Architectural drawings, that is, orthographic projections such as plan, section and elevation, have interiority embedded within them, due to their subject matter. The plan locates planes that form an interior. Our eyes travel over the surface of the drawing, conjuring up the interior that it represents. We infer our inhabitation of the space through two-dimensional means. The artist's book offers a different interiority, a physical one formed through both its objecthood and component pages. As demonstrated previously, the page itself has a dimensionality to it, beyond that of subjectile surface. Through the structure of the book, there is exteriority and, hence, its opposite, interiority present.

Through Charles Rice's writing on interiority, and 'interior's doubleness', this chapter explores the book's interiority. The work of Michael Snow and volumetric devices, such as pop-up and 'peepshow' books, demonstrate aspects of this interiority. In particular, the cut and fold 'origami architecture' of Masahiro Chatani and the spatiality of the Japanese technique of okoshi-ezu, or 'folded drawings', are examined. These drawings which have a three-dimensionality to them, and employ a book-like folding structure, relate to the notion of the book as a folded model.

This chapter examines the way in which interiority can be present within the representation of architecture, that is, representation itself that has interiority, in the form of the book. As will be demonstrated, this interiority shifts the perception of space and the objecthood of the representation, and introduces a temporal reading of representation.

Definition and scope of interiority

In his book *The Emergence of the Interior: Architecture, Modernity, Domesticity*, Charles Rice writes of the formulation of the sense of the interior. According to Rice, it was only from the beginning of the nineteenth century that the interior came to mean the inside of a building or room, especially in reference to the artistic effect, and also, a picture or representation of the inside
of a building or room. The interior thus emerged with significance as a physical three-dimensional space as well as an image, either a two-dimensional print or painting, or a flat backdrop in a theatrical setting. Rice defines this as ‘interior’s doubleness’, that is, ‘a sense which involves the reality of the interior’s spatiality as well as its condition as an image, one that can be imagined and dreamed, and inhabited as such’. This doubleness is manifest in a semantic development that marks the emergence of the interior.

There is a sense of inhabitation present within architectural representation due to its depiction of the interior. Rice writes that the architect and client are future inhabitants of the drawings and model; the drawings necessitate an ‘imaginative inhabitation’, according to Paul Emmons. The reading of these drawings allows the viewer to travel within the imagined space. Susan Hedges writes that, as the imagined miniature self inhabits a drawing, ‘the miniscule body of the architect is the measure, walking across the surface of the drawing.’ As documentation of an existing space, we may use the plan as a mnemonic device, revisiting our steps through the space in order to conjure it up. Hence, the space of the plan may be seen as a surface over which we travel. The section, in maintaining the internal wall in elevation as a flat plane, suppresses the three-dimensional. Hence, the perception of space is produced by its representations, and therefore interiority is assumed.

Within the representation of architecture, there is another way that interiority can be present; that is, representation itself that has interiority. This, then, is a combination of representation both presenting an interior’s spatiality and possessing its own interiority. This may be referred to as representation’s doubleness.

Rice describes interiority as a ‘space of immersion’ in which architecture is enfolded and interiorised. This implies depth and volume and breadth as components of the interior. Depth – as a measurement from surface inwards, or from top down, or from front to back – coupled with breadth relate to ‘extent’ and ‘distance’ and ‘room’. These words have an affinity with cumulation,

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1 Also, in reference to the theatre, a ‘set’ consisting of the inside of a building or room. Charles Rice, *The Emergence of the Interior: Architecture, Modernity, Domesticity* (London: Routledge, 2007), 2.
5 Rice, *The Emergence of the Interior*, 57.
8 Hedges, “Scale as the Representation of an Idea,” 76.
something increasing in force or formed by successive additions. These qualities of depth and cumulation, and hence the notion of interiority as augmented due to their presence, will be examined in relation to the book. Volume and spatiality within the book will also be examined. The doubled sense of the representation is shown then to be a combination of the strong presence of the objecthood of the representation at a 1:1 scale and the content of the work.

The objecthood of the book: depth, cumulation and structure

In her essay on scale within architectural drawings, Susan Hedges refers to Susan Stewart's description of the book as offering metaphors of containment, of exteriority and interiority, of surface and depth, and of covering and exposure11: 'The book sits below me closed and unread; it is an object, a set of surfaces. But opened, it seems revealed; its physical aspects give way to abstraction and a nexus of new temporalities.'12

The book as object is both a volume in space and possesses the ability to be opened. The book's interiority may be accessed by merely paging through a work: lifting the cover of a book 'opens' it. The book as object may be made up of discrete elements, that is, pages. The 'inside' of the book refers to both its internal pages and the literal space of their surface, and its content, which refers to that which is 'outside' the book. Each spread of pages is a separate space, so the book is made up of the accretion of these sites. This aspect of interiority relates to the characteristics of depth and cumulation. The book as object may have a further openable quality, due to particular structures and techniques of making. Volume and spatiality may be included through various pop-up techniques. These qualities of the book will be examined in relation to their contribution to the doubled sense of representation.

Cover To Cover (1975, Nova Scotia College of Art and Design, Halifax), by Michael Snow, is a rigidly sequential book of 360 pages of black and white photographs [Fig. 1]. It documents the forward and backward views of objects and events related to Snow's life as he goes from his house to his car to his gallery and back to his house again. The work moves according to a cinematic logic13; it is a systemic narrative employing photographs.14 Each spread of pages is organised by a recto and verso reading: the recto shows the front view of Snow coming through the door.
and the verso the back view of him passing through, so the central gutter is used as the point of mirroring, of reversals and inversions.\textsuperscript{15} Snow aligns the door he walks through with the edges of the book, so the door frame and page edge are one and the same.\textsuperscript{16} Once he is through, we see the photographers who are positioned to shoot him from each side. The photographer on the left then raises a blank white page over his face which comes to fill the full page opposite. This is then handled and fed into a typewriter and begins its own sequence, handled by fingers which enter the space of the page.

In this work, the space of photographic representation exists in its own space, concurrently within a surrounding environmental space.\textsuperscript{17} Robert C. Morgan writes:

\begin{quote}
What may appear as a firsthand representation of reality is suddenly twice removed as the artist's hand is used to cover an image, thereby confounding our expectations of what we are seeing and how we are seeing it. [It] surpasses the purely visual element on one level by elevating our cognizance of photographic imagery toward a multi-leveled strata of narrative.\textsuperscript{18}
\end{quote}

Hence, the edges of the pages are finite limits: anything beyond them falls away into a void of unrepresentable space.\textsuperscript{19}

\textit{Cover to Cover}, in Michael Snow's words, is a book built of sequences that, while relying on the strength of individual photographs, are always 'part of a sequence which in itself is part of a larger “narrative” which is itself about the book.'\textsuperscript{20} The book's structural features – the cumulation of pages – is then emphatically called to attention. The page is thin, but due to its recto-verso quality, it is this very aspect, its ability to be one of many, that makes this work have cumulative depth. Within this cumulation of pages, each page is granted a dimensionality, 'as if the full space of the event of Snow's movement were contained within its flatness.'\textsuperscript{21} The page is not a flat plane, but rather a three-dimensional dual surface. The layering of pages within a codex structure allows the paper to shift away from the conventional flat surface. Instead, the 'page's flatness is now actual and literal rather than merely serving as a visual support for illusion.'\textsuperscript{22} Henry M Sayre compares the book's system of opening and closing to the hinging of Marcel Duchamp's \textit{Porte: 11, rue Larrey}.

\textsuperscript{15} Drucker, \textit{The Century of Artists’ Books}, 126.
\textsuperscript{16} Drucker, \textit{The Century of Artists’ Books}, 124.
\textsuperscript{18} Morgan, in Lyons, \textit{Artists’ Books}, 220.
\textsuperscript{19} Drucker, \textit{The Century of Artists’ Books}, 126.
\textsuperscript{21} Drucker, \textit{The Century of Artists’ Books}, 124.
\textsuperscript{22} Drucker, \textit{The Century of Artists’ Books}, 74.
(1927) [Fig. 2]. He writes that ‘as one page opens, another closes … the book [is] always open before us even as it closes behind us.’\textsuperscript{23} It is this operation that is the core, and the strength, of Cover to Cover.

Cumulation leading to depth may be seen through a different means, in Jonathan Safran Foer's \textit{Tree of Codes} (2010, Visual Editions, London) [Fig. 3, 4]. This book takes an English language edition of Bruno Schulz’s collection of short stories, \textit{The Street of Crocodiles}, and carves out a new story. Using a different die-cut technique on every page, various parts of the text and page are removed. Through this technique of removal, the gaps in-between words resonate, alerting the reader to the page's physical relationship to each other page. According to Olafur Eliasson, this book ‘welds narrative, materiality, and our reading experience into a book that remembers that it actually has a body.’\textsuperscript{24} The reading experience of \textit{Tree of Codes} is one of paging through a sculptural work. The removal of parts of individual pages creates an intriguing effect, but the strength of this work is the perception of depth of the object of the book, achieved through the cumulation of these pages.

