting of his work: 'My paintings don't really exist unless they're on the wall as part of the wall, as part of the room.'[29]

Ryman's 1985 painting *Expander* is a 71.1cm square sheet of aluminium with a surface of white oil paint. Surface texture differentiates the painting from the wall: 'The paint on *Expander* is flat; it has very soft feeling.'[30] The connection of the painting to the wall is unexpected and delicate. In most traditional, post-Renaissance painting the frame is usually expressed and distinguished from the artwork. Abstract paintings sometimes

27 Stanley Kubrick, dir., *The Shining*, Warner, UK,1980.
28 Tuchman, p. 46.
29 Ryman, p. 156.
30 Ryman, p. 186.

ve a conceptual rather than a physical frame. In both cases the gallery acts as a larg
ame to the artwork and the fixing of the work to the wall is concealed; the fram
llery and fixing are located outside the artwork. Within *Expander*, and slightly of
ntre, are four black oxide steel bolts. As both an abstracted frame and the method
king the work to the wall, they literally and conceptually bring the periphery to t
ntre and question where the work begins and ends, an effect *Fugitive Essays* achiev
' different means. An architectural equivalent to *Expander* is Libeskind's Jewi
useum, although the void at the centre of the building and the absence of famili
chitectural elements allude to a much deeper sense of loss. In *Expander* and the Jewi
useum the gaps are semantic as much as sensual.

In most films a flowing narrative conceals montage, the means of a film's constructio
The Shining the depletion and release of sound increases the awareness of sound ai
e construction of film. In *Expander* the seeming depletion of colour concentrat
tention on colour and the relationship of the artwork to its site. *Expander* is differe
om a traditional artwork, which focuses attention on its interior, in that it focus
tention inwards in order to cast it outwards to the space in which it is located. Both *T*
ining and *Expander* conform to Bürger's description of the non-organic work of a
at proclaims its artificiality.

BUILDING LIGHT

1962 the Pavilion of the Nordic Nations, designed by Sverre Fehn, opened in t
rdens of the Venice Biennale. Serving Finland, Norway and Sweden, the Nord
vilion is located between the American and Danish Pavilions and next to a small hill.
nsists of a single rectangular room. The north and west walls, respectively adjacent
e hill and the American Pavilion, are concrete; those to the south and east are slidir
ass. The roof consists of two layers of closely spaced, deep and slender, concre
ams. The lower, structural, layer extends from the north wall to double beams on t
uth elevation, which rest on the broad double column at the south-east corner of t
vilion. The upper layer is aligned east–west.

To indicate the Pavilion's affiliation to Finland, Norway and Sweden, Fehn focused on
the interdependence of nature, architecture and art in Nordic culture. Especially in
summer, the high sun in Venice creates a sharp, warm light with strong shadows that
emphasize the solidity and mass of buildings. In contrast, the typical Nordic light is
diffuse and cool, with soft shadows that flatten and diminish matter. As a symbol of the
Nordic nations, Fehn created a Nordic light within the Pavilion. The two layers of
concrete beams exclude direct sunlight and create a soft, diffuse one, transforming a
Venetian light into a Nordic one.

Large trees are abundant throughout the Biennale gardens. Rather than remove the
ones that coincide with the Pavilion, Fehn built around them. Gaps in the roof beams
allow the trees to grow unhindered and the two wings of the double corner column
bifurcate at 45 degrees to frame a particularly large tree. On top of the roof, clear
fibreglass sheets prevent rain from entering the Pavilion but a little trickles down to the

base of the trees in heavy rain. Extending beyond the glass walls, the concrete

2.2.7 Sverre Fehn, Pavilion of the Nordic Nations, Venice Biennale, 1962. East elevation. Photograph, Jonathan Hill.

floor is flush with the gardens that surround it, diminishing the threshold between inside and outside. A photograph of the Pavilion before the installation of the sliding glass walls shows the concrete floor shiny and washed with water after a rainstorm, indicating the symbolic and literal fusion of inside and outside that is characteristic of Nordic art and, in moments of peril, Venice.
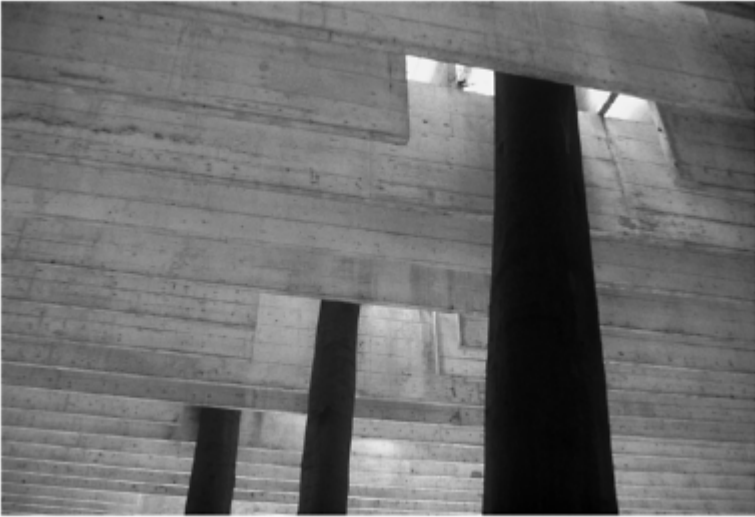
2.2.8 Sverre Fehn, Pavilion of the Nordic Nations, Venice Biennale, 1962.
Roof detail with trees. Photograph, Jonathan Hill.

2.2.9 Sverre Fehn, Pavilion of the Nordic Nations, Venice Biennale, 1962.
Roof detail. Photograph, Jonathan Hill.

The slender beams, glass walls, and smooth, delicate finish of the concrete surfaces
make the Pavilion appear unusually light and weightless. The Pavilion's other important

chitectural elements are natural rather than man-made. They further diminish t[...]
[...]lidity and materiality of the Pavilion, blurring the boundary between nature a[...]
[...]chitecture and inviting casual movements through the Pavilion that undermine the au[...]
[...]art, which the other national pavilions at the Biennale magnify.

SEMANTIC GAPS[31]

[...]he Nordic Pavilion conforms to Bürger's description of the non-organic work of art th[...]
[...]oclaims its artificiality, but by reference to nature. A sensual gap is evident in t[...]
[...]pletion of Venetian light to create Nordic light. Other gaps – spatial, sensual a[...]
[...]mantic – occur due to the absence of a clearly defined threshold between building a[...]
[...]rden, apart from the differences in light, and the presence of external elements, such [...]
[...]es and weather, inside as well as outside. Blurring interior and exterior, Fehn creates[...]
[...]mantic gap between the Nordic Pavilion and the term 'building'. A semantic gap occu[...]
[...]hen certain characteristics expected of a building are absent or undermined.

[...]Designed by Marcel Breuer, the Whitney Museum of American Art, New York, w[...]
[...]ened in 1966. A 50mm spatial gap, and a semantic gap between art and life, separat[...]
[...]e glass external wall of the museum's entrance hall from the concrete entry bridg[...]
[...]nich leads off the street and over the sunken sculpture court. As the bridge stops ju[...]
[...]ort of the glass doors, the visitor must cross a spatial gap and a semantic gap to ent[...]
[...]e building. Both gaps are unchanging and unaffected by use.

[...]The semantic gap I identify in the work of Carlo Scarpa is affected by use. Scar[...]
[...]mpleted the Querini-Stampalia Foundation, Venice, in 1963. The rectangul[...]
[...]hibition space is entered from the edge furthest from the exterior wall. Travertine si[...]
[...]lls frame the view of the courtyard, which is the focus of attention. The visitor[...]
[...]likely to notice the small door at the far end of the right-hand travertine wall, whi[...]
[...]nnects the exhibition space to the gift shop. Ravin Ponniah comments that 'it on[...]
[...]ally became a door when I pushed it … Architecture is pushing the door open and n[...]
[...]e door itself.'[32] The gap Ponniah describes is one of recognition. He did not see t[...]
[...]or at Querini-Stampalia as a door because it does not have all the famili[...]
[...]aracteristics of a door. Its proportions and size are those expected of a door, but it[...]
[...]ade of travertine and flush with the travertine wall. It becomes a door by touch mo[...]
[...]an sight. At Querini-Stampalia, the continuous travertine wall surface opens a semant[...]
[...]p in the term 'door', which the user reveals by using a section of the wall as a door.

31 A semantic gap can exist between a text and its title.
32 Ponniah, p. 18.

2.2.10 Marcel Breuer, Whitney Museum of American Art, New York, 1966.
Photograph, Adrian Forty.

2.2.11 Marcel Breuer, Whitney Museum of American Art, New York, 1966.
Entry bridge. Photograph, Jonathan Hill.

CREATIVITY IN GAPS

In this chapter, each type of gap is discussed largely in isolation, through the example of specific artworks, films and buildings. The spatial gap is the latent entity between fragments; the sensual gap occurs when either a number of senses contradict each other or when one is depleted; the semantic gap occurs when, for example, certain characteristics expected of a building, or a fragment of a building, are absent or undermined. In the examples discussed here, spatial, sensual and semantic gaps require the mental and bodily creativity of the user. The semantic gap may also require the user to be creative physically. In other situations the user of spatial, sensual and semantic gaps may show constructional and conceptual creativity.

In the next six chapters, I discuss architectural projects that montage spatial, sensual and semantic gaps, and consider how the architect and the user share authority in each instance. I designed the first two projects. The others are by Diller + Scofidio, Dunne + Raby, Oliver Michell, Steven Holl and Vito Acconci, and Zvi Hecker in collaboration with Rafi Segal. The projects exhibit some of the strategies of user creativity discussed in 'The Role of the User'. But they are included here because they have been proposed or constructed in the last 10 years, exemplify aspects of the montage of gaps, and share a concern for architectural matter that is in flux and particularly susceptible to numerous revisions and appropriations because it is never quite the same each time it is experienced.

2.3
the institute of illegal architects

BUILDING A DRAWING AND DRAWING A BUILDING

The Institute of Illegal Architects and Weather Architecture, two projects I designed, are metaphors of the outside pouring into the practice of architects. Each begins with a critique of an architectural idea and an architectural institution, in which the idea is manifest, and leads to a counter proposition.

Sited directly in front of the Royal Institute of British Architects, the Institute of Illegal Architects challenges the idea that architects alone make architecture. Questioning the binary opposition of architect and user, it proposes a third entity: the illegal architect, a hybrid producer-user, who questions and subverts the established codes and conventions of architectural practice and acknowledges that architecture is made by use and by design.

To imply that they can predict use, architects promote models of experience that suggest a manageable and passive user, unable to transform use, space and meaning. In Chapter 1.1, 'The Passive User', I identify the contemplation of art as one of the most prevalent of such models, and state that it is exemplified in the history of the Barcelona Pavilion. Weather Architecture proposes a reassessment of architectural matter that undermines the status of the Barcelona Pavilion as an object of contemplation and focuses, instead, on the creativity of use.

Whether intended or not, every design for a building suggests a model user. As designs for buildings The Institute of Illegal Architects and Weather Architecture suggest the creative user but what model of reader and viewer do the texts, drawings and photographs that constitute the projects suggest?

Architects build drawings, models and texts. They do not build buildings. However, to claim authority over building, architects often discuss architectural drawings as if they are a truthful representation of a building. But all forms of representation omit as much as they include. Texts, drawings, models and photographs are partial, providing contradictory and elusive information. Rather than considering this a problem, it is a theme of The Institute of Illegal Architects and Weather Architecture. Neither project tries to present a complete, truthful picture of a building. Rather they provide a rich collection of fragments, each providing different and specific information, from which the reader/viewer can 'construct' their idea of each project. My intention is to emphasize the differences between words and images as well as their similarities. In Weather Architecture words largely affirm images, forming a shared narrative. In The Institute of Illegal Architects one sentence may explain a drawing or photograph, while another either contradicts it or adds further information. In certain drawings the reader/viewer is given comparatively little opportunity for interpretation, while in others the relationship between signifier and signified is loose. Individually the drawings and photographs of the two projects can, like all images in any architectural book, be seen as objects of

ntemplation. But considered collectively, the drawings, photographs and texts a
alogous to the buildings they describe. Like this book, they are conceived as a monta
gaps.[1]

WEYMOUTH STREET

his Institute of Illegal Architects refers to two simultaneous journeys: one conceptu
om the architect to the illegal architect, the other physical, from the RIBA to t
oposed IIA sited directly in front of it.[2] The subject of my criticism is the architectu
ofession, not all architects. I use the architectural profession in Britain as an exampl
y criticism is applicable to other countries in which architects are members of
ofession.

In 1932, one year after the Architects (Registration) Act, a building was commission
architects for architects. Designed by G. Grey Wornum, the headquarters of the RIB
located at 66 Portland Place in central London. High above the street, a row of fi
ulptures completes the side elevation onto Weymouth Street. The painter and t
ulptor flank the central figure of the architect, in the image of Christopher Wren. At t
ter edges of the composition are the artisan and the mechanic. The sculptures are n
parate elements placed onto the façade. They bulge outwards, physically of the san
ne as the building and metaphorically of the same material as the architectu
ofession. However, the four side figures have different roles to play. Devalued with
e class system, manual labour is considered incompatible with the intellectual skills
e architect. The artisan and the mechanic are servants of the architect, who wishes
entify the skills of the painter and sculptor with his own. Only in the three cent
gures does the merging of wall and sculpture – of profession, architect and artist
curately portray the ambitions of the RIBA.