A book which uses a similar technique but achieves a different spatiality is \textit{Room} (2010) by Indian-based artists Vishwa Shroff and Katsushi Goto [Fig. 5]. \textit{Room} generates space within the bounds of the book by creating a staircase and a room running through its entirety. When one opens the book, one sees the space from a bird's eye point of view, going down from roof to floor, keeping its point-perspective as seen from the sky. The narrative of the book is that of a girl growing up, commencing with her arrival just home from the hospital to eighteen years of age, leaving the room and her childhood behind her for university. The story is told with the protagonist missing, but her objects telling of her aging. The book comprises of the physical space and the narrative space: the girl grows up with every page as one goes down from the attic into the room. The cumulation of cut pages creates the space of the story and of the book. When the room ends, the girl too has moved on.\textsuperscript{25}

The notions of depth and cumulation may be associated with conventional orthographic representation. The implied three-dimensionality that arises from a perspectival section or due to the inclusion of shadow rendering, or sciagraphy, provides depth to the drawing. Cumulation could be said to refer to the deliverance of information, via the addition of plan with section with elevation. However these examples do not possess their own interiority. Flip books also have some

\textsuperscript{24} Olafur Eliasson, in Foer, \textit{Tree of Codes}, back cover.
\textsuperscript{25} Vishwa Shroff and Katsushi Goto, e-mail to author, 2 August, 2011.
relevance to a discussion of cumulation of pages. These books operate by quickly reading though a number of pages, with slight variation on each page, to animate the sequence. The illusion of movement or time passing is achieved through the flicking through of discontinuous drawings or photographs in quick succession. However, these books do not allude to Johanna Drucker's description of the 'literal space of the openings,' a crucial component of representation's doubleness in this instance.

There is another type of interiority possible within the book, one which is made by the inclusion of volume within the structure of the book. Volume may be achieved by various techniques, such as the inclusion of moveable pieces – flaps and revolving or sliding parts – and pop-up structures, made by cutting and folding within the book. These techniques, sometimes referred to as novelty devices, give a three-dimensional quality to the book and are a means of emphasis, interpretation and accent. When used properly, they should explain, describe, or entertain, while engaging the reader in action, rather than reverting to a gimmick without significant meaning.26

Some of these novelty devices are concerned with plane, such as dissolving pictures [Fig. 11], rotating pictures [Fig. 6], split pages, cut-outs and slits [Fig. 8]. Others devices create a theatrical stage [Fig. 9, 15], have elements that stand up at 90 degrees [Fig. 7], or pop-up at 180 degrees [Fig. 10, 18]. Although these types of books employing paper engineering became popular for the entertainment of children, before the eighteenth century their use, as early as the thirteenth century, was primarily scholarly.27 While the inclusion of moveable parts does not necessarily guarantee a sense of interiority within the book, some techniques are valuable in offering a particular spatiality, relevant to the documentation of architecture.

Humphrey Repton employed an early functional visual in *Fragments on the Theory and Practice of Landscape Gardening* (1816, London) [Fig. 12]. His desire to show his clients the effect of his landscape designs led him to develop a system of overlay lifts, tabs/slots and foldout sections, applied to aquatint engravings of his drawings. These showed the existing landscape, as 'before', with the 'after' revealed by the physical manipulation of lifting, sliding, or opening the altered sections.28

Two examples of books made in the late-eighteenth and early-nineteenth centuries begin to

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offer an interior spatiality of the house. Dolly's Mansion, publisher by Jarrold and Sons in London, contains an interchangeable selection of rooms, based on those of a typical middle-class Victorian house, complete with servants' quarters [Fig. 13]. The book folds into a triangular shape, offering containment to the interior [Fig. 14]. Maison de Poupée, published by Dambuyant and Guinard in Paris around 1900, is a book which becomes a doll's house [Fig. 16, 17]. The usual doll's house has only limited access from the removable front. This book allows easy access to every item which is hinged together, so that it can be folded away flat. These examples demonstrate volume and spatiality which moves from two dimensions to three, within the format of the book.

Another example of a book employing three-dimensionality is The Sleeping Beauty: A Peepshow Book29 [Fig. 20]. What is commonly referred to as a ‘peepshow’ or tunnel book usually takes the form of a single view. This technique was developed from the late eighteenth to early nineteenth century and creates a fixed field of view with depth and perspective. For example, this technique is used to demonstrate the front façade and internal space of Notre Dame Cathedral in The Architecture Pop-Up Book30 [Fig. 21]. The Excursions and Adventures of Don Quixote (c1850) is another example [Fig. 22]. Alternatively, The Sleeping Beauty may be read in a circular, 'carousel' way, hence its structure is sometimes referred to as a 'merry-go-round' book. This book creates six theatrical scenes in the valley folds, through the use of a book-like proscenium and three tiers of window cut-outs, with text below. When the cover cords are tied, the book stands up to form a pentahedron.

In this book, narrative is achieved through a strong use of 'scene-setting': the dominant locations of the story are used as the sequential structuring device. There is a definite rendering of foreground, middle-ground and background allowing for both architectural framing devices, such as fenestration, and the inclusion of distant landscape. Hence, there is a dominant sense of interiority to each scene: the castle's turrets are able to be glimpsed through the forest's 'impenetrable thicket of brambles'.

This book does not present a continuous spatial arrangement that is aligned with a plan, as a model does. Instead, there is a presentation of codex-oriented spatiality which cannot be viewed all at once, but in slivers. This fracturing of space and discontinuity is advantageous as it offers the potential for a different examination of space. Rather than examining each interior in relation to how it is connected to its adjacency, instead its containment is emphasised, allowing a different narrative structure to connect the spaces as they appear as spreads within the book.

The pop-up technique, while creating volumetric elements within the book, does not guarantee an interiority within it. Often the page is reduced to a flat field with volumes sitting upon it, such as is shown in America the Beautiful\textsuperscript{31} [Fig. 23]. In this work, the page resembles a \textit{tabula rasa}, awaiting the erection of mountains or bridges to rise above it. Similarly, Carol Barton's \textit{Five Luminous Towers: A Book to be Read in the Dark} (2001) presents the interiority of the page spread as the place from which the pop-up is grounded [Fig. 24]. The volume is contextualised by the inclusion of printed plans and elevations on the spread, but the work does not display representational interiority.

A different pop-up technique, as demonstrated in the work of Masahiro Chatani, does allow a spatiality to emerge in the documentation of buildings [Fig. 26, 27]. While not an artists' book, \textit{Origami Architecture: American Houses Pre-colonial to Present}\textsuperscript{32} presents elevations of examples of American architecture – from the tepee and pueblo structures through to Peter Eisenman's House VI from 1975 – made from a cut and fold technique. Due to this technique, these works shift from two dimensions to three. Chatani calls these works origami architecture, and were produced through the Japan Institute of Architecture as a way of introducing architectural aesthetics to school children. Similar examples, making such buildings as the Farnsworth House and Tate Modern, present the buildings as a form of modelled elevation, which adopt certain book-like structures and techniques [Fig. 28, 29, 31]. Toyo Ito also employed this technique in his charrette submission for the first phase of the expansion of the Museum of Modern Art, New York (1997) [Fig. 30].

Chatani's works have an affinity with the axonometric in that there seems to be one ideal viewing position, from a 45 degree angle off-centre and slightly above the façade. Although the building protrudes, no information of the side elevations is able to be given due to the structure of cutting and folding. One is outside the building and there is no sense of the range of spatialities that the spectrum of documented buildings offers. It is up to the viewer to infer this from information that is modelled, such as wall openings and windows. Within these limitations, Chatani's work does offer a useful method of comparison by adopting a particular technique that creates a synthesis among seemingly dissimilar buildings. By using the cut and fold technique of origami architecture, connections and similarities are able to be speculated upon, that would not exist at a built scale or across pages of drawings.

This technique has been taken up by others, for example Ingrid Siliakus's \textit{Captured} (2008)

\textsuperscript{32} Masahiro Chatani (New York: Kodansha International, 1988).
involves multiple valley folds to create an origami architecture in the round [Fig. 32] However, by remaining as individual valley folds, Chatani’s works offer another view. When rotated and viewed from ‘behind’, Chatani’s pop-up elevations create more possibilities. This under-the-bleachers quality begins to have a spatiality quite different from a model. This technique interacts with the positive and negative space that the concertina format offers. When read from behind, it is the mountain folds that are interrupted as opposed to the reverse side’s valley folds. These start to imply modelled sections rather than volumetric elevations.

Another technique which creates an interiority within representation is the ancient Japanese drawing process called okoshi-izu, or ‘folded drawing’, which emerged in the Edo period (1603–1868) [Fig. 33–36]. Andrew Barrie outlines the historical use of these and their influence on the reading of contemporary work, particularly that of Toyo Ito. At the start of the Edo period, the ruling elite set aside the predetermined patterns of building and encouraged innovation in the form of the sukiya style, which were influenced by the teahouse. These small spaces required intense consideration and attention to detail; in order to consider and communicate these design intentions, a new type of drawing emerged, the okoshi-izu.