A principle of professionalism is that it is possible to be objective and unbiase
ofessionals are expected to suppress individuality and personal creativity in the cau
shared, 'common sense', values that are assumed to be neutral and universal but
any cases primarily benefit a privileged minority. In contrast, the artistic traditi
presented on the Weymouth Street elevation is of subjective, individual creativity. T
paration of objectivity and subjectivity is a myth. Work cannot be simply divided in
e objective and the subjective, a fact now widely acknowledged. But the aspirations
ofessionalism and art are often so far apart that architects' desire to be bc
ofessionals and artists creates a contradiction that cannot be comfortably resolved.

THE PROFESSIONAL ARCHITECT

A number of mutually beneficial relations have formed between the architect and the
state, one of the most cohesive being the Académie Royale d'Architecture founded in
France in 1671, in which the architect performed the role of iconographer of the state's

1 Comparable especially to John Baldessari's *Fugitive Essays*.
2 The terms illegal architect and Institute of Illegal Architects are not protected by law.

ildings and public spaces. The contemporary manifestation of the relationship betwe
e architect and the state is the architectural profession. Professions acquired prominen
the nineteenth century due to the fluctuations of a rampant industrialized economy th
as perceived to be veering close to catastrophe. Capitalism requires the continu
nstruction and destruction of objects, goods and ideas in the search for new marke
the apparent benefit of practitioners, consumers and the state, organizations such
e professions are a response to the desire to contain and manage capitalism's excesse
e state offers legal protection, and a potential monopoly, to a profession in return f
safe management of an area of unsafe knowledge.

The Industrial Revolution created a vastly expanded market with many new practic
d the subdivision of existing ones. In building production, design was increasing
parated from construction; by the 1830s the general contractor commonly assumed
mber of roles previously undertaken by architects, such as the co-ordination
dividual craftsmen. Eliot Freidson writes: 'Gaining recognition as a "profession" w
iportant to occupations not only because it was associated with traditional gentry statu
t also because its traditional connotations of disinterested dedication and learnin
gitimated the effort to gain protection from competition in the labour market.'[3] T
istitute of British Architects was founded in 1834, becoming the Royal Institute
itish Architects in 1866. Registration in Britain did not occur until the twentie
ntury, however. Andrew Saint writes: 'A parliamentary bill put up by the Society
chitects in 1895 nearly succeeded. But the RIBA opposed this and other measur
cause it did not control the profession. Only a quarter of British architects we
embers of the "Institute" in 1911. Once this figure rose to half in the 1920s the RIB
on took up the cudgels in earnest, achieving registration in 1931.'[4] The Architec
egistration) Act 1931 and subsequent Architects Act 1997, which protect the use of t
m architect, establish a relationship between the state and architects collectivel
nding architects together in a manner unlikely in, for example, the art world.[5]

PROTECTING THE ARCHITECT

As defined by Pierre Bourdieu the accumulation of cultural capital has a direct bearing
on financial and social status and is affected by gender, occupation, class and race, which
can help or hinder its acquisition.[6] An architect acquires cultural capital as an individual
and collectively as a member of a profession. Cultural capital is, however, not assured
and has to be defended.

Two bodies, the Architects Registration Board and the RIBA now define the
architectural profession in Britain. 'Protecting the consumer and safeguarding the

3 Freidson, p. 24.
4 Saint, p. 66.
5 Dingwall, p. 5. Freidson, p. 24. Rueschemeyer, p. 41. Rüedi, p. 28.

6 Bourdieu, pp. 171–183. For a discussion of Bourdieu's theory of cultural capital and its relation
to the architect see Rüedi, pp. 30–32.

putation of architects' is the mandate of the ARB.[7] Under the 1997 act the AR
placed ARCUK, the Architects Registration Council for the United Kingdon
tablished by the 1931 act. Saint writes: 'ARCUK was set up to regulate t
embership, conduct and education of the British profession. The RIBA … accepted
minally independent registration council in the shape of ARCUK. But from the fir
e RIBA appointed most of ARCUK's members and so controlled the profession.'[8] T
RB administers individuals permitted to call themselves an architect in the Unit
ngdom and monitors misuse of the title. Under the 1997 act, in line with state an
blic demands for greater accountability of the professions, its supervisory pan
cludes a majority of lay members. The ARB has the power to discipline and remove
ember from the list of architects. Unless an individual is registered with the ARB he
e cannot claim to be an architect when offering architectural services in the UK. A
chitect need not be a member of the RIBA, although a majority of architects choose
. The RIBA aims to protect and expand the cultural capital of architects throu;
hibitions, publications, conferences and other events on the work of individu
chitects and architects as a whole.

    The RIBA and ARB are housed on adjacent sites in the centre of London, rather li
e halves of a pantomime donkey bound together but pulling in different directions. T
me of the RIBA, the public face of the architectural profession, is a grand and elega
ilding on the route between Regent's Park and Regent Street. The ARB is sited in
ndescript building in a side street to the rear of the RIBA.[9]

THE WAY OF MASKS

me is the one place that is considered to be truly personal. Home always belongs
meone. It is supposedly a stable vessel for the personal identity of its occupant(s),
ntainer for, and mirror of, the self. But the concept of home is also a response
security and fear of change. Home must appear stable because social norms and

personal identity are shifting and slippery. It is a metaphor for a threatened society and a
threatened individual. The safety of the home is really the sign of its opposite, a certain
nervousness, a fear of the tangible or intangible dangers inside and outside.

    Directly opposite the RIBA, on the other side of Portland Place, is the most prominent
building of the embassy of the People's Republic of China. The flag hanging on the
façade clearly states the building's purpose and importance. An embassy performs a
number of roles. It is both a home(land) for its citizens and a police station to protect and
discipline insiders and monitor and exclude outsiders.

    In pre-communist China the height of a dwarf wall at the threshold of a house
represented the social status of its principal occupant, permitting an immediate
comparison

7 Architects Registration Board, p. 1.
8 Saint, p. 150.
9 In 1999 the main entrance of the ARB's premises in Hallam Street was moved to Weymouth
Street.

tween visitor and visited. In communist China the status of a person's occupati
termined the size of their apartment. Status is manifest in buildings if it is desirable f
to be seen and understood. Claude Lévi-Strauss suggests in *The Way of Masks* that
ask transforms and omits as much as it represents.[10] He states that in the study of mas
is essential to discover what is denied as much as what is revealed. The mask and t
ilding are similar apparatuses through which ideology is transmitted, transformed a
ncealed. Individuals and groups are defined as outsiders, and excluded from domina
wer structures, by the process of mythification in a building, which makes a situati
system appear impenetrable.

A foreigner requires a visa to enter China. The visa section of the embassy is locat
wn the street from the main building, on the ground floor room of a house that giv
rtually no indication of its role. The visitor to the embassy is analogous to the foreign
China: aware of the scale of the whole but permitted to enter just a part. If the ma
mbassy building is the mask, the control of the population within China, whether nati
foreign, is the omission.

Allegiance is loyal support to a nation, cause or ideology. Allegiance to a profession
t dissimilar to allegiance to a nation and can be just as blind. The buildings of t
IBA and ARB are the embassy of the architectural profession, combining the roles
me and police station. As there are no short-term visits to the architectural professio
e ARB is the passport office not the visa section. The physical restrictions on the visit
the RIBA are less obvious than those on the foreigner entering the Chinese embass
e non-architect enters through the main entrance of the RIBA building and
couraged to use the bookshop, exhibitions and café. So what is omitted from th
ask? What threat is posed to this home?

The architect is a legal term. Planning laws and building regulations monitor buildi
oduction but architecture has no legal protection. Unlike in some countries, the practi
architecture is not protected in the UK. Amanda Shepherd writes: 'Registrati
otects the word. It does not, as would be the case with a surgeon, prohibit

the carrying out of the activity.'[11] For reasons of social and financial self-promotion, one
of the aims of the architectural profession is to further the idea that architects alone make
buildings and spaces which deserve the title architecture. The non-architect is
encouraged to enter the headquarters of the RIBA as a consumer and passive user but not
as a designer and creative user of buildings.

Shortly after the 1997 UK general election a survey in *RIBA Journal* asked the Labour
Party's new Members of Parliament: 'Do great buildings need architects?' In response
RIBA Journal added: 'Luckily, Labour's new MPs, however ignorant of the process of
architecture, understand overwhelmingly that great buildings are only possible through
architecture.'[12] The revealing aspect of this statement occurs at the end, where
architecture is used in place of architects. In 1999 *Building Design* reported that the

10 Lévi-Strauss, p. 187.

11 Shepherd.
12 Prince, p. 13.

RB wants new legislation to extend the scope of the 1997 Architects Act, which it fee inadequate because it only protects the title "architect". The ARB wants the act to tended to cover "architecture" and "architectural" – which are not protected esent.'[13] *Building Design* reported the support of the then RIBA President, Dav ick, for the ARB proposal.

To acquire financial and social security a profession needs a defined area of knowled th precise contents and limits in which it can prove expertise. However, trying fine architectural knowledge is like pouring water into a colander. Two unfortuna nsequences of the architectural profession's attempts to define and protect what insiders to be its territory are isolation from developments in other cultural fields and rrow range of practices, forms and materials.

THE ILLEGAL ARCHITECT

arthes proposes a new writer aware of the independence of the reader, whi uationists propose a hybrid producer-user who designs, makes and consumes a wor prrowing from both models, and questioning the binary opposition of the didact escriptive architect within the architectural profession and the passive, receptive us thout, I propose a third entity that blurs and invalidates the supposed hierarchy chitect and user. The illegal architect questions and subverts the established codes ar nventions of architectural practice, and acknowledges that architecture is made by u d by design.[14] The creative user can be an illegal architect, and the illegal architect c a creative user.

In stating that architecture is far more than the work of architects, my aim is not ny the importance of architects in the production of architecture but to see their role pre balanced terms and to acknowledge other architectural producers,

including the creative user.[15] Although the building and city remain central to architecture, there are now many architectures, all related to the varied experience of the user and interdependent with an understanding of the building and city. Architecture can, for example, be found in the incisions of a surgeon, the instructions of a choreographer or the actions of a user. Anyone wanting to produce architecture should discard the preconceived boundaries of the discipline and learn from architecture wherever it is found, whatever it is made of, whoever it is made by. Architecture can be made of anything and by anyone.

Architects design most buildings of note, but architectural invention equal to the work of architects can be found in the work of other architectural producers, such as artists.

13 Fairs, p. 3.
14 One of the aims of the illegal architect is to recognize and support the creativity of use. The discussions of user creativity in other texts in this book, such as the application of 'The Death of the Author' to architecture in 'The Creative User', are applicable to the practices of illegal architects and architects.

15 Many buildings are produced without the involvement of architects.

r example, in the late 1950s Yves Klein, working with Werner Ruhnau, designed t *rchitecture of the Air*. Locating all services underground, and transforming the clima ove ground by means of air, fire and water, Klein proposed an ecologically consciou t urban, architecture without physical boundaries that would enable its users to li mfortably in nature. Rather than the title architect being legally protected it should ven to any architectural producer who really deserves it. But, for now, Klein must be egal architect.

THE INSTITUTE OF ILLEGAL ARCHITECTS

the early twentieth century specific institutions and the institutional autonomies of d architecture were the subject of simultaneous attack. However, the denial of t stitutions of art and architecture collapsed, in part, because of the anti-institutionalis the avant-garde, resulting in either the withering away of radical practice or t corporation of its de-politicized husk within an expanded discipline. In accepting t iginal principles of avant-gardism, many of the seemingly radical projects produced e last 20 years have concentrated on the minor. However, marginality and the role e outsider are self-fulfilling. Institutions must be formed or re-formed not destroye ey are essential to the advocacy of change. Sited directly in front of the RIBA entran Portland Place, the IIA fosters what the profession omits: the production chitecture by illegal architects and creative users.

Born from its opposition to the RIBA and ARB, the IIA is, potentially, caught in lemma similar to the one Jeremy Till describes: 'My argument is that communi chitecture, through its dialectic genesis, suffers from the fate of all binary argume mely that it never succeeds in reformulating the original points of opposition, but is t caught within their ideological structure.'[16] The relationship between the IIA a chitects is, however, not simply adversarial.[17]

At the entrance to the RIBA building, half a metre forward of the Portland Place elevation, are two columns, one each side of the entrance. Each column is surmounted by a sculpted figure dedicated to the 'creative forces in architecture'.[18] Turned towards each other but with their faces angled to the sky and bodies slightly crouched, the figure on the left is female, the one on the right is male. An individual entering the building passes between the two columns, which might suggest that the sexes are equally represented in the RIBA. However, the single sculpture of a female figure is outnumbered by the male figures on the façades of the building, just as there are far more male members of the RIBA than female ones. Beneath the columns, the basement of the RIBA headquarters extends a little over a metre beyond the line of the front elevation. Beneath the column with the female figure are the female toilets, beneath the column with the male figure the

[16] Till, p. 62.
[17] The RIBA, rather than the ARB, is the focus of 'The Institute of Illegal Architects' as it is the public face of the architectural profession.
[18] Richardson, p. 18.
male toilets.