Okoshi-izu are pop-up drawings which fold up to create a fully three-dimensional miniature. Barrie describes these as being made of pieces of washi paper cut to the shape of walls fixed onto a plan drawing. Holes were cut into the walls for windows and openings and other elements, such as raised floors and shutters, were sometimes fixed into place on the walls. Drawn onto both sides of the paper were notations relating to dimensions, materials and textures. These were stored flat, easily transportable and were erected by folding the walls up and fixing them into place with tabs and slots. As Barrie writes, the resulting representation ‘is at once a three-dimensional drawing and a collapsible model’ in the Edo-Tokyo Museum in Tokyo, an example is titled a ‘three-dimensional plan’ [Fig. 37, 38].

Before the advent of sukiya style, the design of conventional religious and residential building types was determined primarily by systems of proportion and modules that guided traditional practice. It was the plan, therefore, which was the most critical aspect of the design. The historian Teiji Itoh writes that, rather than being conceived as a large structure subdivided,
sukiya buildings can be understood as a collection of individually designed spaces without predetermined relationships to each other. According to Barrie, sukiya architecture represents a shift in the priority of space over structure as the organising principle of the design and okoshi-uzu served as a tool for both determining and recording these designs.

The Japanese architect Sutemi Horiguchi remade many of these in the 1960s as part of his historical work on sukiya architecture, rather than as an exploration of a representational technique. Housed in the National Diet Library in Tokyo, they exist as twelve boxed sets of portfolios. Each portfolio opens to reveal an unerected model, which sits on a base slightly larger than A3 size. While not strictly categorised as artists’ books, this is a technique of making books with a model-like quality.

There are connections between this type of construction and origami. Contrary to popular opinion, origami is not a ‘Japanese’ art. According to Paul Sloman, in his book *Paper: Tear, Fold, Rip, Crease, Cut*, a picture in the 1490 edition of the book *Tractatus de Sphaera Mundi*, by Johannes de Sacrobosco, contains an origami boat, which is ‘unlikely to have descended from Japan since Japanese origami at that time would have existed, if at all, in purely ceremonial form.’ Early European origami is thought to relate to the baptismal certificate of the sixteenth and seventeenth centuries, which at that time was folded into double blinz or the Japanese model known as menko. Sloman writes that European and Japanese classic origami were so different that they seem almost to have developed independently. The Meiji Restoration in the nineteenth century led to a fusion of Eastern and Western origami following exchange between Japan and Europe. The use of cutting is anathema to the origami purist today, but, according to Sloman, there is no reason to believe that in eliminating this technique gets one closer to the art of origami as it was originally manifested. The main difference between origami and okoshi-uzu is the ‘undoing’ of the work: origami remains folded, yet okoshi-uzu is unique in that it may be ‘made’, then folded flat against the page, and ‘remade’ endlessly.

Barrie argues that okoshi-uzu are very helpful in studying the buildings they represent: in

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41 Barrie, e-mail message to author, 23April, 2010.
excluding the thickness of walls and any replication of the building’s materiality, they present an architecture of thin walls wrapped around cubic structures.\(^\text{48}\) Barrie writes that \textit{okoshi-ezu} are both easy to understand and extremely comprehensible, a combination that is usually mutually exclusive in architectural drawing, ‘where legibility tends to decline as the density of information increases.’\(^\text{49}\)

When erected, these paper models differ from a conventional model with a removable roof. The process of actually ‘making’ the building in order to read these portfolios, and flattening the building – the architecture is ‘undone’ – in order to close the portfolio, creates this difference. Shifting the model from two dimensions to three is a participatory act for the reader. Also, the model offers a comprehensible view by existing as a contained object. It aims for a totality of grasp, for a synthesis of comprehension. \textit{Okoshi-ezu} operate differently, due to their inclusion of interiority.

This technique is related to a type of interior drawing, developed in the middle of the eighteenth century. An example of this is Thomas Lightoler’s drawing of a stair hall, and published in \textit{The Modern Builder’s Assistant}\(^\text{50}\) [Fig. 39]. This plan is shown in the middle of a group of four elevations which look as if they had been folded out from their upright position and flattened onto the same place as the plan.\(^\text{51}\) Robin Evans names this a \textit{developed surface interior}; in descriptive geometry, folding out the adjacent surfaces of a three-dimensional body, so that all its faces can be shown on a sheet of paper, is called developing a surface.\(^\text{52}\)

Earlier examples from the seventeenth century use this technique to illustrate town squares or formal gardens with their perimeter elevations folded out. Evans speculates that these evolved from the common cartographer’s practice of laying out elevations of buildings, landmarks and trees flat on a map’s surface to facilitate recognition.\(^\text{53}\)

The Japanese architect Takefumi Aida uses a similar technique in his drawings for projects, including ‘House Like a Die’ (1974), ‘Nirvana House’ (1972) and ‘Annihilation House’ (1972), included in the exhibition catalogue, \textit{A New Wave of Japanese Architecture}\(^\text{54}\) [Fig. 40]. In these examples, the planes of the house are drawn flat, turned to the exterior space and operate as composite

\(^{49}\) Barrie, “\textit{Okoshi-ezu},” 66.
\(^{50}\) William Halfpenny, Robert Morris and Thomas Lightoler (London, 1757). This was not the earliest use of the technique. See Robin Evans, \textit{Robin Evans: Translations from Drawing to Building and Other Essays} (London: Architectural Associations Publications, 1997), 228, note 5.
\(^{52}\) Evans, \textit{Robin Evans: Translations from Drawing to Building and Other Essays}, 202.
\(^{53}\) Evans, \textit{Robin Evans: Translations from Drawing to Building and Other Essays}, 203.
plan and elevation. The thickness of the walls is included in Aida’s drawings, in contrast to the exclusion of this in the example by Lightoler. In reference to Lightoler’s drawing, Evans writes, ‘all four walls are shown connected to the side of the plan they originate in. Five discontinuous planes are therefore represented in one plane and the illustration becomes completely hermetic; nothing outside can be shown … not even the thickness of the walls.’ Like the conventional section, the developed surface interior is a three-dimensional organisation reduced to two-dimensional drawing, but it is much less easy to restore apparent depth. While the section merely compresses space, the developed surface interior also fractures space and destroys its continuity. There are other limitations to this type of drawing: in showing the appendages of the room, the room itself is presented as a void, with the emphasis on the walls that face it.

The okoshi-uzu technique, while showing similarities to developed surface interior drawings, allows an interiority that is different due to the physical shift from two dimensions to three. Rice writes that ‘the interior is produced through an infolding [of an] impressionable surface. This surface does not produce a hermetic seal against the world, but rather is activated through the inhabitant’s relation to the city.’ The interior of the okoshi-uzu, in contrast to the developed surface drawing, is open to the world, activated by the reader’s relation to it as an object which is made.

In okoshi-uzu, the cut out elevations and the base to which they are glued are of the same paper. The walls of the building are made of the same material as the base upon which they sit: the materiality of the page makes the interior and hence, the walls have the same thickness as the pages of the book, or portfolio. This is similar to the synthesis of approach achieved in Chatani’s work.

Barrie’s interest in the technique of okoshi-uzu is in its connection with Toyo Ito’s work: Ito’s exploration of lighter, ‘thinner’ architecture, employing continuous surfaces as structure and his desire to escape the universal space of the grid result in a strong resemblance between the paper sheets of the okoshi-uzu technique and some of his buildings. Another affinity this technique has with architectural space is in modelling the moveable within architecture. The reader’s participation in making the interior and the emphasis on the building’s elevations, presented as exterior and interior panels, begins to speculate on the documentation of buildings made by prefabrication methods, buildings that shift location during their lifespan, and temporary buildings.

The book and the model

55 Frampton, A New Wave of Japanese Architecture, 16.
56 Evans, Robin Evans: Translations from Drawing to Building and Other Essays, 203.
57 Evans, Robin Evans: Translations from Drawing to Building and Other Essays, 203.
The objecthood of the book offers metaphors of containment and exteriority: it exists as a closed object. The closed book is a set of pages, that through their accumulation, offer a full-scale reading of their internal references. In the examples of *Cover to Cover, The Sleeping Beauty* and the *okoshi-ezu* technique, no element of their structure remains neutral, since the whole functions only because its parts have been brought into sharp focus in relation to the way they perform. In engaging with these works, the reader’s act of turning the pages or making the volume becomes, as Drucker writes, a physical, sculptural element, rather than an incidental activity: ‘a convention of bookness becomes subject matter … The fact that the work is bound goes beyond mere convenience of constraint and fastening and becomes a means to articulate these relations.’

The content of these books becomes spatialised through the structure of the book and meaning is read through the manipulation of pages. This is a demonstration of a twinning of the 1:1 scale object book with its to-scale referent.