Seemingly the most functionally defined of spaces, toilets can also be the m
mestic and intimate: the site of events and conversations difficult in the other spaces
public building. The only physical connection between the buildings of the RIBA a
e IIA leads from the toilets in the basement of the RIBA to the lowest level of the II
e toilets are shared by the two institutes but are no longer gendered. In the m
osaic of spaces, both border and toilet, the architect and the illegal architect meet a
oss over into each other's spaces.

The IIA inhabits the public domain of the street rather than the private realm of the
miliar building site. It is an urban landscape as well as a building. The IIA occupies t
l width of Portland Place, blocking it to vehicular traffic and severing the symbo
ate which runs north–south from Regent's Park to Regent Street, a sequence of spac
t is one of the few examples of royal patronage in London. John Nash design
egent's Park in 1811 for the Prince Regent, after whom it is named.

The IIA consists of five production spaces and a series of transient elements, eit
gments or gaps. The production spaces hinge around the horizontal plane of the str
 that they appear to be rising from and sinking into Portland Place. Each producti
ace is associated with a specific experience – of time, sight, sound, smell, or touch
t a tight fit between space and use is not expected and is even undesirable.[19] Ea
oduction space is an example of flexibility by spatial redundancy and is comparable
rtzberger's concept of a form with polyvalence that is suggestive, ambiguous and op
reinterpretation.

Flush with the surface of Portland Place, the time production space occupies the f
dth of the street for 250m between Devonshire Street and Cavendish Street. The cen
e of the time production space, where the surface changes from white to black,
gned with the Weymouth Street elevation of the RIBA, on the east side of Portla
ace. The sight production space cantilevers over the sound production space, a flatten
ne sited directly in front of the RIBA, which balances on the smell production space
ncave glass shell recessed into the time production space. The touch production spa
 located under the time production space. A ramp connects it to the end of the sig
oduction space furthest from the RIBA, in the section of Weymouth Street to the w
 Portland Place.

The northern half of the time production space is made of a hard white stone cover
th a thin layer of soft black chalk, the southern half is made of a hard black sto
vered with a thin layer of soft white chalk. Users gradually erase the chalk surfaces
t the northern half changes from black to white, the southern half from white to bla
e seeds of black and white wild flowers, mixed in with the chalk, are carried in t
evices of shoes, marking lines of movement through the city. Once all the soft chalk
noved the harder surfaces beneath erode more slowly.

[19] Production related to taste, the fifth major sense, is dispersed throughout the IIA.
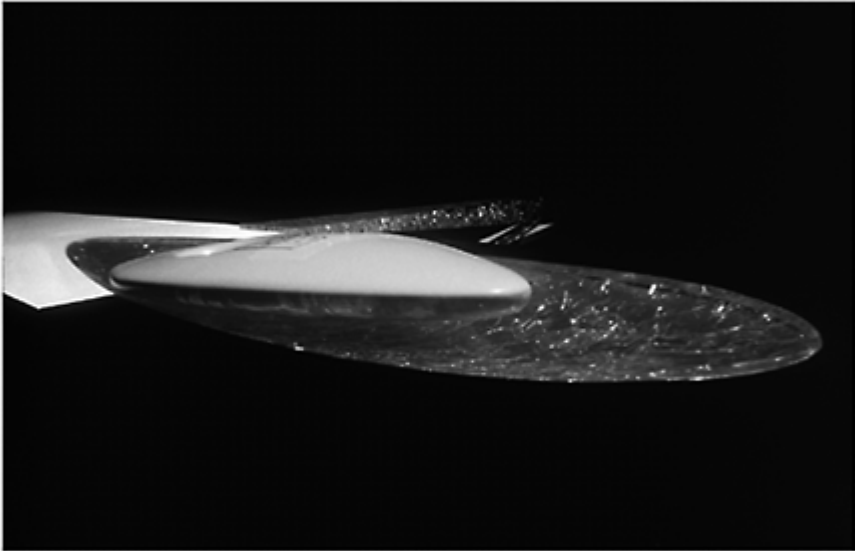
2.3.1 Jonathan Hill, The Institute of Illegal Architects, 1996. Exterior viewed
from the RIBA. Model, Bradley Starkey. Photograph, Edward
Woodman.

The sight production space is 70m long and triangular in plan, section and elevation.
Its glazed horizontal eastern edge, which at 1.5m above ground level is the highest point
of the IIA, is aligned with the eye level of an individual leaving the RIBA, who looks
down the full length of the interior of the sight production space, as its users look back.
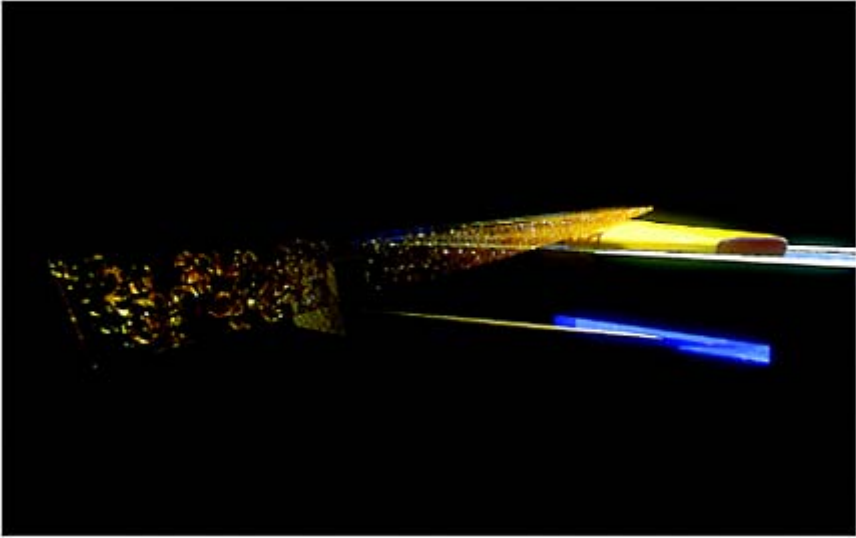
2.3.2 Jonathan Hill, The Institute of Illegal Architects, 1996. Exterior, looking towards the RIBA. Model, Bradley Starkey. Photograph, Edward Woodman.

The walls and roof of the sight production space are each made of two continuous skins, an inner one of timber and an outer one of glass, with a 100mm gap between them. The floor is toughened glass. A shredder and a grater between the timber and glass skins gradually fill the gap with shredded paper and grated timber.
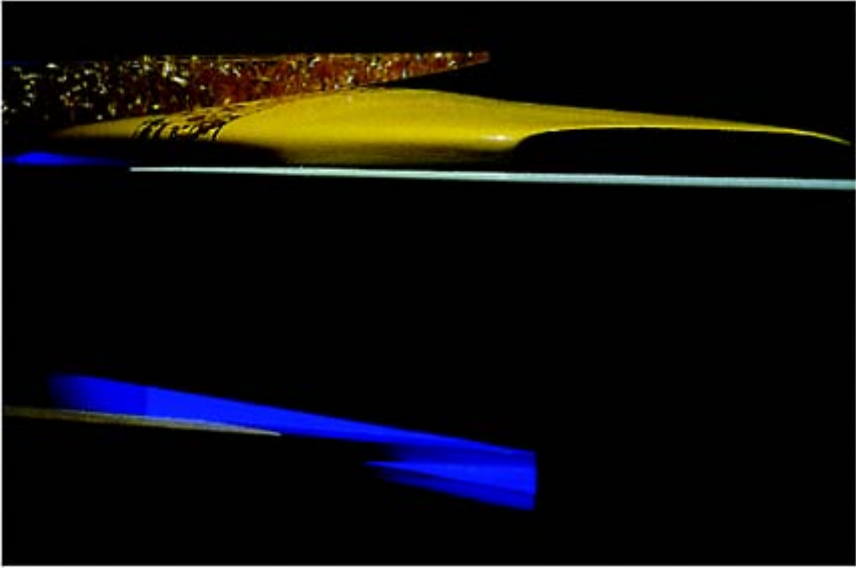
2.3.3 Jonathan Hill, The Institute of Illegal Architects, 1996. Exterior detail,
looking towards the RIBA. Model, Bradley Starkey. Photograph,
Edward Woodman.

Adjacent to the corner of the RIBA at the junction of Portland Place and Weymouth Street, the 'Mouth' is a circular recess in the upper surface of the sound production space. It projects the sounds of production from the IIA to the RIBA, creating a sensual gap between what is heard and what is (not) seen. The sound production space is the same colour as the yellow lines in the street, turning a symbol of restriction into one of play, and creating a semantic gap between the two understandings of the same colour.

2.3.4 Jonathan Hill, The Institute of Illegal Architects, 1996. Mouth. Model,
Bradley Starkey. Photograph, Edward Woodman.

A single large room, 250m × 40m, the touch production space is an example of
flexibility by spatial redundancy. The service shaft at its centre connects the touch, smell
and sound production spaces. Hung from the underside of the concave glass shell of the
smell production space, it does not quite touch the floor of the touch production space.
The surface of the shaft is encased in compressed workshop debris, which accumulates at
2mm per hour, reducing the space and enlarging the shaft so that the spatial gap between
them changes.

The touch production space has a blue light-box floor aligned with the level of the
London water-table. A circular glazed opening in the roof of the touch production space,
also the underside of the street, is located over each of the 45° magnifying mirror walls at
the northern and southern ends of the touch production space. They enable a pedestrian in
Portland Place to look along the length of the touch production space, and to observe
another person doing the same.
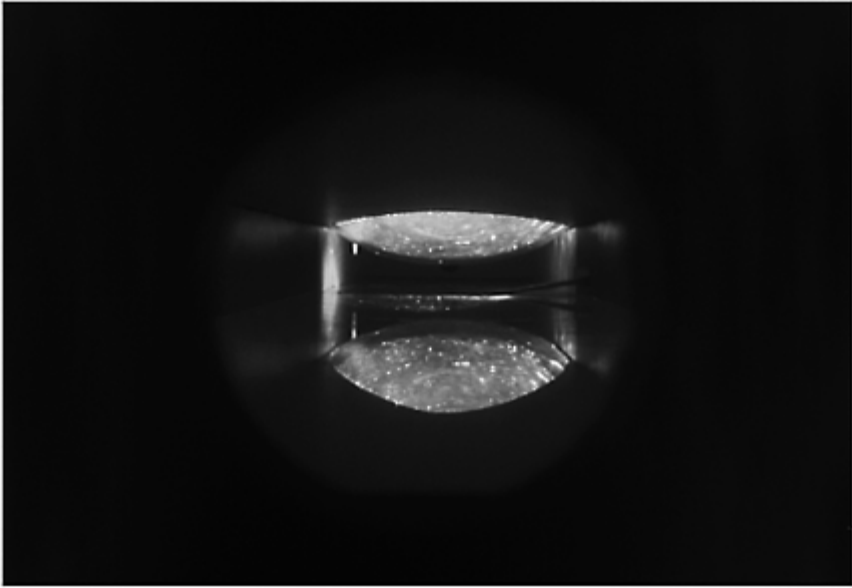
2.3.5 Jonathan Hill, The Institute of Illegal Architects, 1996. Touch production
space. Model, Bradley Starkey. Photograph, Edward Woodman.

Some of the transient fragments are designed, others are appropriated. Their number
and character change according to the wishes of the IIA's users. Each fragment does
something. Some functions are obvious, others not. Typical of a designed transient
fragment, Table (no. 43) is a single form made of four materials: plastic, steel, wool and
soap, each exactly the same colour orange. Each material suggests a number of different
uses: plastic for sitting, steel for working, wool for sleeping and soap for washing are
four possibilities. As each material wears at a different speed, use affects form and
meaning. Resisting a single interpretation, Table (no. 43) has polyvalence. A semantic
gap exists between the functional specificity of its name and its many potential uses.
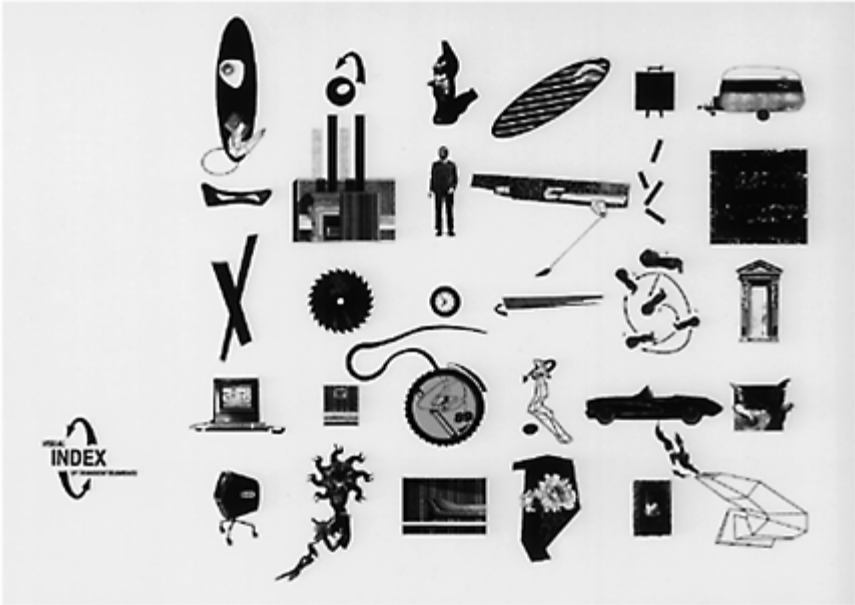
2.3.6 Jonathan Hill, The Institute of Illegal Architects, 1996. Visual index of
the transient elements.