The objecthood of the model seemingly offers a vehicle for the combination of the strong presence of the representation at a 1:1 scale and the content of the work, when related to interiority. Models, merely by existing in a three-dimensional state, may be seen as objects in their own right, which display the interior. It is this objecthood which sets them apart from drawings. The exhibition ‘Idea as Model’ in 1976 was important in exploring the shifting role of the model. Peter Eisenman, the exhibition’s curator, sought to present the artistic and conceptual existence of models, independent of the project they represented. The exhibition showed the model as a conceptual, rather than narrative, tool. However, the model also encompasses the miniature, the diminutive, and hence, a fascination of this concentrated self-enclosed world. Susan Stewart writes that ‘we can only stand outside, looking in, experiencing a type of tragic distance.’ The miniature as model begins with imitation; hence, a ‘second-handedness and distance’ exists within the model. Christian Hubert refers to the extent of the model’s objecthood: ‘The space of the model lies on the border between representation and actuality … neither pure representation nor transcendent object. It claims a certain autonomous objecthood, yet this condition is always incomplete. The model is always a model of.’

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60 Snodgrass and Coyne refer to a similar situation within modelmaking, with what is being explained, is the *explanandum*, that is, the modeled; and the explanation, or the *explanans*, is the model. Adrian Snodgrass and Richard Coyne, “Models, Metaphors and the Hermeneutics of Design,” *Design Issues* 9, no. 1 (1992): 59.
64 Christian Hubert, “The Ruins of Representation,” in *Idea as Model*, 17.
some objecthood, its desire is to act as a simulacrum, and therefore, the model as representation, is always present. The model struggles to truly separate itself from the miniature in the way the book exists at a 1:1 scale. The model as an object rarely overrides its reading as a miniature depiction.

Alternatively, Johanna Drucker writes in her comprehensive commentary of artists’ books:

> We enter the space of the book in the openings which position us in relation to a double spread of pages. Here the manipulated scale of page elements becomes spatialized: we are in a physical relation to the book. The scale of the opening stretches to embrace us, sometimes expanding beyond the comfortable parameters of our field of vision, or at the other extreme narrows our focus to a minute point of intimate inquiry.65

This supports the notion that the presence of the book exists more strongly as an object rather than as a scaled referent. The interiority offered by books is due to both their component parts and their overall structure. Through the cumulation of discrete pages, combined with their conceptual terrain of reference, depth through accretion is achieved. The structure of the book and its inherent possibilities for containing unfolding volumes and spatialities, allow another form of interiority to be explored. Representation’s doubleness is present within books due to these characteristics.

The temporality of interiority

In order to examine the outcomes of representation’s doubleness, the varying intensities of past, present, and future tenses within representation need to be acknowledged. Within architectural drawing, the past is the time of drawer, the drawing has been drawn. The present is the time of the viewer, when it is being viewed – according to Michael Newman, the drawing’s particular mode of being ‘lies between the withdrawal of the trace in the mark and the presence of the idea that it prefigures.’66 The future is the time of the inhabitant, it is to exist in the future, the drawing as proposition. However, there is not necessarily an equality to these three. Orthographic projections are not drawn with vigour, or with spontaneity, and due to their precision, they are less connected to the present. Their generative qualities refer strongly to a future tense. Within these tenses, it is

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66 *The Stage of Drawing: Gesture and Act, Selected from the Tate Collection by Avis Newman, Curated by Catherine De Zegher* (London: Tate Publishing; New York: The Drawing Center, 2003), 95. Norman Bryson, in referring to the difference between drawing and painting, writes that the drawn line ‘in a sense always exists in the present tense, in the time of its own unfolding, the ongoing time of a present that constantly presses forward’. Norman Bryson, “A Walk for Walk’s Sake,” in *The Stage of Drawing*, 149–50.
Rice's description of the plan's 'necessity to be imagined' that is dominant; David Leatherbarrow writes, 'Architects work not in the nominative but in the subjective case; each drawing or model is an “as if”.' Therefore, the architectural drawing seems to proclaim this will be.

In comparison, it is the past tense that is dominant in photography. As Barthes writes, the photograph 'does not necessarily say what is no longer, but only and for certain what has been.' Analogies may be drawn between the architectural drawing and the photograph: both the image and plan operate as a snapshot in time; and both possess an 'evidential force' whereby the power of authentication may exceed the power of representation. The plan as a snapshot in time, is a synchronic sliver of illumination in the process and time of a building. It represents the building in that moment between the builders leaving the site and the owners putting their key in the lock. These drawings are an idealised snapshot, without origin, decay, palimpsest, or lived-in-ness. Eduardo Cadava writes analogously of the photograph as an 'abbreviation that telescopes history into a moment.' Orthographic projections may be read as proof of a building's having been constructed. Post factum documentation, drawings done after-the-event, therefore, assume a connection with photography in this way: these drawings say this has been.

However, Cadava's writing on this aspect of photography, of capturing what has been, allows another reading of post factum documentation. According to Cadava, the temporality of the photographic structure 'interrupts history and opens up another possibility of history, one that spaces time and temporalizes space. A force of arrest, the image translates an aspect of time into something like a certain space, and does so without stopping time, or without preventing this “spacing”.' Rather than implying that something becomes present, the photographic event 'interrupts the present; it occurs between the present and itself, between the movement of time and itself.' Analogously, post factum drawings do not only attest to what has been, but, through the evidential force of the present tense, shown through the act of drawing, obscure a dominant reading of tense. In undertaking post factum documentation, the knowledge of hindsight through the act of drawing, connects the past tense to the present. Elizabeth Grosz writes: 'The past is the virtuality that the present, the actual, carries along with it.' According to Grosz, the past and

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70 Barthes, Camera Lucida, 89.
72 Cadava, Words of Light, 61.
73 Cadava, Words of Light, 61–2.
74 Elizabeth Grosz, Architecture from the Outside: Essays on Virtual and Real Space (Cambridge,
the present operate through virtual coexistence, because it is only though a pre-existence of the past, that the present can come to be.\textsuperscript{75} Similarly, Marco Frascari writes of time, not as a series of ‘nows’, ‘but as temporal “extantness” that make past, present, and future coexist in a possible architecture.’\textsuperscript{76} Similarly, Steve McCaffery urges the reader to consider the page ‘not as a space but as a death occurring in the gap between “writing” and “wanting to say”’\textsuperscript{77}: the page we encounter rests between the intentions of its maker and the evidence of its presence.

Books, with \textit{post factum} architecture as their content, are not proposing a future building. Instead, it is the book as object that is the dominant reading. This is achieved both through the presence of the representation and the encounter one has with it, in the act of reading. This ‘present version’ of the drawings is experienced through the act of reading and turning pages, which both place the book strongly in the present tense. Reading may be private and suggests an intimacy of engagement: it is an active relationship between a representation or object and the individual. This shifts the book then, from existing strongly as a 1:1 object reified in framed space, to existing in real time, as a series of experiences bound together.\textsuperscript{78} Our involvement in the book is entirely physical and due to this, the book is a performance.\textsuperscript{79} This relates to Mike Linzey’s view that drawings take priority \textit{in time}.\textsuperscript{80} Rather than saying \textit{what has been}, or \textit{what will be}, the book instead says this is the most \textit{present version} of it.

The book as containing \textit{post factum} documentation of architecture is performing an archival role: the ‘opening of the book becomes the opening of the archive.’\textsuperscript{81} Books embody the notion of \textit{post factum} documentation, that is, the ‘accumulation, classification and dissemination of information, or the material record of an act or event.’\textsuperscript{82} Inherent qualities of the artist’s book are the object and the archive. However, the archive suggests repository, which may or may not form a narrative. It is the act of compiling a set order of pages which reflects a decided narrative.\textsuperscript{83} The book may be seen as both the vehicle for documentation and the artifact itself.\textsuperscript{84}

\begin{itemize}
\item \textsuperscript{75} Grosz, \textit{Architecture from the Outside}, 124.
\item \textsuperscript{76} Marco Frascari, “Horizons at the Drafting Table: Filarete and Steinberg,” in \textit{Chora 5}, Alberto Pérez Gómez and Stephen Parcell, eds (Montréal, Québec: McGill-Queen’s University Press; Chesham: Combined Academic, 2007), 184.
\item \textsuperscript{78} Henry M. Sayre in Hubert, \textit{The Artist’s Book}, 305.
\item \textsuperscript{79} Henry M. Sayre, in Hubert, \textit{The Artist’s Book}, 305.
\item \textsuperscript{81} Susan Hedges, “Scale as the Representation of an Idea,” 75.
\item \textsuperscript{82} Cornelia Lauf and Clive Phillpot, \textit{Artist/author: Contemporary Artists’ Books} (New York: Distributed Art Publishers: American Federation of Arts, 1998), 41.
\item \textsuperscript{83} Hal Foster, “An Archival Impulse,” \textit{October} 110, Fall, 2004, 3–22.
\item \textsuperscript{84} A recent exhibition highlights this role of the book: ‘The Artist’s Book as Document’ (2011),
\end{itemize}
Traditionally, the separate sheets of paper or film on the drawing board offered a repository of design thought developed and collected during the course of a project. With the complex of tools and techniques in the post-digital realm, there is no longer a core medium in which this repository may reside, but, argues Linzey, the demand for it still exists. The book offers itself as such a repository. The book, in strongly relating to the present tense, then brings the notion of the archive to the present. As Jacques Derrida writes:

The question of the archive is not … a question of the past. It is not the question of a concept dealing with the past that might already be at our disposal or not at our disposal, an archivable concept of the archive. It is a question of the future, the question of the future itself the question of a response, of a promise and of a responsibility for tomorrow. The archive: if we want to know what it will have meant, we will only know in times to come. Perhaps.