A designed transient fragment, Kitchen (no. 17) is an oven in a corrugated steel
container coupled to a freezer in a fireplace, creating sensual and semantic gaps between
expectation and experience.
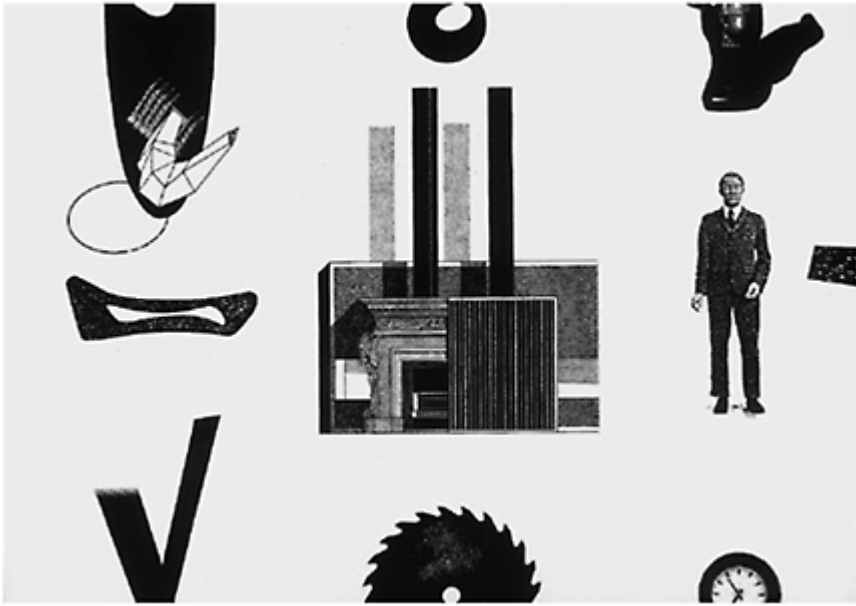
2.3.7 Jonathan Hill, The Institute of Illegal Architects, 1996. Detail, visual
index of the transient elements.

Instead of a single author the surrealist game Exquisite Corpse has hybrid author-
ᵗders who both make and consume a work. It is a game played by several people w
mpose a sentence without anyone seeing the preceding collaborations. Each player
ᵗn writes a word or phrase, folds the paper to conceal their contribution, and passes
to the next player. André Breton states that 'with "Exquisite Corpse" we had at ᵗ
ᵗposal – at last – an infallible means of temporarily dismissing the critical mind and
ᵗly freeing metaphorical activity.'[20] The first sentence produced by the game created
ᵗme: 'The exquisite corpse will drink the new wine.'[21] It is more familiarly known
ᵗnsequences, a verbal narrative, and a children's game in which, instead of the words
ᵗentence, each participant draws a part of the body, first the head, then the neck, torᵗ
ᵗist, legs and feet. Exquisite Corpse is an example of montage.
    The rules for the combination of the transient fragments refer to the Exquisite Corᵖ
ᵗt instead of the linearity of the surrealist game, the transient fragments relate to eaᵗ
ᵗer spatially. They form spatial gaps comparable to those in Baldessari's *Fugitᵗ
says* but in three dimensions not two. The users of the IIA determine the juxtapositiᵗ
ᵗtween the fragments, and between the fragments and the spaces, creating a montage
ᵗps in a state of constant flux.

20 Jean, p. 222.
21 Jean, p. 220.
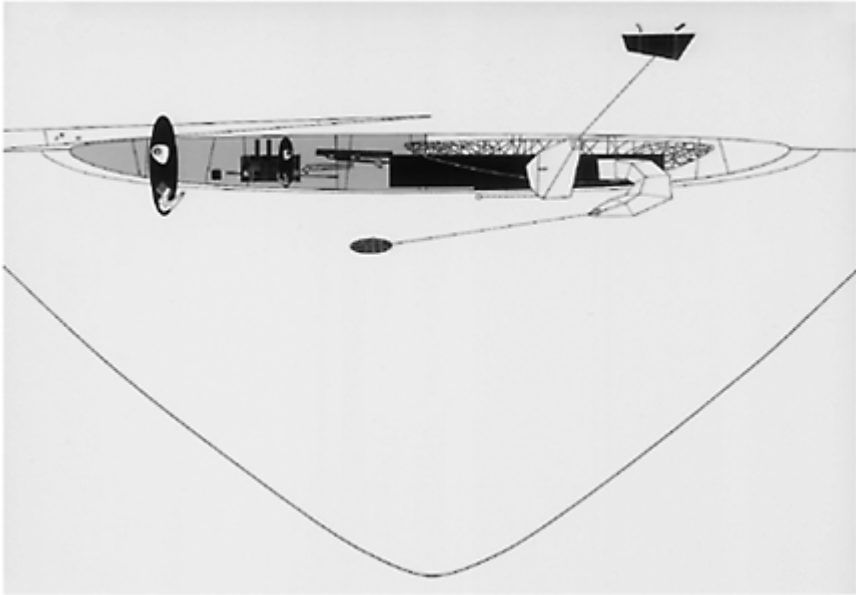
2.3.8 Jonathan Hill, The Institute of Illegal Architects, 1996. Perspective
looking north towards the sound production space.

The rubber interior surface of the sound production space progresses from hard at the
entrance to soft and upholstered at the rear. The south elevation of the sound production
space consists of a 150mm wide void between two parallel sheets of glass. A pivoting
hollow steel door with four recessed nozzles stores pigment, polystyrene and seeds,
which are blown into and sucked out of the void, turning the façade from transparent to
opaque and back to transparent. The periscopes on the storage door project the sights and
smells of sound production into the RIBA.
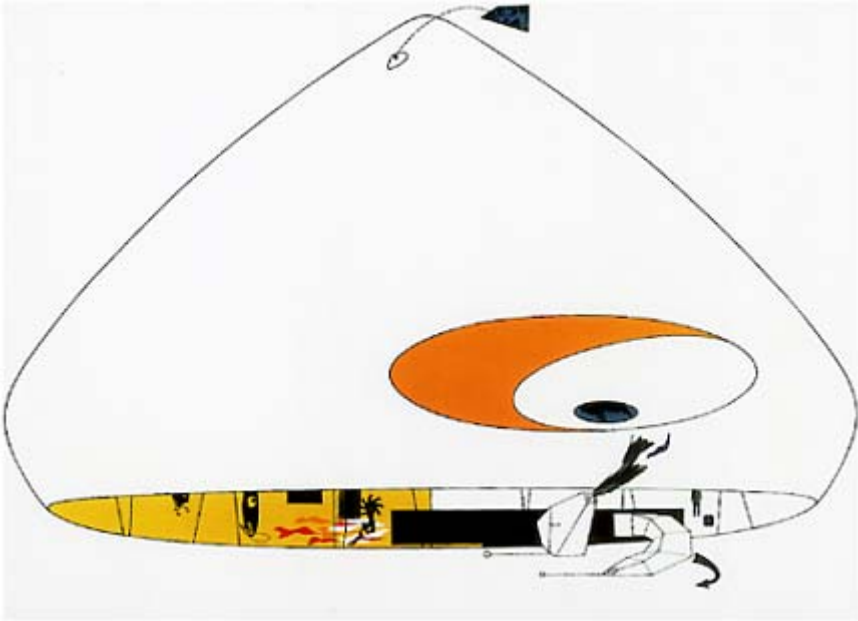
2.3.9 Jonathan Hill, The Institute of Illegal Architects, 1996. Aerial perspective
looking north of the sound production space.

The drawings of the IIA refer to each of the gaps – spatial, sensual and semantic –
discussed in Chapter 2.2, 'The Montage of Gaps.' Fragments in the drawings rarely touch
and the distances between them are unequal. They are pushed to, and extend beyond, the
edges of a drawing, and rarely occupy its centre. It is common to assume that the unused
areas of an architectural drawing are unimportant. In the drawings of the IIA my intention
is the opposite. The spatial gaps are often the largest part of a drawing and define the
relations within it. The spatial gaps in the drawing are analogous to those in the building,
and the roving eye of the viewer is equated with the wandering movements of the user.
Colour is not true to nature. It is placed selectively around a drawing and often
emphasizes a seemingly minor element, pulling the eye across and around the drawing.

The drawing of the internal wall in the smell production space is primarily an
elevation. Its major part describes clear glass storage containers set into opaque glass
internal walls. Each container has a measuring scale particular to the size and volume of a
specific raw material, which is removed only for essence extraction. When a raw material
is removed from a container, and from sight, its smell filters through the smell production
space and is juxtaposed to the sight of the materials in the other containers. When no
essence extraction occurs, another sensual gap exists between the sight of the various
materials and the absence of their smell. As the containers fill they transform the
transparency of the wall, forming a semantic gap as the framed becomes more solid than

the frame. The drawing of the internal wall has more than one scale and a number of forms of representation. For example, the major section of the drawing is at 1:20 but Letraset people at 1:200 represent the bodily odours stored in one of the containers. Through the juxtaposition of scales, the drawing acquires a third dimension with distance and depth.
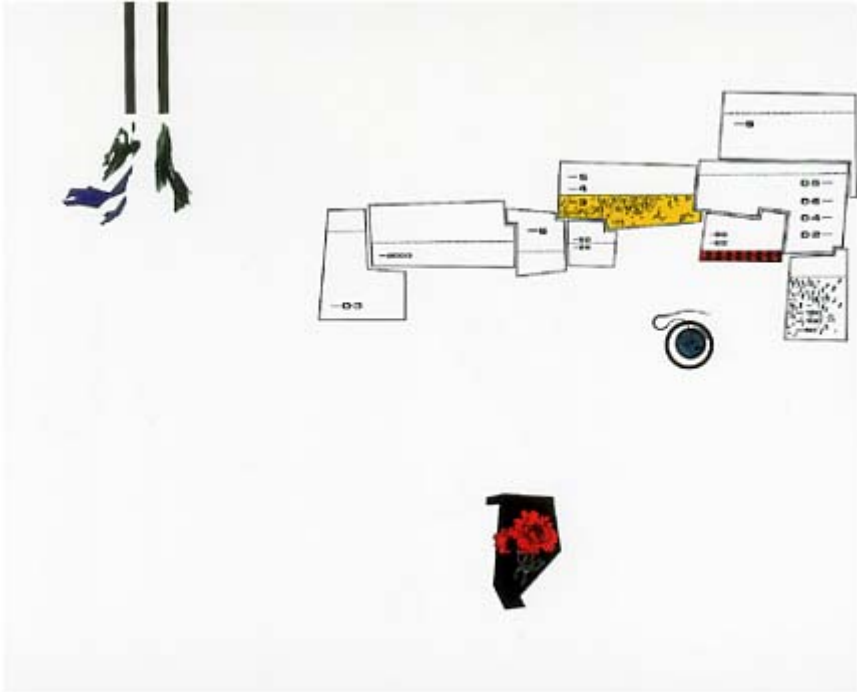
2.3.10 Jonathan Hill, The Institute of Illegal Architects, 1996. Internal wall of the smell production space.

2.4
weather architecture (Berlin 1929–1930, Barcelona 1986–, Barcelona 1999–)

WATER LILIES IN THE GERMAN PAVILION

ιe idea that the building is an object of contemplation comparable to the artwork in t
llery affirms the authority of the architect and devalues the user. It is exemplified in t
story of the Barcelona Pavilion, which I discuss in Chapter 1.1, 'The Passive User'. T
rpose of Weather Architecture, my project for the Pavilion, is to disrupt the status
e Pavilion as an object of contemplation and to affirm the creative role of the user in t
rmulation of architecture. Like the proposal for the Institute of Illegal Architects, r
search began with a study of the absences and inconsistencies in the physical fabric
architectural institution. As Solà Morales, Cirici and Ramos, the architects of the 19
construction, say they wish to be faithful to the 1929 Pavilion it is interesting to s
ιat they ignored:

> As for the presence of floral elements, it is apparent that the large pool was
> planted with water lilies, which in due course covered its entire surface, even
> causing maintenance problems, while we know that the smaller pond did not
> contain any kind of vegetation. The more naturalistic treatment of the larger,
> more open and exposed pool, whose surface was continually ruffled by the
> breeze, was designed to contrast with the dark, sombre mineral severity of the
> enclosed area of the smaller pond, where the high walls controlled the access of
> daylight, creating hard, sharply defined geometries of light and shade far
> removed from any kind of natural vitalism.[1]

ιe water lilies are absent from the 1986 Pavilion. As Solà Morales, Cirici and Ram
empted to resolve other technical problems, I assume that the water lilies were r
ınted in the 1986 Pavilion because they would introduce life, climate and decay,
compatible with the experience of a contemplative artwork.

Although now commonly known as the Barcelona Pavilion, it was commissioned
e Weimar Republic and built as the German Pavilion for the Barcelona Univers
position. Solà Morales, Cirici and Ramos state that:

> On the day of the inauguration, in the speech Alfonso XIII gave in reply to that
> of the German commissioner, the king specifically alluded, almost ironically, to
> German industriousness and efficiency – qualities that had been demonstrated
> in completing in such an incredibly short time a building such as the one he was
> opening … The speech by Dr Schnitzler, German general commissioner for the
> Barcelona International Exposition, was a wholehearted manifestation of the
> New Objectivity, taking the Pavilion's formal clarity and aesthetic rigour as a

[1] Solà Morales, Cirici and Ramos, p. 19.

metaphor for the new German spirit.[2]

though its relationship to Germany is a concern of critics and historians, the Pavilion re often associated with international modernism than a particular nation or cit wever, in denying the 'widely received idea, very much in line with the interpretati Mies' architecture in the fifties, that saw the Barcelona Pavilion as a prototype',[4] S rales, Cirici and Ramos argue that it has a precise relationship to its site, and plication to Barcelona. It is possible that one of the purposes of the reconstruction is phasize the Pavilion's relationship to Barcelona and disregard its connections rmany, Spain and internationalism. Two masts, 15.5m high, were placed symmetrica front of the 1929 Pavilion. The German flag flew from one mast, the Spanish flag fr other. The size of the flags, each measuring 6m×9m, gave them special prominen e masts were rebuilt but the flags are absent in all the photographs of the 1986 Pavili the book by Solà Morales, Cirici and Ramos.

WEATHERING THE BARCELONA PAVILION

chitects are caught in a vicious circle; in order to emphasize their idea of architectu y often adopt techniques, forms and materials already identified with the work hitects, and learn little from other disciplines. Instead, from art I take the principle t pace can be made of anything,[5] and from situationism the idea that architecture c nsist of ephemeral conditions and appropriations. A fundamental purpose of t ilding is to provide shelter and to exclude weather. But I use weather as an architectu terial. First, as a metaphor of the outside pouring into the discipline of architecture a cond, to introduce what is absent from the 1986 Pavilion: habitual occupation, Germa d the passage of time. My transformation of the 1986 Pavilion makes a copy original micking the weather in Germany between the start of the construction of the fi vilion in March 1929 and its demolition in February 1930. The source of the Germ ather is Berlin, the site of Mies' office in 1929. Its new location is the 1986 Pavili e weather on a specific day in Berlin between the construction and demolition of t st Pavilion will be repeated within the reconstruction on the same day every year. F ample, the weather in Berlin on 3 December 1929 will be repeated in Barcelona ever cember.

Articles on the Pavilion mention its sensuality and cold purity, implying that these tw ns are not mutually exclusive.[6] The weather conditions I insert into the 1986 Pavili mbine sensuality and coldness, such as frost, fog, snow and ice. All the transformatio

olà Morales, Cirici and Ramos, p. 20.
Quetglas, p. 150. Evans, 'Mies van der Rohe's Paradoxical Symmetries', pp. 236–238.
olà Morales, Cirici and Ramos, p. 28.
he critique of contemplation is another valuable development in art.
afuri, *The Sphere and the Labyrinth*, pp. 111–112. Quetglas, pp. 133–134. Evans, 'Mies van d he's Paradoxical Symmetries', pp. 255–257.

sult in a temperature reduction but some are more visible than others. Snow on t
vertine floor is seen immediately but the chilled surface of the red onyx wall, creat
cooling elements concealed within it, is perceived more by touch than sight.

German weather is not inserted consistently throughout the reconstruction. T
ontage of different weather conditions and the 1986 Pavilion creates an ever-changi
ace that enlivens and disturbs the often habitual nature of architectural experience. F
ample, like Mies' design, my transformation of the Pavilion emphasizes the distir
alities of the two pools.[7] On a day, such as 10 February, when the temperature
29–1930 Berlin dropped below freezing but remains above freezing in present-d
rcelona, one pool freezes, but the other remains liquid. As it is difficult to clearly s
om one pool to the other, the juxtaposition is not experienced immediately, making t
p between the pools appear larger than it is, both in time and distance.

THE MONTAGE OF GAPS

ie montage of gaps structures the composition of the drawings of Weather Architectu
d the project they describe. Each of the gaps discussed in Chapter 2.2 'The Montage
ips', is evident in Weather Architecture. Sensual gaps exist between the weather
rcelona and the German weather imported into the 1986 Pavilion. Spatial gaps occ
tween the fragments of German weather, between the fragments of Barcelona weath
d where German weather displaces Barcelona weather. Semantic gaps exist betwe
uilding' and 'weather as building', when snow creates a new floor inside the 19
vilion, for example. The montage of gaps occurs when two versions of the same ty
gap, or two or three types of gap, are juxtaposed to each other, for example when t
ow floor melts.

ARCHITECTURAL PREDICTIONS

ie drawings of Weather Architecture combine notation familiar in weather maps a
chitectural drawings.[8] A weather map predicts rather than produces the weather and t
itus of the meteorologist is based on the accuracy of his or her prediction. T
chitectural drawing is both an instruction and a prediction. The ability of the archite
any other architectural designer, to predict the building is more accurate than that
e meteorologist to predict the weather, but the ability to predict use is especia
certain.

I wish, however, to make a number of predictions. First, the juxtaposition of the

German weather of 1929–1930, the 1986 Pavilion, and the weather in present-day
Barcelona will disturb the current experience of the reconstruction as an object of

7 Solà Morales, Cirici and Ramos, p. 19.

8 The drawings mimic photographs in architectural magazines but the disruptive presence of the
German weather and the spatial gaps in the drawings suggest a space of appropriation rather than
contemplation.

ntemplation. Second, the introduction of German weather into the 1986 Pavilion w
ke it decay, which is expected of the building but not the artwork. Third, t
habitants of Barcelona will start to inhabit the 1986 Pavilion, and the weather within
king the Pavilion less art and more architecture. As the experience of the buildi
pends on the way it is managed as well as designed, Weather Architecture is intend
disturb the management of the 1986 Pavilion as well as the space itself.

Weather Architecture refutes the assumption that contemplation is the most appropria
ly to experience the building and questions function's role as a guiding principle of t
sign and use of buildings. Instead, it argues that the building that is most suggesti
d open to appropriation is the one we do not know immediately how to occup
naining particularly susceptible to numerous appropriations because it is never qu
e same each time it is experienced. Neither the building nor its architect suggests a u
stead, the user decides use.[9] If constructed Weather Architecture would no doubt
ed in ways I cannot imagine. It is located within another tradition of architectu
actice which, in place of the passive user associated with functionalism a
ntemplation, recognizes the creative user with a role as important in the formulation
chitecture as that of the architect. To use a building is to alter it, either by physi
nsformation, occupying it in unexpected ways or conceiving it anew. A carpet of sno
n be a bed or become a chair. Architecture is made by use and by design.

9 An idea similar to Hertzberger's concept of a form with polyvalence.
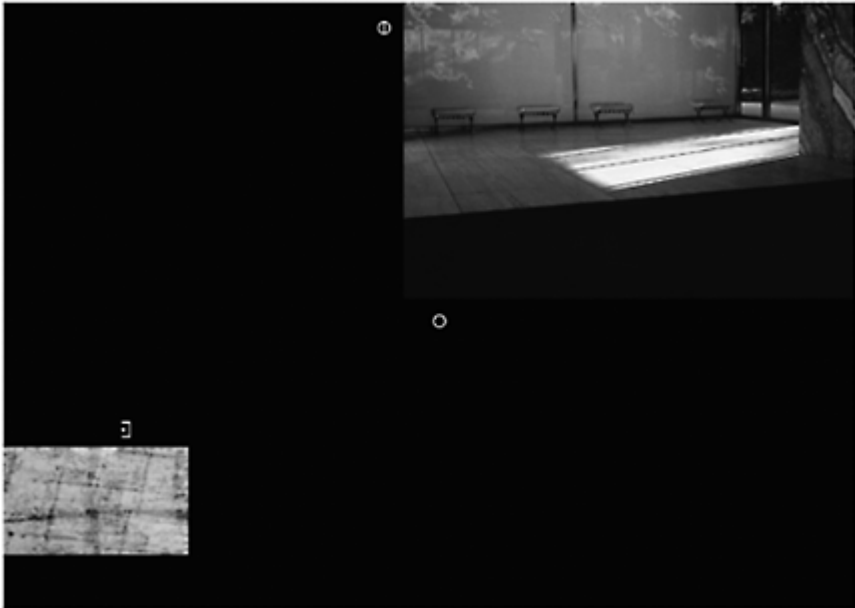
2.4.1 Jonathan Hill, Weather Architecture, 1999.

Berlin 3.06pm 12 December 1929 – Barcelona 3.06pm 12 December 1999. Travertine Wall: frost(Berlin); White Glass Wall: one-tenth cloud cover(Be), clear sky(Barcelona).
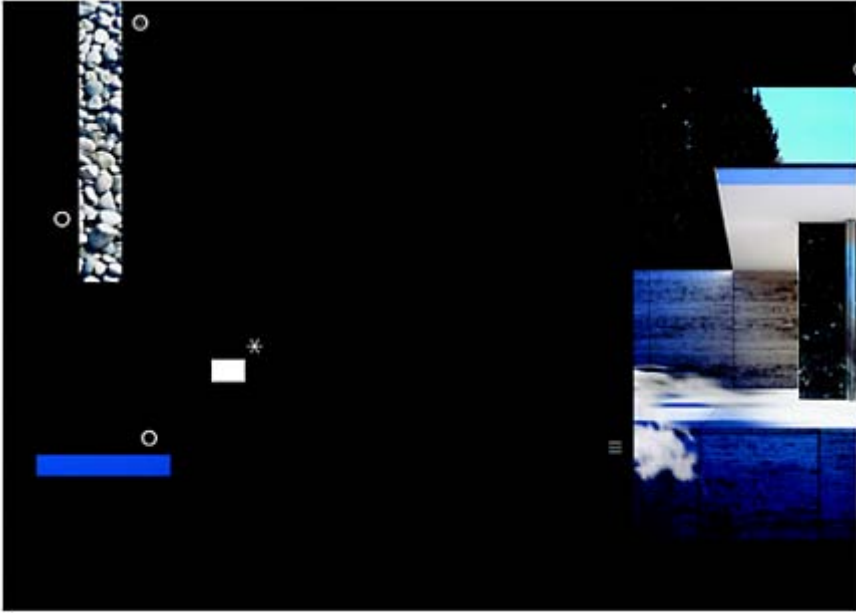
2.4.2 Jonathan Hill, Weather Architecture, 1999.

Berlin 2.55pm 18 December 1929 – Barcelona 2.55pm 18 December 1999. Large Pool: calm(Ba), clear sky(Ba); Small Pool: snow(Be), clear sky(Ba); External Travertine Floor: fog(Be), clear sky(Ba).
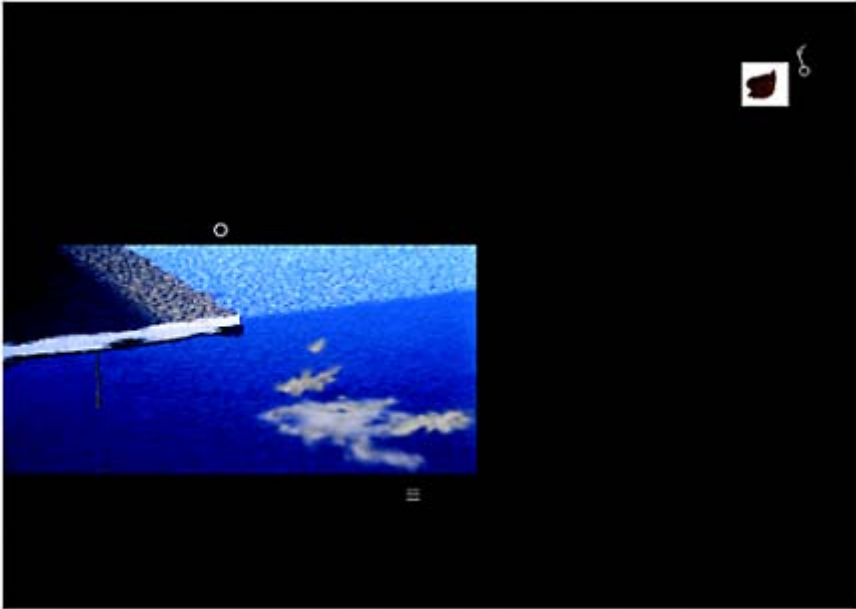
2.4.3 Jonathan Hill, Weather Architecture, 1999.