But it is a repository and archive that has been assembled or made with intention; it is a highly curated and designed vessel. The act of interpretation brings this type of book as archive within the realm of the present tense. And in doing so, the importance of post factum documentation as interpretation, is highlighted.

An examination of the interiority of representation, in highlighting representation’s doubleness, brings the presence of that representation in focus. Artists’ books bring doubled interiority to the representation of space: the book brings into tension and coincidence its own interiority and the imagined or represented interiority of the drawn architecture. This is done through the book’s use of the structure of the codex as an aspect of its conception as well as calling attention to it throughout the execution. Representation possessing its own interiority is achieved by a twinning of scale, of that which is represented, and the 1:1 scale, or presence of the representation itself. Architecture requires a range of representations, it continually operates in the mutable zone that occurs when shifting representations. Artists’ books then are seen as a complementary three-dimensional representation, with a propositional role.

curated by Natalie McGrorty, at the Bower Ashton Library, University of the West of England, Bristol, UK.
In examining the architectural drawing, the building and the artist’s book, the common
element of reproducibility occurs. The architectural drawing is made with reproduction in mind;
the architectural drawing is transitive in nature, uniquely capable of producing something new
from something else. Copies are circulated in order for the process of building to be undertaken
and are a means to gain an understanding of the built project as an alternative to actually visiting
it. The building itself is potentially reproducible; by using the same plans, every building is re-
buildable. However, no site can be occupied twice simultaneously and some would argue then
that each building is unique. Architecture is precious about uniqueness and materiality: it has a
troubled relationship with copies, which the artist’s book does not. The artist’s book that emerged
during the 1960s was a highly reproducible object; the book was seen as a ‘democratic multiple.’
This technical reproduction, writes Eduardo Cadava, is not an empirical feature of modernity, an
invention linked to the so-called modern era, but rather, it is a structural possibility.2

Reproduction as the act of moving from original to copy embraces a range of subtleties,
including notions of imitation, mimicry, similarity, simulacrum, authenticity and prototype. In
each of these situations – of drawing, the building, and the book – the notion of the original, the
copy, and the process of reproduction have different intentions, qualities and results. Through
an exploration of theories of originality and reproduction, and aberrations to the notion of the
architecturally unique, the book as a vehicle for the representation of reproduction, documenting
translation, will be examined. The potency that the book can enter is revealed: the book makes
reproduction evident.

The opportunities for the exhibition and curation of architecture in the form of the book,
with the exhibition of architecture seen as a type of post factum documentation will then be examined. Rather than being a simulation or representation of a particular building, the exhibition can be a space of integrity separate from the object-like displays of architecture's by-products. These exhibitions may also lie outside gallery spaces, in order to document different aspects of architecture, for which the book is an appropriate format.

Reproducibility and the architectural drawing

Architectural drawings are made with the intention of being copied: their ability to be reproduced is crucial to their use. Peter Wood writes:

Architectural drawing can be understood as a type of matrix that maintains a tripartite relationship between architecture, architect, and building. The only factor that straddles these three components, and links their constructive parts, is the reproductive capability of the architectural drawing. This is particularly true for the architect whose relationship to building and architecture is contingent upon being able to control a representational realm that carries a mimetic power.3

In pre-digital methods of working, the original drawing would be considered to be an ink drawing on linen, later on detail or trace paper or drafting film. Over the course of a project, its lines might be removed and redrawn, or new iterations generated by tracing over its linework with variations. These original drawings were rarely sighted outside the environment in which they were produced, the most notable exception being their inclusion in exhibitions interested in the display of the ‘original’ drawings by an office or architect. In this situation, the hand of the architect on these original drawings lends authenticity to the drawing through its clear authorship. The Western notion of author is found in traces of the author’s hand, as a basis for attribution. This relates strongly to the notion of originality.4 The definite authorship of the drawing lends it an increased perceived value. However, to read a drawing as having a single author questions the notion of the drafting film as a site of heterogeneity.5 The drawing may hold the work of many hands – of student, graduate, licensed architect, draftsperson and designer. Interestingly, the

4 This is as opposed to Japanese notions of authorship which relate to the inventor of a method or methodology. Arata Isozaki, Japan-ness in Architecture, trans. Sabu Kohso (Cambridge, Massachusetts: MIT Press, 2006), 294–5.
authorship of any reproduced version of a project still seems to rest with the designer, or conceiver, of the original project that is documented. In this situation, the word original comes to imply authenticity: that which speaks to us in an unmediated way. According to Peter Wood, this is due to the historical role of drawing, as a replacement for the ‘unreliability of memory with the “truth” presented by pictorial record.’ Wood argues that this concept of truth underlies all architectural drawing: in order to be termed an ‘architectural drawing’, and thereby be distinguished from ‘ordinary drawing’, it must carry an architectural intention.

Before technological developments in the nineteenth century, architectural reprography involved copying by hand, tracing over drawings, engraving, lithography and various photographic processes. This method approximated the actions that produced the original, it is copying as re-enactment. With the development of wet-process reprography using techniques of light manipulation, such as blueprinting and dye-line printing and later the Diazotype process, the copy could be made as an entirety, the complete image appropriated to another form. Stan Allen discusses the difference between analogue and digital technologies of reproduction. He writes that analogue technologies work through imprints, traces, or transfers: ‘The image may shift in scale or value (as in a negative), but its iconic form is maintained throughout. Internal hierarchies are preserved.’ Photocopying operates in a similar way, directly using the original. This method scarcely resembles the original process; one arrives at the result ‘not step by step but through a fluid, seamless, and invisible act of twinning.’ This version of a copy adheres to the widely cited definition, by Justice Bailey from 1822, that a copy is that ‘which comes so near to the original as to give every person seeing it the idea created by the original.’ Upon this basis, copyright would be conceded to architectural plans. However, according to the Grove Dictionary of Art, which defines copy as a non-fraudulent manual repetition of another work of art, the contemporary notion of authenticity ‘has tended to obscure the fact that the exercise of copying has been a central feature of art practice since antiquity. Unlike the forger, the copyist produces a work that,
while taking another work as its point of departure, is not intended to deceive the spectator.13

In post-digital working methods, the term original drawing takes on a different meaning. The computer offers an ease of saving many variations of a drawing. Rather than seeing the screen as the original drawing, or a printed version as original, the word takes on a chronological implication: the phrase 'the original drawing' refers to a drawing made first, it is a chronological reference, as computer drawings do not have a trace original.14 In this way, there is one original, yet the drawings generated from it as iterations are not referred to as copies. Equally, a print out of these computer drawings also acquires the quality of an original: it is seen as an authentic version of the drawing in a new format. It is only the reproduced version that one is able to hold in one's hands. In this situation, the word original implies the root or source: originality, not as the urge to be different from others, to produce the brand new, but rather, 'it is to grasp (in the etymological sense) the original, the roots of both ourselves and things.15

This method of copying has similarities with photography, in which prints are made from a negative or a digital image. There is no original in photography. However, a difference of intent exists between prints made at a similar time to the capturing of the image, and authenticated by the photographer, and those printed with a large gap in time, much later.

This view of reproduction within architectural drawing is quite different from drawing within an art context. In this situation, the object uncopied is under perpetual siege, writes Hillel Schwartz, 'valued less for itself than for the struggle to prevent its being copied.'16 The better that methods of reproduction have become, then the more exalted is uniqueness, and, hence, the concept of originality. This description of the original is more applicable for the sketch drawing by an architect, a gestural drawing that implies a signature of both the architect and the building. Its seemingly unfinished, fragmentary quality has an immediacy which is seen to diminish with reproduction.

The method of making reproductions of digital drawings, using either pen-based plotters, inkjet or laser printers, employs a similar copying method as the dominant pre-digital techniques, that is, copying as an entirety.17 These methods are able to create copies free of creases, smudges, or any implication of the hand of the producer. The production of these drawings has established

14 Stan Allen writes that in digital technologies, a notational schema intervenes: 'A field of immaterial ciphers is substituted for the material traces of the object.' Allen, in Beckmann, *The Virtual Dimension*, 249.
16 Schwartz, *The Culture of the Copy*, 212.
17 Schwartz writes of the danger of this type of copying, that what we copy instantly, we assume that we know intimately. Schwartz, *The Culture of the Copy*, 246.
methods which conceal the multiplicity of hands: standardised details and uniformly plotted or printed products ‘cover the characteristic fingerprints of multiplicity in the architectural office. Both the final print and the plotted sheet attempt to erase all signs of difference – these are the xeroxed palimpsests which can no longer be held up to the light to expose the skeletons of stories past.’18 Due to improvements in photocopying, it is possible to view a printed drawing and its photocopied double without being able to detect a difference between the two.

Reproducibility and the building

Predominantly the building exists as an original, as a unique example of the built manifestation of a set of drawings. Its authenticity, due to its presence, is assured. However, in the minority of situations, a building may be rebuilt. This occurs as a recreation of a no longer extant building, recreated on the same site; as a duplicate of an existing building, on another site; or as a building that moves sites, and so has different incarnations of itself due to a shifting context. In these examples, the notion of the original and copy are less clear. In examining aberrations to the notion of the unique in architecture, the limitations of conventional documentation are revealed, in its exclusion of time within the building process.

The recreation of the Barcelona Pavilion nearly sixty years after the original was dismantled is an example of the former situation. Demolition of the original pavilion began in 1930, seven months after its opening. In 1981 Oriol Bohigas, on being appointed to the position of director of Urbanism and Building by Barcelona City Council, revived the initiative, begun in the 1950s, to reconstruct the pavilion. Ignasi de Solà-Morales, Cristian Cirici and Fernando Ramos were commissioned to produce a scheme that was finally built.19 The reconstruction of the pavilion was inaugurated in 1986. Recreating this pavilion made three-dimensional a building that had existed only as a graphic reference for more than fifty years. Beatriz Colomina writes that many exhibited experiments ‘gain their force precisely by physically disappearing while inhabiting the spaces of publication, of memory, of fantasy. The lack of a specific client or site gives them a permanent role: since they are not pinned down, they remain open to speculation. Reconstruction fixes them, if not finishes them.’20 In this situation, the copy – in the form of the drawing or photograph – takes on the role of the authentic presence, and so becomes similar to the original building.

18 Christine Macy, in McArthur, Knowledge and/or of Experience, 147.
19 For more detail see Ignasi de Solà-Morales, Cristian Cirici and Fernando Ramos, Mies van der Rohe: Barcelona Pavilion (Barcelona: Gustavo Gili, 1993).
Due to the gap in time between dismantling the pavilion and the recreation, decisions regarding its construction were dependent on the available information, yet with different technical conditions. According to Solà-Morales, Cirici and Ramos, it was not merely restitution, but rather it was a project of its own. However, the recreation was generated from a desire to make manifest something that had been, that only existed in representation. The reconstructed pavilion is intimately connected to the 1929 version, and although a project in its own right, it is another version of the original, that is, a full scale post factum model.21

However, as it is the most present version of the original, it is most commonly read as another version of the original. Once the reconstruction was completed, there is the possibility of it being substituted for the experience of being within the 1929 building. By recreating that which does not exist elsewhere, potentially allows the reconstruction to sit in place of the original. Kester Rattenbury has written of this potential for the replica to usurp the original:

> Sometimes a photo or a drawing – done either before or after construction – frames a specific architectural interpretation so successfully that it becomes the quintessential image: the ‘real’ or ‘authentic’ version of it, of which the occupied, adapted … or inaccessible building seems only a partly valid version. Sometimes, as the only record of a demolished building, it almost replaces the architecture in the idea of being ‘real’.22

This has the possibility of ‘confl at[ing] simulacra with the thing imitated’.23

For this not to occur, the original and the replica can be separated by either an interval of time, or by the different form that a reinterpretation provides. In the case of the Barcelona Pavilion, it is the interval of time between the original and the reconstruction that stands to separate the two and overcome the common factor of the two buildings occupying the same site. This timespan allows the reconstruction to sit next to the original, as another version.

The building may be a duplicate of an existing building, as in the case of a project or model home, used to sell identical speculative subdivision houses. The model home is an example of a full scale model depicting a type of future for the visitor, which may be rebuilt on another site.

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22 Kester Rattenbury, ed., *This is Not Architecture* (London: Routledge, 2002), 57.
23 ‘While it has become a commonplace of the early twenty-first century to conflate simulacra with the thing imitated, the two remained relatively distinct between the wars. It was the difference between the two, not their similarity, which prompted Walter Benjamin to write such seminal essays as “The Mimetic Function,” and “The Work of Art in the Age of Mechanical Reproduction.”’ George Dodds, *Building Desire: On the Barcelona Pavilion* (London: Routledge, 2005), 5.
As a prototype, it is not lived in. Once all the available houses have been sold, this once public, walked-through house may itself be sold and inhabited, when the need to model no longer exists. It moves from pre-original, to original, with the mark of its new inhabitants beginning its separation from its built copies. Similarly, the houses that replicate this design built on different sites, which could be seen as copies, instead become individual through the process of inhabitation: they each become their own ‘original.’

A requirement of the houses designed as part of the Case Study House Program in Los Angeles, begun in 1945, was that the exhibition houses were to be permanent [Fig. 1]. This program produced a series of model homes that came to define an architectural style and way of living that was truly contemporary.24 The houses were open to the public for six to eight weeks, and then occupied: ‘The house must be capable of duplication, and in no sense be an individual “performance.”’25 However, these houses gained their individuality through the act of inhabitation.

Another example of the duplication of an existing building is the building that moves sites to achieve different versions of itself. Between 1949 and 1955, the Museum of Modern Art in New York erected three full sized houses in its sculpture garden. The first two of these were designed by Marcel Breuer and Gregory Ain, with Joseph Johnson and Alfred Day, titled respectively, ‘House in the Museum Garden’ (1949) [Fig. 5, 6] and ‘Exhibition House’ (1950) [Fig. 2, 3]. In 1953, Junzō Yoshimura was commissioned to reproduce a full scale reproduction of the Kyaku-den guest house of the Kōjō-in at Onjōji Temple in Ōtsu in the MoMA sculpture garden26 [Fig. 7–9]. Although the materials were new, the house was based on sixteenth and seventeenth century prototypes; it was a re-creation, authentic in all details. The building was originally erected in Nagoya, dismantled and each part, including stones from mountains near Nagoya for the garden, wrapped and labelled and shipped to New York in over 600 crates aboard the S.S. Tungus. The ‘Japanese Exhibition House’ opened to the public in 1954.27

26 Although, in fact, the building is a hybrid of several architectural sources, the design was modelled in large part on the so-called shiuden plan of the Kōjō-in at Onjōji. Jonathan Reynolds, “Ise Shrine and a Modernist Construction of Japanese Tradition,” Art Bulletin 83, June, 2001, 340, note 70. It was named ‘Japanese Exhibition House’, 1954–5. John D Rockefeller 3rd, as president of the Japan Society, and his wife Blanchette, were instrumental in persuading Arthur Drexler, as curator of the department of architecture and design at the Museum, to select Yoshimura to contribute to this exhibition. Kurt G.F. Helrich and William Whitaker, eds, Crafting a Modern World: The Architecture and Design of Antonin and Noémi Raymond (New York: Princeton Architectural Press, 2006), 59.
27 The exhibition was in two parts: the house was open from 20 June, 1954 to 31 October, 1954, then closed over the winter. Heavy brown paper wrapped all delicate paper sliding walls, the house was cleaned and waxed, old tatami mats were replaced and 400 sq feet added to the garden. The house
The blueprints of the houses by Breuer and Ain were made available, and MoMA obtained construction estimates from builders in several suburbs of New York where replicas of the houses were actually built.\textsuperscript{28} The houses, while exhibited, awaited being copied. The Yoshimura example, while a copy itself, took on the qualities of the original: in its full scale presence and ability to be entered, it provided an interior experience of a Japanese house which many visitors had not had before.

In this exhibition, architecture is not shown by displaying artifacts or the debris of a design process, but rather the space of the exhibit and the exhibit became the same thing.\textsuperscript{29} This continued an exploration of the full scale exhibition of architecture, other examples being Le Corbusier's \textit{Pavillon de l'Esprit Nouveau} in the 1925 \textit{Exposition des Arts Décoratifs} in Paris [Fig. 11]; the building of a small suburb of houses on the outskirts of Stuttgart, designed by various European architects, for the 1927 \textit{Deutsche Werkbund Weissenhofsiedlung}; the construction of full scale models of houses and apartments by Mies, Breuer and others for the Berlin Building Exposition of 1931, with the theme of "The Dwelling in Our Time"; the construction of one of Frank Lloyd Wright's Usonian Houses on the site of the future Guggenheim Museum in New York in the 1950s [Fig. 12]; and the commissioning of Buckminster Fuller's \textit{Dymaxion Development Unit} (1941), a type of experimental temporary housing, also constructed in the MoMA sculpture garden\textsuperscript{30} [Fig. 13] More recently, Serpentine Gallery in London instigated in 2000 the commissioning of a temporary structure by an international architect or design team who has not completed a building in England at the time of the invitation. The Pavilion commission, sited on the gallery's lawn, has become an international site for architectural experimentation\textsuperscript{31} [Fig. 14].