Berlin 11.09am 22 December 1929 – Barcelona 11.09am 22 December 1999. Large Pool: fog(Be), 13 knot east wind(Be), clear sky(Ba).
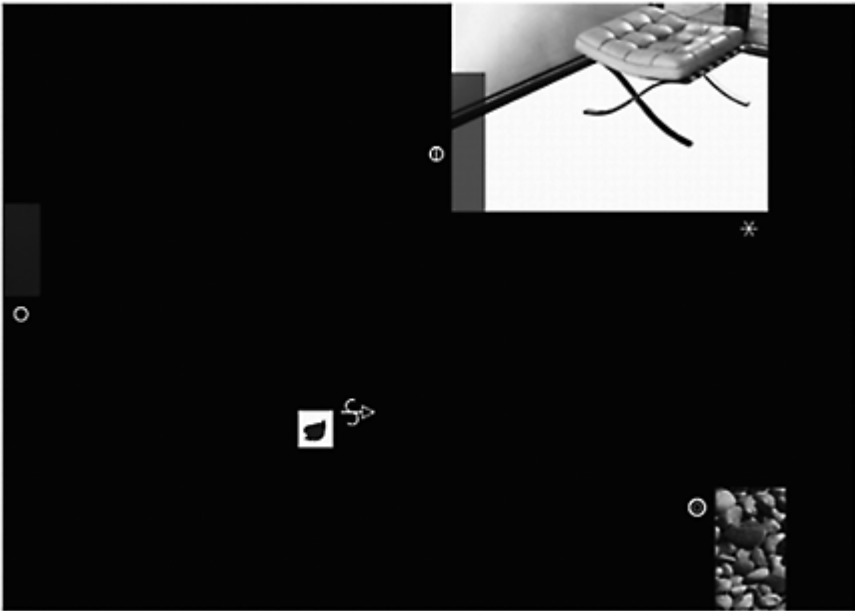
2.4.4 Jonathan Hill, Weather Architecture, 1999.

Berlin 10.32am 2 January 1930 – Barcelona 10.32am 2 January 2000. Large Pool: calm (Ba); Small Pool: clear sky(Ba); Internal Travertine Floor: snow(Be), one-tenth cloud cover(Be), storm (Be).
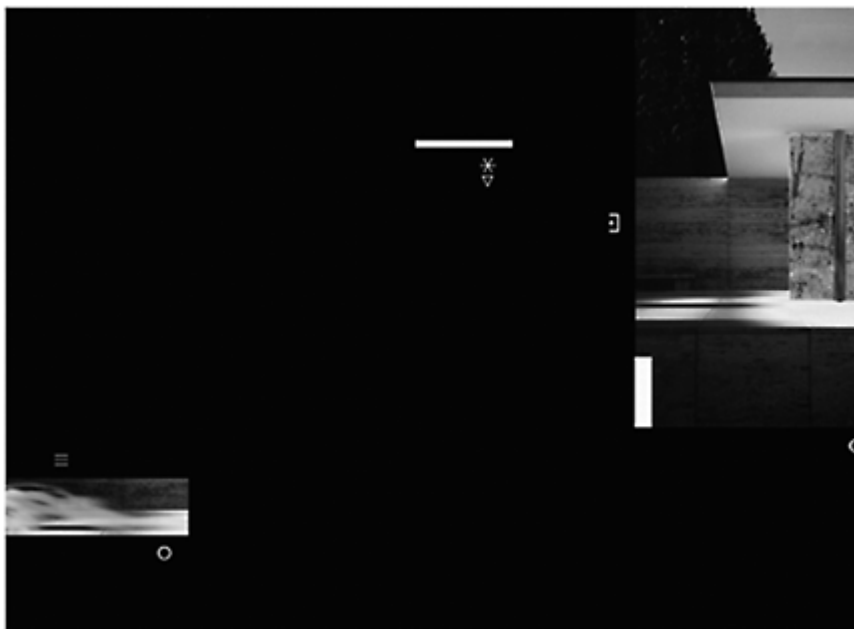
2.4.5 Jonathan Hill, Weather Architecture, 1999.

Berlin 3.15pm 6 January 1930 – Barcelona 3.15pm 6 January 2000. Marble Wall: frost (Be), snow(Be), clear sky(Ba); External Travertine Floor: fog(Be), clear sky(Ba)
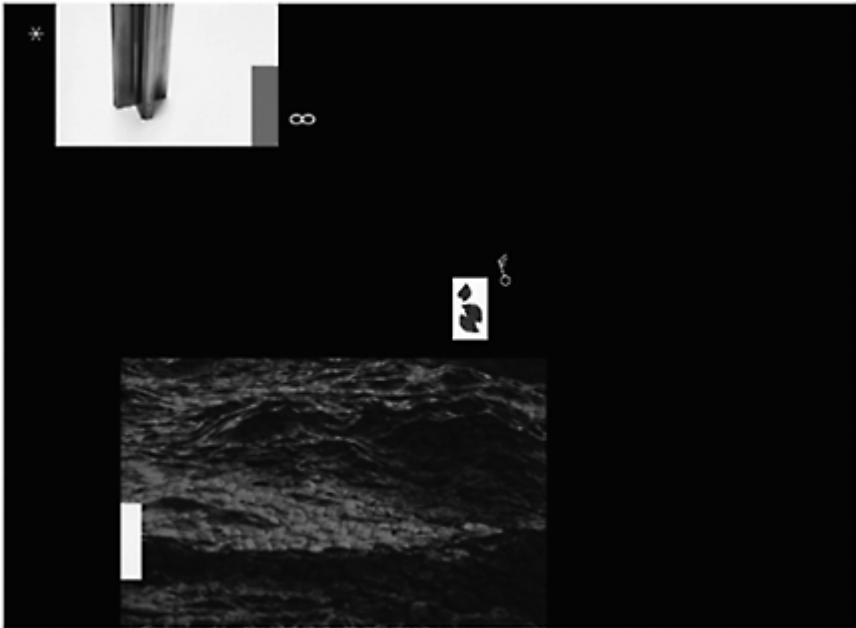
2.4.6 Jonathan Hill, Weather Architecture, 1999.

Berlin 10.03am 14 January 1930 – Barcelona 10.03am 14 January 2000. Large Pool: 23 knot east wind(Be); Internal Travertine Floor: snow(Be) haze (Be).

2.4.7 Jonathan Hill, Weather Architecture, 1999.

Berlin 10.34am 19 January 1930 – Barcelona 10.34am 19 January 2000. Large Pool: calm(Ba), clear sky(Ba); External Glass Wall: drifting snow(Be), clear sky(Ba).
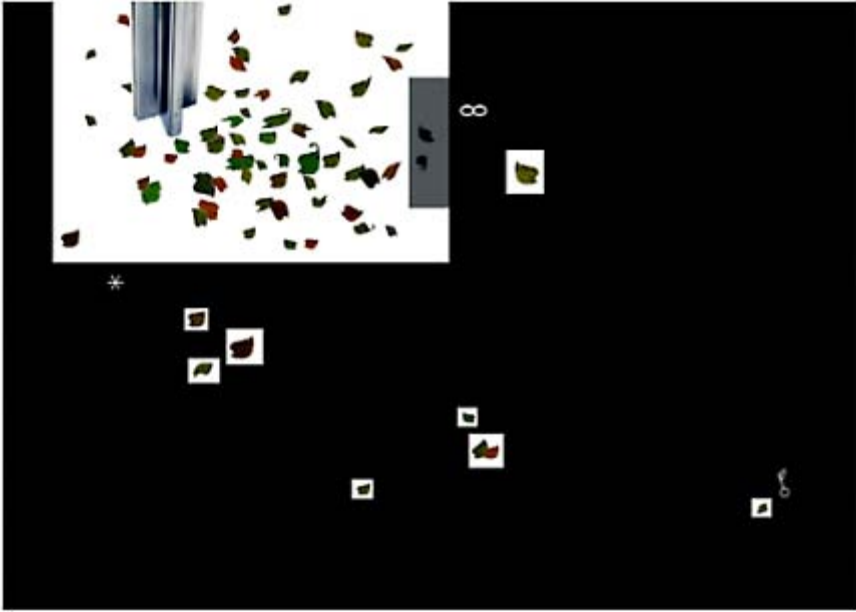
2.4.8 Jonathan Hill, Weather Architecture, 1999.

Berlin 3.29pm 20 January 1930 – Barcelona 3.29pm 20 January 2000. Internal Travertine Floor: snow(Be), 23 knot east wind(Be), haze(Be).

2.4.9 Jonathan Hill, Weather Architecture, 1999.

Berlin 1.56pm 10 February 1930 – Barcelona 1.56pm 10 February 2000. Large Pool: calm(Ba), clear sky(Ba); Small Pool: ice(Be), calm(Ba), clear sky(Ba).
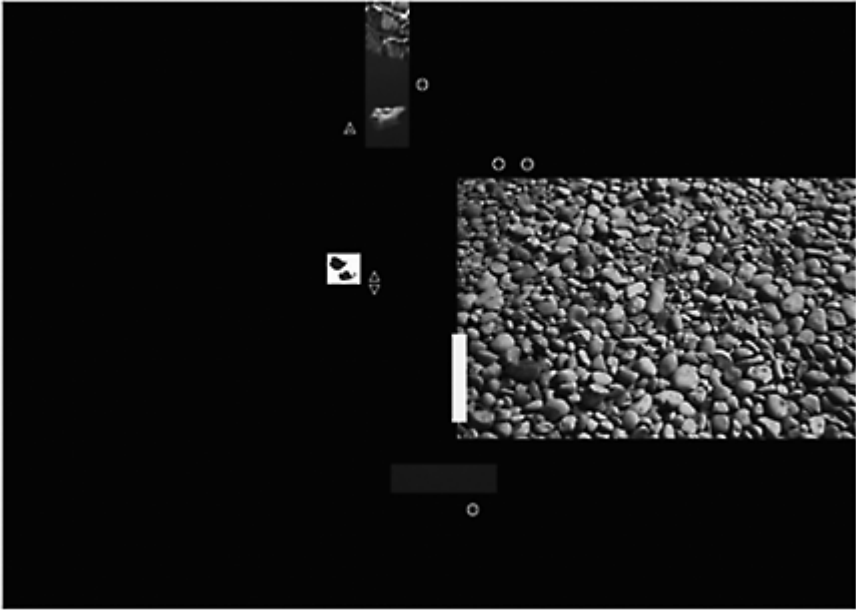
2.4.10 Jonathan Hill, Weather Architecture, 1999.

Berlin 2.31pm 15 February 1930 – Barcelona 2.31pm 15 February 2000. Large Pool: hail showers(Be), calm(Ba), clear sky(Ba); Small Pool: ice(Be), clear Sky(Ba), calm(Ba).

2.5
white on white

signed by Elizabeth Diller and Ricardo Scofidio, the Blur Building, also called The
oud, is a media pavilion for the Swiss Expo 2002 in Yverdon-les-Bains, a small s
wn at the southern end of Lake Neuchâtel in the west of Switzerland. Located in t
ke, close to the water's edge, the Blur Building sprays 5000 litres of filtered lake wa
minute through 31400 nozzles to form an artificial cloud, 100m long, 60m wide a
m high, hovering above the lake. A weather station within the building controls wa
pour output in response to climatic changes that affect the size and form of the clou
ch as humidity, air temperature, wind speed and direction. Diller writes:

> *And the cloud is dynamic. It's in a constant play of natural and technological*
> *forces. So, on a windy day, it will have a long tail … and on a hot, humid day,*
> *the mist will tend to expand outwards; while on a day with low humidity, the fog*
> *will fall and drift in the direction of the wind; and on a cool day with low*
> *humidity, the fog will tend to rise upwards and evaporate. In addition, if air*
> *temperature falls below lake temperature, a convection current will lift the fog.*[1]

fore leaving the land, each visitor completes a character profile, which is stor
ectronically in a hooded 'intelligent' white raincoat. The raincoat provides protecti
m the wet environment and communicates with the Blur Building's computer syste
sitors reach the Blur Building via two 100m long ramped glass-fibre bridges. As t
sitor moves towards the cloud the experience becomes progressively white. The wh
oud fills vision and the white noise of the pulsating fog nozzles muffles other soun
aving a bridge, the visitor steps onto a large platform 'about the size of a footb
ld'[2] built on piles set in the lake-bed. As visitors wander past one another, their co
mpare character profiles and blush in response, changing colour to register either r
desire or green for disinterest, the colours standing out in the white environme
imbing to a higher level, visitors enter the Angel Bar, where they see the clear s
ove and distant views, and drink waters from around the world. Diller writes: 'Bottl
ters, spring water, mineral waters, distilled waters, sparkling waters, as well as ra
ters and municipal tap waters from a variety of international cities will be served.'[3]
e Angel Bar offered filtered water from Lake Neuchâtel visitors could even drink t
ilding. Instead, they just need to hold out their tongues. As water vapour accumula
clothing the boundaries between natural environment, building, technology and u
r. Diller writes:

> *We wanted to synthesize architecture and technology in a way that each would*

1 Diller, p. 2.
2 Diller, p. 3.
3 Diller, p. 2.

2.5.1 Diller + Scofidio, Blur Building, Yverdon-les-Bains, 2002. Perspective. © Diller + Scofidio.

exchange the characteristics of the other, that is to say, de-materialize architecture and to materialize technology. But materialize, not in the sense of hardware, but in the sense of making certain things palpable, that are usually invisible. Like the omissions of certain technologies. So the big project here is the sublime, and the sublime on a level of nature, we're creating artificial nature sublime, but also on the level of technology, where the omissions in this technology, this invisible and fast communication almost beyond our ability to control it, happens. Besides wanting to foil the conventions of heroic Expo and Fair architecture we wanted to delve into the aesthetics of nothing and engage in substance without form.[4]

Conventionally, a principal aim of Expo architecture is to provide ordered experience of an image with high visual definition, a mass spectacle consumed by a largely passive audience. Diller + Scofidio do not deny the spectacle, but attempt to redefine it by reducing visual definition and allowing undirected movement. Diller writes:

'To blur' is to make indistinct, to dim, to shroud, to cloud, to make vague, to obfuscate. Blurred vision is an impairment, it's vision mediated. A blurry image is typically the fault of a mechanical malfunction in a display or reproduction technology. For our visually obsessed,
[4] Diller, pp. 4–5.

high-resolution, high-definition culture that measures satisfaction in pixels per inch, blur is understood as a loss.[5]

Basically the movement in this pavilion is completely unregulated. Also we were interested in the relation between attention and mobility. We wanted a range of movement, from aimless wandering, to curious trolling, to grazing, to motivated browsing or shopping, to aggressively focused hunting ... We wanted to think of a way to socialize the space. It's strongest feature is that it's really about dispersion and it's really very different from the spectacle which is focused, concentrated, on something in particular. This event is entirely dispersed.[6]

For its users, the Blur Building may be as socially liberating as a masque or provide an easily consumed, tourist experience. During the Expo, the latter is most likely. In that it is a tourist destination, a spa town such as Yverdon needs to engage with spectacle to some degree. But it is a rather everyday little town. Between the end of the Expo in October 2002 and the demolition of the Expo buildings in autumn 2003, locals will outnumber visitors and a more active, and questioning, engagement may occur, informed by habitual experience of the building and the surrounding environment.