At the close of the exhibition of the Breuer house at MoMA, the building was moved by barge up the Hudson River to Pocantico Hills, near Sleepy Hollow, New York, to the estate of John

\textsuperscript{28} Colomina, in Ferguson, \textit{At the End of the Century}, 140.
\textsuperscript{29} Colomina, in Ferguson, \textit{At the End of the Century}, 132.
D Rockefeller 3rd\textsuperscript{32} [Fig. 4]. The Yoshimura house was also relocated. In 1955 it was given to the Fairmount Park Commission in Philadelphia, Pennsylvania at the close of the exhibition. The following year it was transported to the Memorial Hall in Philadelphia for storage, then to West Fairmount Park, and re-erected in 1957\textsuperscript{33} [Fig. 10]. It is able to be visited at this location, renamed Shofuso Japanese House and Garden, and occupies the site of several previous Japanese structures from the 1876 Centennial Exposition.

In this act of relocation, the Breuer house loses some sense of the quality of the original. The building’s earlier life, as an example of a contemporary 1949 modernist exhibition house within a museum setting, is more significant than its physical existence now, as a relic among other buildings on Rockefeller’s property.\textsuperscript{34} The Yoshimura house, however, has taken on a new life as a public building. Visitors may experience a traditional tea ceremony or take part in other aspects of Japanese culture, such as calligraphy and taiko drumming, within its walls. Although these buildings may be considered ‘original’, the different phases of their lifespan alters the perception of an ‘authentic’ version. In this way, it is the context of the building that is important for its perception as original or copy; that is, the intention of its making corresponding with the immediacy of its viewing.

The case study of \textit{Ise Jingū} or Ise Shrine offers another notion of the original and copy within the built form, which questions the notion of the unique in architecture. Ise Shrine is located in Mie Prefecture, Japan, south-east of Kyoto. Today there are two major Shintō shrine complexes located at Ise: the \textit{Kōtai Kaijijingū}, or \textit{Naikū} (Inner Shrine) – dedicated to the sun goddess \textit{Amaterasu Ōmikami} – and the \textit{Toyouke Kaijingū}, or \textit{Gekū} (Outer Shrine) – dedicated to \textit{Toyouke Ōkami}, the goddess of grain. Scattered among these two extensive shrine precincts are eighty-one subsidiary shrines\textsuperscript{35} [Fig. 16, 19]. The buildings of this system are all built in a virtually identical style: they are set off the ground on posts, the roof is thatched, the building is rectangular,


\textsuperscript{34} Marcel Breuer and Antonio Armesto, guest ed., \textit{Marcel Breuer: American Houses} 17 (Barcelona: Editorial Gustavo Gili, 2001), 143.

\textsuperscript{35} The Ise Shrine, also known as the Grand Shrine of Ise, was first installed around the third century, in the province county of Yamato (now Nara Prefecture), when the sacred mirror, which had previously been housed under the same roof as the Emperor himself, was removed to a separate place of worship. Noboru Kawazoe, “The Ise Shrine,” \textit{Japan Quarterly}, July–November, 1962, 286, 288.
and the roof is supported at each end by a pillar\textsuperscript{36} [Fig. 17].

Once every twenty years, since the reign of Emperor Tenmu in the seventh century, every fence and building is completely rebuilt on an identical adjoining site, a practice known as \textit{shikinen-zōkan}.\textsuperscript{37} Although in the past other shrines were regularly rebuilt, few other shrine complexes have so consistently maintained this practice.\textsuperscript{38} Transposition involves the complete construction of new buildings and ritual utensils, accompanied by various rituals on the alternate site, including transposing the \textit{shintai} (god’s body) [Fig. 18, 20]. The spirit is thought not to be seriously disturbed in the shift in location, as the new home is identical in every respect to the old one, except for its polished, golden freshness.\textsuperscript{39}

According to Arata Isozaki, it is believed that the period of twenty years ‘is predicated on the life span of buildings whose pillars are sunk directly into the ground, without foundation; or it may be the time needed for passing down the necessary carpentry techniques; or there may be another, more mysterious reason.’\textsuperscript{40} The last of these transpositions took place in 1993, the sixty-first on record and completion of the next rebuilding is scheduled for the year 2013.

These buildings then are temporary constructions that embody the ritual of moving which reiterates the primary installation of the sacred within the shrine.\textsuperscript{41} This ritualistic rebuilding event views architecture as performative, rather than as inert object. Kenneth Frampton writes of the ‘universal presence of a nonlinear attitude toward time that guarantees, as it were, the cyclical renewal of an eternal present.’\textsuperscript{42} This places architecture within a process of mimicry, repetition, and re-enactment. According to Isozaki, Ise’s origins have never been present:

\begin{itemize}
\item The exact date of the first building of the shrines is not known but seems to have been in 690 CE. \textit{Engi-Shiki: Procedures of the Engi Era}, Volume 1, Books I–V, trans. Felicia Gressitt Bock (Tokyo: Sophia University, 1970), 35. ‘The twenty-year period counts both the initial and terminal year, so that here nineteen years is twenty by Japanese count.’ \textit{Engi-Shiki}, 35, note 93. Due to turmoil in the late medieval times, there occurred a complete interruption of more than one hundred years.
\item Isozaki, \textit{Japan-ness in Architecture}, 131, 136. On the ‘vacant site, there remains the sacred central post (shin-no-mihashira) with its tiny wood roof cover, which is preserved after the tearing-down of the former shrine on that site, until the next rebuilding. Ellwood, “Harvest and Renewal at the Grand Shrine of Ise,” 169.
\item Arthur Drexler, \textit{The Architecture of Japan} (New York: Museum of Modern Art, 1966), 35. ‘The preparations for the Rebuilding begin with the Mountain Entrance rite, the opening of the mountains for the garnering of wood for the new buildings, a ritual held in the mountains ten years before the Rebuilding Year.’ Ellwood, “Harvest and Renewal at the Grand Shrine of Ise,” 187.
\item Isozaki, \textit{Japan-ness in Architecture}, 323, note 1.
\item Isozaki, \textit{Japan-ness in Architecture}, xi.
\end{itemize}
There is thus no answer to the query of Ise's origin. Rather, the very system that reenacts the primary ritual is meant to respond: do not ask about what was before! What was there was simply this: a ‘beginning’ (not the origin) of this ritual of rebuilding/relocation. At stake here is a pure gesture of veiling whose purpose is merely to allude to the idea that there was something before.43

Therefore, Ise Shrine tells us not to query the origin, but to simply repeat the beginning, which Isozaki argues is at odds with Western notions of construction, which rely on an enduring materiality.44 Ise Shrine instead uses repetition as monumentality; that is, a biological model of isomorphic regeneration gives identity. A different path to permanence is offered by the maintenance of an archetypal form, as replica. Isozaki writes: 'Each repetition is the repetition of a beginning compelled to similitude. We are forever being lured toward whatever may be lurking in a beginning endlessly repeated.'45 Rather than reproduction relating to the replication of an object, the rebuilding-and-relocation scheme of twenty-year cycles manifests the replication of a beginning, of a process and hence, is an effective statement of perpetual newness.46 The repetition of a prototype conceals the ‘beginning’ and hence, the words ‘original’ and ‘copy’ are irrelevant.

Noboru Kawazoe cites Ise Shrine as a prime example of a tendency in Japanese building to perpetuate architectural form without undue concern for the preservation of the actual building itself: for Kawazoe ‘this suggested an appreciation for the mutability of all things amid the recognition that the practice of building should be attuned to natural processes.’47 The shrines do not solidify conceptions in order to ensure eternal existence. Rather, the shrines ‘stress the refinement of the transitory.’48 With this in mind, Ise Shrine can be seen as documenting reproduction; the similarities of the rebuilt shrines over the years makes manifest the act of repetition. This is not to say that the shrine buildings have not undergone change – there has been a certain will to readjust the design toward a perceived authentic form, and so Ise Shrine has been redesigned at critical junctures, for example in the 1954 rebuilding, most of the decorative metal fittings were

43 Isozaki, Japan-ness in Architecture, xi.
44 Isozaki, Japan-ness in Architecture, xii.
45 Isozaki, Japan-ness in Architecture, 146.
46 Ellwood, "Harvest and Renewal at the Grand Shrine of Ise," 189. 'If the Ise shrines preserve the past, it is not through the atmosphere of ancient and fading buildings which boast the actual wood worked by archaic hands. Rather it is through making ever new and fresh, and finally related to the living transcendent rather than the long ago, what was also new and fresh in another time also aware of the transcendent.' Ellwood, "Harvest and Renewal at the Grand Shrine of Ise," 190.
The actual presence of the buildings predominantly refers to the act of their rebuilding, more than the interior that they present. This is emphasised by the secrecy of the act of shikinen-zōkan and the inaccessibility of the buildings themselves: the main shrines are surrounded by four layers of sacred hedges, now fences, and the Shōden (or main building) is only able to be entered by the Emperor and the High Priest of Ise; and the transferral of sacred objects contained within the shrines is undertaken during the night. Isozaki refers to this secrecy as ‘the rhetoric of veiling.’