Two characteristics demanded of the building are stability and solidity. A purpose of the building is keep the outside outside and the inside spatially defined and materially certain. Traditionally, threats from outside come in a number of guises, notably inclement weather conditions and undesirable people. Both are associated with the formless, fluid, unstable and unpredictable. Banister Fletcher and Banister F. Fletcher write that 'Architecture ... must have had a simple origin in the primitive effort of mankind to provide protection against inclement weather, wild beasts and human enemies.'[7] The threat of external factors is psychological and social as much as physical and, sometimes, the threat of the outsider fuses with the threat of the outside, so that one becomes a metaphor of the other. For example, in *The Embarrassment of Riches*, Simon Schama states that in seventeenth-century Netherlands a static and reassuring interior was juxtaposed to a fluid and menacing exterior, personified by the flood-tide and the vagrant, which were considered both physical threats and metaphors of all that was disturbing.[8]

Sibley writes: 'Generally, anxieties are expressed in the desire to erect and maintain spatial and temporal boundaries. Strong boundary consciousness can be interpreted as a desire to be in control and to exclude the unfamiliar because the unfamiliar is a source of unease rather than something to be celebrated.'[9] He argues that while the stability of the building may provide gratification, it can also, simultan

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[5] Diller, p. 1.
[6] Diller, pp. 3–4.
[7] Fletcher, p. 1.
[8] Schama, pp. 34–40.
[9] Sibley, 'Comfort, Anxiety and Space', p. 108.

eously, create anxiety because the security it offers can never be fully achieved, generating an increasingly intense, and unfulfilled, need for stability. Sibley writes: 'As Freud (1919) recognised in his essay on the uncanny (*unheimlich*, unsettling or unhomely), this striving for the safe, the familiar or *heimlich* fails to remove a sense of unease. I would argue that it makes it worse.'[10] Sibley does not, however, reject all attempts to construct a stable order. Instead he argues for a dialectical view that acknowledges the merits of both defined boundaries and spatial porosity.

At Yverdon, a semantic gap exists between the cloud hovering over the lake and its designation as a building. As the wind blows, spatial gaps form between the previous location of the building and its new one. We do not expect a building to drift, flow and blur. Missing from the Blur Building are the precise thresholds and spatial and material stability expected of the building.

2.5.2 Diller + Scofidio, Blur Building, Yverdon-les-Bains, 2002. Exterior. Photograph, Elke Zinnecker.

10 Sibley, 'Comfort, Anxiety and Space', p. 115.

2.5.3 Diller + Scofidio, Blur Building, Yverdon-les-Bains, 2002.
Interior. Photograph, Elke Zinnecker.

The Blur Building combines natural and artificial materials but it is made, principally, of an unpredictable and immaterial architectural material: weather affected by the weather. To use the Blur Building also requires an understanding of architecture and nature. Unlike the flood-tide, fog is more often gently disorientating than destructive and local responses to the Blur Building can exploit everyday experience of a foggy climate. Contrary to the familiar image of Switzerland as a completely mountainous country, a large band of comparatively flat countryside between the Jura to the north-west and the Alps to the south stretches in an arc from Zürich to Geneva. Yverdon is located to the west of this arc. The low-lying land and profusion of lakes creates a foggy climate that fills the landscape for days or even weeks, sometimes creating a sea of fog up to the summit of the Chasseron and the Chasseral, at 1607m the highest peaks in the Jura. Because the fog is so pervasive it becomes a part of the everyday environment, slowing movement, diminishing visual depth, flattening sound, and shifting the relationship between interior and exterior.

   Diller writes that 'we were afraid that this fog would drift to shore and wipe out the Expo, maybe the town as well.'[11] Diller + Scofidio's drawings contrast the cloud of the Blur Building with blue skies and blue water. These conditions do occur but more fascinating is the Blur Building within the foggy conditions

11 Diller, p. 2.

that regularly appear around Lake Neuchâtel, forming a dialogue between defined boundaries and spatial porosity that the inhabitants of Yverdon may find both familiar and stimulating. In an environment of blurred sounds and sights, spatial, sensual and semantic gaps are especially numerous when the fog of the natural environment surrounds the fog of the Blur Building, confusing interior and exterior and making the gaps between the building and the fog ever more open to interpretation. At such a moment, the threshold between the building and the fog is reduced to delicate differences in temperature, tone and density of water vapour. Sometimes the fog inside is denser inside than outside, sometimes the opposite. White on white; cloud on cloud.

The Blur Building has two architects, one is the firm of Diller + Scofidio, the other is the weather. The Blur Building is especially open to appropriation because it is so clearly useless, unstable and out of its original architects' control. Precisely for these reasons, rather than be demolished, it should be retained.

2.6
electromagnetic weather

A significant purpose of the building is to create an ordered internal climate protected from an unpredictable external climate. The term 'weather' is applied to the climate outside, but not the one inside. Today physical barriers – such as doors and walls – are no longer sufficient to keep the outside outside and the inside inside. While means to exclude weather increase, electromagnetic weather flows in and out of the home via the phone, television, radio and computer. Unlike weather, electromagnetic weather is generated inside and outside the home. Anthony Dunne and Fiona Raby write:

> *Originally domestic space was simple, designed to provide shelter and comfort, a stable environment protected from climatic instability. However, electromagnetic weather, oblivious to damp proof membranes, effortlessly passes through, saturating everything. Its presence, disregarded by human inhabitants, becomes a luminary to a growing number of electronic devices that spring into life and chatter.*[1]

To experience the breezes and flows of electromagnetic weather, a system of spaces we inhabit but cannot see, they drove through west London:

> *We hired a car, tuned our scanner to an illegal bugging frequency and drove around the city in pursuit of leaky buildings … In this new radio landscape occupied by electronic things, walls dissolve and the contents of rooms, once safely contained within private boundaries, spill out into the streets.*[2]

In response to the profusion of immaterial spaces, such as the electromagnetic, Dunne + Raby propose a fusion of the physical and the virtual, and a process of re-materialization in which immaterial spaces find a physical expression that empowers the user. They write: 'Re-materialization involves the creation of hybrid situations that mix virtual and physical elements, the construction of spatial narratives, and the organization of time-dependent media into spatial events and experiences.'[3]

Dunne + Raby's Electroclimates, 1997, is an example of such a re-materialization. Dunne writes:

> *Electroclimates is a response to the communications that invade domestic spaces. When a scanner is used in the privacy of the home to listen in on a telephone conversation outside it, the user is seen as the*

[1] Dunne and Raby, 'Notopia', p. 102.
[2] Dunne and Raby, 'Notopia', pp. 99–100.
[3] Dunne and Raby, 'Notopia', p. 97.

invader but, seen from another viewpoint, the radio signals from cellular telephones are invading the home. Electroclimates uses an aesthetic language to gently draw attention to this new and problematic interface between private and public space.[4]

2.6.1 Dunne + Raby, Electroclimates, 1997. Still from Pillow Talk video. © Dunne + Raby.

To materialize the immaterial Dunne + Raby propose a pillow that enables the user to recognize and interpret the electronic environment. Dunne writes:

Electroclimates responds to local changes in the radio frequency environment by switching itself on when it detects signals stronger than the general background. It turns electrical space invasions of the home into flickering patterns of light and distorted sounds, when a head is placed on the pillow the distortion clears revealing what is actually being received (for example, telephone conversations, fax transmissions or garage door openers). Through a slow, gentle interaction the owner would gradually learn to read their electromagnetic environment through the object's responses.[5]

The Electroclimates Pillow makes the user aware of the fluctuations in a single point of electronic space. It does not show the larger ebbs and flows of electromagnetic weather, which it implies are relatively benign. Dunne + Raby use other terms to identify the worst excesses of the electromagnetic landscape: 'The rapid expansion of uses for the electromagnetic spectrum has resulted in a

4 Dunne, p. 93.
5 Dunne, p. 95.

new form of pollution, or electrosmog.'**6** Consequently, they argue that 'The challenge today is not to create electronic space, but electronic-free space.'**7** In 1998 they proposed a Faraday Chair, an enclosed day bed that counters the flow of electronic information. Dunne writes: 'I realised that today all space is electronic, and that the challenge to designers is to create an "empty" space, a space that has not existed for most of the century due to the explosion of uses for the electromagnetic spectrum.'**8**

6 Dunne and Raby, *Design Noir*, p. 21.
7 Dunne and Raby, *Design Noir*, p. 26.
8 Dunne, p. 105.
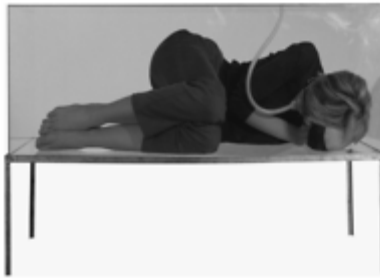
2.6.2 Dunne + Raby, Faraday Chair, 1998. © Dunne + Raby.
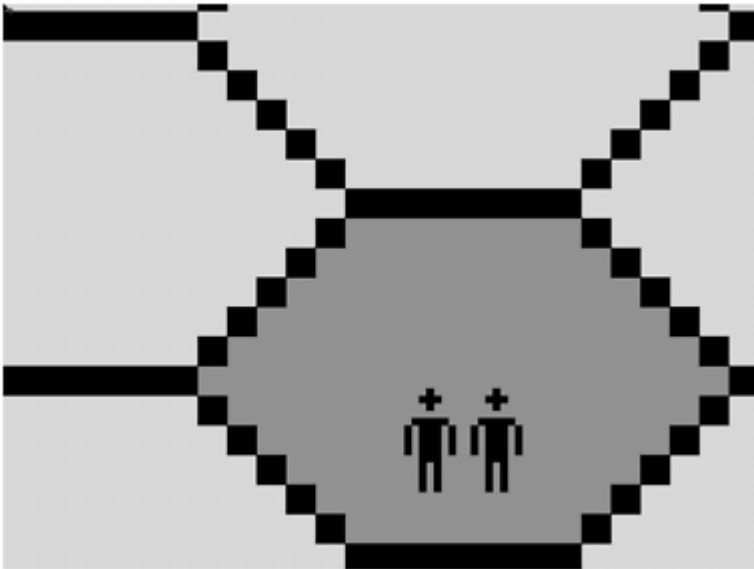
2.6.3 Dunne + Raby, Lovetectonics, Helsinki, 1999. Pixel kissing. © Dunne + Raby.

The Electroclimates Pillow and Faraday Chair offer different responses to electromagnetic space; one surveys and the other excludes a point of electromagnetic space. A third response, evident in another Dunne + Raby project, Lovetectonics, is to 'play in its enchanted landscape'. Set in Helsinki in 1999, Lovetectonics uses WAP enabled mobile phones to create a city full of chance dating encounters between people who do not know each other:

> *A million people live in Helsinki. What proportion of them share the same birthday as you? One in 365? If you walked around the city and were alerted to all the people in the same locality as you who share the same birthday, how many alerts would you get? What if we add year of birth and gender and a Pixel Kissing meeting occurs just as you board the tram. Instantly you might look at all the people immediately around you and start to imagine who you think that person is. In reality they are probably around the corner out of view, in a shop, moving in another tram, but they are there somewhere, nearby, they do exist, they are real.*[9]

Electromagnetic space is ripe for semantic, sensual and spatial gaps between the space itself and the means we use to create, control, represent and perceive it. For example, a semantic gap exists between electromagnetic space, which we cannot sense without a mediating device, and terms such as electromagnetic weather and electrosmog, which allude to the specific characteristics of the space. In using familiar terms, such as weather and pollution, Dunne + Raby make electromagnetic space comprehensible and open to new applications. If electromagnetic weather were as easy to perceive as natural weather, users could choose to immerse themselves within it, search for specific weather conditions or avoid it completely, using each of the strategies – survey, exclude and play – in Dunne + Raby's projects. In *Design Noir: The Secret Life of Electronic Objects*, Dunne + Raby cite the City of Façades, a project for Berlin designed by Oliver Michell in 2001.[10] Using familiar domestic surfaces, such as net curtains and wallpaper, Michell proposed a multiple layered building that its users could adjust to create subtle and complex configurations of electromagnetic space. For example, to create a space that could be easily transformed Michell provided electromagnetic shielding with minimal physical mass. He constructed a Faraday Curtain from a domestic lace net curtain soaked in clear resin and coated in copper. Dunne and Raby write:

> *His project proposes a new settlement populated by radio enthusiasts broadcasting opinions and (dis)information from a very dense site in Berlin. The city's fabric consists of a layering of protective surfaces, or façades, which protect broadcasters from the*

9 Dunne and Raby, 'Notopia', p.105.
10 The Bartlett School of Architecture, UCL, Diploma Unit 12, tutors

Elizabeth Dow and Jonathan Hill.

electromagnetic waves generated. In the true spirit of radio hams, the city is assembled by its inhabitants themselves, using a selection of designed parts and construction guidelines.[11]
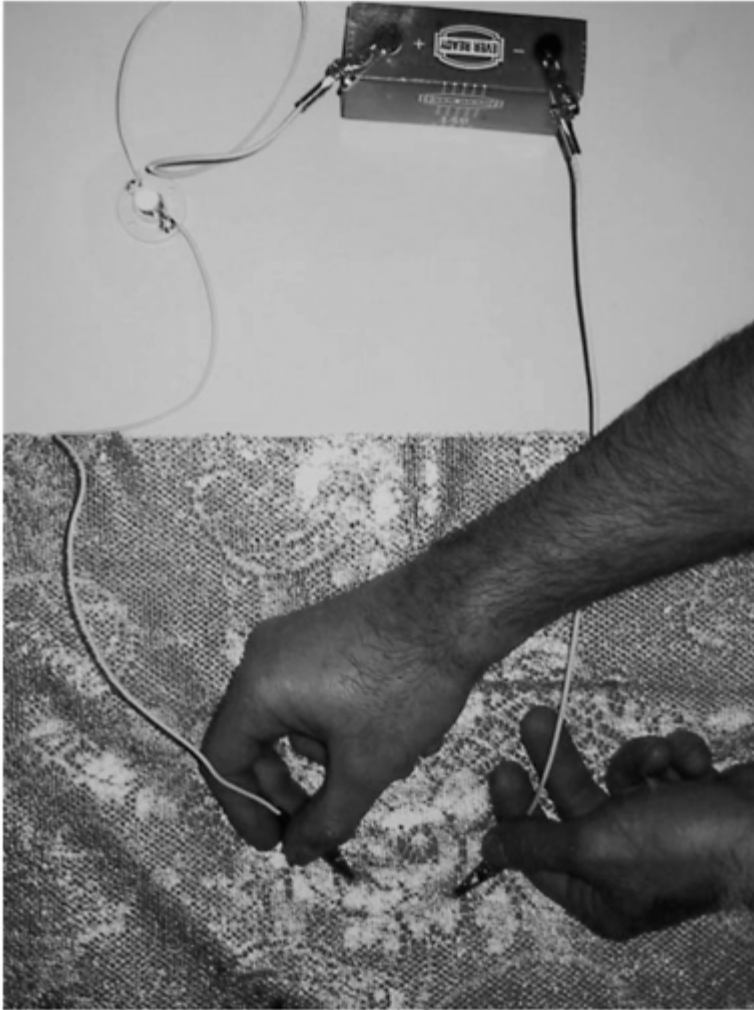
2.6.4 Oliver Michell, City of Façades, Berlin, 2001. Faraday Curtain.
© Oliver Michell.

11 Dunne and Raby, *Design Noir*, p. 27.

2.7
the subject is matter

An elite commando unit, the Palmach played an important role in the establishment of the state of Israel. David Bass writes:

> *The Palmach operated in a delicate predicament during the Second World War, working both for and against the British wartime administration in Palestine (which used the Arab population as a bulwark against the Germans), while also undermining the Arabs in an effort that led to independence in 1948.*[1]

After independence, the Palmach was absorbed into the Israeli army but it retains an important symbolic role. The Palmach Centre in Tel Aviv, designed by Zvi Hecker in collaboration with Rafi Segal, commemorates and houses the organization. The spaces it accommodates – memorial, offices, exhibition hall, library, auditorium and café – are those expected in such a building. Especially interesting are the building's exterior, external spaces and siting. The relationship of the Palmach to the land is essential to an understanding of the building. On a practical level, the Palmach depended on the land to survive and

2.7.1 Zvi Hecker, in collaboration with Rafi Segal, Palmach Centre,
Tel Aviv, 2003. Entrance wall. Photograph, Jonathan Hill.

[1] Bass, p. 35.

operate. But the Palmach and the land are bound together in a deeper way because Zionism establishes a symbiotic relationship between Israelis and the land of Israel, which had a positive consequence in that it led to the formation of Israel, and has a negative one because of disputes over the boundaries of Israel and a Palestinian state. Israelis commonly see the Palmach as an embodiment of the positive characteristics that they identify in themselves and the land of Israel. Bass writes that 'the word "palmach" remains an expression meaning honest, unpolished and improvisational.'[2]

The Palmach Centre is located on a sloping rocky site covered in pine and eucalyptus trees. It expresses the Palmach's dependence on the land, and its role as a symbol of the land and Israelis, in two ways: the space at its centre and its materials. From the street, and behind a concrete wall, a long concrete ramp leads up a steep slope to the building, passes round an end wall, and leads to a space open to the sky at the centre of the building. Here, the smooth concrete ramp stops. The central space is ambiguous and difficult to name, creating a semantic gap between the characteristics of the space, a fragment of the original rocky and tree-clad landscape unchanged by the architects, and its location at the centre of the building. Names such as garden, square and courtyard do not fit.

2.7.2 Zvi Hecker, in collaboration with Rafi Segal, Palmach Centre,
Tel Aviv, 2003. Detail, entrance wall. Photograph,
Jonathan Hill.

2 Bass, p. 35.

2.7.3 Zvi Hecker, in collaboration with Rafi Segal, Palmach Centre,
Tel Aviv, 2003. Entrance ramp. Photograph, Jonathan Hill.

Buildings are sometimes constructed of indigenous materials but in industrialized societies especially it is rare to see a building built of the material on which it is sited. The Palmach is not only built on its site; it is built of its site. The high wall facing the street is made of the rough, jagged stone excavated from the site. A semantic gap exists between the term 'wall' and the material of the wall. The jagged stone is not smoothly cut or polished, instead it is transferred to the wall with minimal transformation. Layered in strata, the wall is clearly man-made. But its rough and inclined profile also makes it like a natural formation. A spatial gap exists between the excavated site at the side of the building and the stone walls at the front, and is especially tense because they cannot be seen together. The stone walls face onto the street, not the excavated site, which is concealed from the street by trees and changes in level.

Bass writes that 'The realisation of Hecker and Segal's brutally simple, unfussy building reflects their attitude to making architecture in the region as well as the improvisational and direct approach of the Palmach.'[3] The architects have no desire to fix the building. By their actions and movements, the users can 'construct' their

3 Bass, p. 36.

2.7.4 Zvi Hecker, in collaboration with Rafi Segal, Palmach Centre,
Tel Aviv, 2003. Central space. Photograph, Jonathan Hill.

own Palmach Centre. Routes around the building and the external spaces are relaxed and varied. The detailing is basic and matter-of-fact and, even before the building is complete, additions have been added in a pragmatic and ad-hoc manner that suggests the users will make their own transformations where necessary or desired, with or without the architects' assistance.

2.8
turning a wall in to a window

Forty writes that "Transparency" is a wholly modernist term, unknown in architecture before the twentieth century.'[1] Modernist architecture is often associated with a quest for visual transparency, which it associates with social transparency. The visually transparent modernist façade implies that the workings within are equally transparent and accessible. As Dan Graham recognizes, the transparency of modernist buildings is deceptive. In *Rock My Religion*, next to a photograph of Mies van der Rohe's 1958 Seagram building, New York, he writes:

> *Yet the glass's literal transparency not only falsely objectified reality, it was a paradoxical camouflage. For while the actual function of the occupying corporation might have been to concentrate its self-contained power and to control by secreting information, its architectural façade gave the impression of absolute openness. The transparency was visual only: glass separated the visual world from the verbal, insulating outsiders from the focus of decision-making and from the invisible, but real, links between company operations and society.[2]*

Storefront for Art and Architecture is a New York gallery primarily noted for architectural exhibitions. It occupies a long thin triangular room on the ground floor of a corner building in Manhattan. One principal wall is internal; the other is external, facing onto Kenmare Street. In 1993 Storefront commissioned the architect Steven Holl and the artist Vito Acconci to collaborate on the design of a new external wall. Limited to a budget of just $45,000, Holl and Acconci designed a façade of interlocking and pivoting Supraboard panels. When closed, the façade is flat and mute, dividing interior and exterior. The joints between the interlocking Supraboard fragments provide the only detail in the consistently unrevealing façade.

   The size of the Supraboard fragments vary; the largest is nearly as high as the façade, the smallest is the height of a child. Hinged either vertically or horizontally and slotted together like a jigsaw puzzle, the fragments can be opened individually or collectively. Like Scarpa's travertine door at Querini-Stampalia, the Storefront façade is animated by use. When it is open, the street and gallery revolve around it, one entering the other. The façade forms a space of variable dimension, from the thickness of a sheet of Supraboard when closed, to the depth defined by the movements of the fragments when open. As the narrow gaps between the Supraboard panels do not provide protection from the weather, the façade does not provide a hermetic gallery space. Even when it is

1 Forty, 'Transparency', p. 286.
2 Graham, *Rock My Religion*, p. 227.

closed, light, wind and the sounds of the city permeate through the gaps from exterior to interior.

2.8.1 Steven Holl and Vito Acconci, Storefront for Art and
Architecture, New York, 1993. Façade open. Photograph,
Jonathan Hill.

2.8.2 Steven Holl and Vito Acconci, Storefront for Art and
Architecture, New York, 1993. Façade open. Photograph,
Jonathan Hill.

The door at Querini-Stampalia is simpler than the Storefront façade. To recognize it as a door, the user must find and then use it, but once found it is obviously a door and the mystery has gone. At Storefront the user has a more creative role as the status of each façade fragment is defined by the way it is used, which may change. A fragment becomes a 'window' if it is used for viewing and a 'door' if it is used for entering or leaving. In transforming a 'window' into a 'door', the user changes the meaning of a fragment and its adjacent fragments. In manipulating a number of fragments, a single user can transform the meaning of the whole or a number of users can respond to the actions of each other. The Storefront façade is rarely the same because its configuration depends upon the actions of its users. The gaps at Storefront are semantic and spatial. Exhibiting polyvalence, the Storefront façade counters Benjamin's argument that habitual use is passive. Rather than the illusory transparency of a modernist glass façade that creates a consistent threshold resistant to transformation, the varied configurations of the Storefront façade suggest a dialogue between the gallery and its visitors. Recognizing the creative role of the user, the Storefront façade is especially appropriate to an architecture gallery because it is made by use and by design.

<div align="center">

2.9
conclusion

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Benjamin, the principal theorist of early twentieth-century montage, from whom so much later work on the subject springs, states that montage has the ability to shock, awaken and educate its audience. But two distinct models are evident in Benjamin's advocacy of a montage that can shock. Typical of the first is Heartfield's *Hurrah, the Butter is Finished*, which is didactic and offers little space for interpretation. The directness and clarity of the message match the seamless combination of fragments into a single image. On the other hand, Benjamin's second draft for *The Arcades Project* is indicative of his statement that a montage is made anew in the mind of each person. Here the focus on detail, independence and juxtaposition of the parts, and discontinuous structure, resist a single interpretation. The reader is an active force in the creation of the text.

Benjamin's second draft for *The Arcades Project* is a more promising model for montage than *Hurrah, the Butter is Finished* because the ability to shock is but one of its attributes. A shocking and traumatic event can have a long and lingering influence. But, more often, shock disperses quickly and leads to recognition, acceptance and disinterest. Shock may suit a form of art that is usually seen only once, such as film, but is of limited relevance to architecture because most buildings are experienced many times. The ability to shock, the attribute of montage Benjamin considers so important, is even less relevant and worthwhile today, now that montage is a familiar strategy of art and advertising.

Benjamin's second draft for *The Arcades Project* is, principally, a montage of

fragments. The most obvious gaps within it are those between the six sections of text. The montage of gaps requires the interplay of a site and a set of fragments and gaps of equal importance. Gaps are especially open to varied interpretation. In contrast to the familiar understanding of a montage of fragments, the montage of gaps aims not to shock, and then become understandable, but to remain unfinished so that it is available for endless revisions and appropriations. Even more than in the montage of fragments, in the montage of gaps authority is shared between the producer and the user. The montage of gaps is particularly appropriate to user creativity in architecture because the building is not experienced all at once. It is experienced as a montage, piece by piece, in moments separated by gaps in climate, space and time, to mention but a few examples.

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