In the case of Ise Shrine, it is the representation of the buildings, rather than their rebuilt form, which may be read as the dominant ‘copy’. It was not until after the seventeenth century that any systematic effort to produce measured drawings is recorded. The Shrine authorities produced elevations and perspective drawings of even the most sacred buildings in order to facilitate rebuilding. These images were not widely available before the late nineteenth century, when architectural drawings of the main sanctuary began appearing in architectural publications. Texts of ceremonial procedures provided a framework for the governance of shrines. These handbooks, for example Engi-Shiki which was developed during the Engi Era (927 CE), were worked on over a long period of time, with a great many compilers. This is both a pre-factum and post factum text; as an ongoing record of the components of, and rituals associated with, the buildings it allows for the continuation of the process.

At the time of the fifty-ninth rebuilding, Yoshio Watanabe was invited to photograph Ise Shrine by the Society for International Cultural Relations in 1953. These photographs were published in Ise: Prototype of Japanese Architecture, by Kenzō Tange and Noboru Kawazoe [Fig. 22, 23]. These photographs were taken between the building of the new shrine buildings and their formal consecration and provided intimate visual access to the inner reaches of the shrine complex. The inner compounds and the surrounding precincts had been photographed several times since the 1880s, but photographers had always remained outside the compounds’ protective

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49 ‘This was Ise reinterpreted under the aesthetic of modernist architecture.’ Isozaki, Japan-ness in Architecture, 139. Also, according to Dr Fukuyama, the Naikū was often destroyed by fire, and the old Nara-period form has therefore undergone some changes. Kenzō Tange and Noboru Kawazoe, Ise: Prototype of Japanese Architecture (Cambridge, Massachusetts: MIT Press, 1965), 47.
50 Isozaki, Japan-ness in Architecture, 131.
51 Isozaki, Japan-ness in Architecture, 137.
54 Before the shrine is consecrated members of the local lay community are also allowed to enter the inner compound in order to place fresh stones on the ground, a ceremony known as oshiraishimochi gyōji. Reynolds, “Ise Shrine and a Modernist Construction of Japanese Tradition,” 340, note 67.
fences [Fig. 21]; Ise Shrine authorities had never before granted permission to photograph from within the inner compounds of the Inner and Outer Shrines. The Officials were concerned about the intrusion of the photographer and equipment on sacred ground. Jonathan Reynolds speculates that it is possible that the naturalism associated with the medium of photography presented special problems: ‘there may have been concern that in the act of looking at photographs viewers might in some sense be transported to the site and in the process violate the shrines' sacred space.’

Watanabe photographed Ise Shrine from eye level, in the harsh light of late afternoon, producing images with deep shadows. This is in comparison to Yasuhiro Ishimoto’s 1993 photographs, whose even lighting conditions produced ‘dark and brooding prints.’ Watanabe’s photographs demonstrate a respect for the craft of construction of these buildings by highlighting the materials and details of their components. However, the photographs 'threaten to strip the core structures of their mystery by submitting them to relentless inspection.'

According to Reynolds the photographs undermined the religious aura that had shielded Ise Shrine, and reconstituted the shrines within a rigorously modernist aesthetic, a departure from their depiction as a symbol of the imperial institution. They became the authoritative representations of Ise, with an international audience. A similar example, of the immediacy of representation shifting the original, occurred in relation to Katsura Imperial Villa, Kyoto. Bruno Taut’s visit to Japan in 1933 and his subsequent writings and the publication of Yasuhiro Ishimoto’s photographs in *Katsura: Tradition and Creation in Japanese Architecture* in 1960 brought this building within a modernist discourse. Here, the representation brought the object of architecture closer, able to be inspected without the weight of history. In the case of Ise Shrine, what emerged was a new shrine, ‘Ise as a body of photographs, as a readily reproducible series of images, Ise-as-reproduction.’ Reynolds argues that since these photographs were published, few have visited the shrine precincts without having seen the reproduced Ise first, and so, as a result, they have come to mediate the experience of the ‘authentic’ Ise. In this way, Ise Shrine represents

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56 Reynolds, "Ise Shrine and a Modernist Construction of Japanese Tradition," 326.
57 Reynolds, "Ise Shrine and a Modernist Construction of Japanese Tradition," 337. Watanabe returned to Ise to photograph the shrines when they were rebuilt in 1973 and 1993; numerous photographers and filmmakers have been granted access to the inner compounds since 1973.
60 Taut, *Houses and People of Japan*, 139.
62 For more on this discussion, see Isozaki, *Japan-ness in Architecture*, 247–267.
64 Reynolds, "Ise Shrine and a Modernist Construction of Japanese Tradition," 339.
copy as reinvention.

In these examples, which deviate from the notion of the building as unique, it is the uncertain status in regard to originality and copy which gives them identity and clarifies their presence. This aberrant state is not acknowledged in conventional documentation, as time is omitted from architectural projections, as demonstrated in earlier chapters. The representation's presence in time and space, its unique existence different from that which it represents, remains lacking.\(^{65}\)

Reproducibility and the book

The artist's book that developed during the 1960s and 1970s relied, for dissemination, on its ability to be reproduced easily and cheaply. In fact, the term artist's book was synonymous with the booklets by artists that were published cheaply in ‘unlimited’ or ‘open’ editions.\(^{66}\) That the book could be made directly under the control of the artist was crucial for its development as a ‘democratic multiple.’ Johanna Drucker adopts this term to signify the shift in the book from a rare commodity, expensive and labour intensive to produce.\(^{67}\) The greater availability of inexpensive modes of production after World War II, combined with changes in the artworld, created a foundation for the book as a democratic multiple. The book in this form was complementary with the conceptualisation of art as an activity not bound to particular media or conventional forms such as painting or sculpture.\(^{68}\) The multiple editioned book is portable, durable, inexpensive, non-precious and replicable.\(^{69}\) The book began to operate as an alternative space to that of the gallery.

According to Clive Phillpot, three of the most prolific book artists to work with multiple open editions, have been Sol LeWitt, Lawrence Weiner and Peter Downsbrough.\(^{70}\) Kate Linker writes that the artist's book as an original art work is not violated by reproduction but rather defined by reproducibility. The book, therefore, 'provides a potentially infinite and simultaneous number of exhibitions.'\(^{71}\)

The desire to produce multiple editions decreased in the late 1970s, as book-like objects


\(^{68}\) Drucker, The Century of Artists' Books, 70.


or book sculptures developed a visible presence. In the 1980s, there began a tendency toward precious, costly collectables in limited editions, while some of the earlier, once cheap bookworks began to sell for inflated prices on the secondhand market. According to Phillpot, 'unique works normally embody a denial of the potential replicability of content and the inherent communicative value of the printed book.' These books have an auratic quality, an 'often inexplicable air of power, attraction, or uniqueness.' While Phillpot may be referring to the ability for the book to have a wide audience, simultaneously, a unique or small-editioned book retains its communicative value with the individual reader. The reader becomes a member of a community of readers when an editioned work is purchased.

The multiple editioned book offers many examples of the original no longer existing, which relates to Jean Baudrillard's concept of the simulacrum, that is, the copy without an original. In the case of works produced by letterpress printing, the lead type and furniture is dismantled after printing. The original, which produced the copies, no longer exists. Each example of a book within a particular edition, varies subtly from others in the same edition due to the nature of this type of printing. There is difference, which may be defined as a certain originality, among the copies. Therefore, the notion of original and copy may be conflated: it may be said that there are multiple 'originals.' With a multiple editioned book, such as Martha Rosler's *Service* (1978, unnumbered edition), the original may refer to the chronological order of the editions. Historically this is shown as a perceived increase in value placed on first editions.

A different version of reproduction is that shown in *Xerox Book #1*, by Ian Burn (1968, New York) [Fig. 24]. This is a stapled and taped landscape-format book, bound between black card covers. Its ninety-eight pages demonstrate the book's method of production: a blank sheet of paper was copied on a Xerox 720 machine. This copy was used to make the second copy and the second to make a third, and so on. Any grime, dust or scratches are progressively processed, enlarged

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78 Of relevance to this is the quote: 'Peculiar, that our modern culture of the copy should opt instead for the authority of the signature, since no two signatures by the same person are exactly the same. (Experts discern forged signatures by the absence of spezzatura, that offhandedness by which we sign a bit differently every time.)' Schwartz, *The Culture of the Copy*, 219.
or moved across the paper. The final pages are filled with blackness from errors of reproduction. George Gessert's *Dust and Light* (1987) uses a similar method of production. As Alex Selenitsch writes, it would be difficult to produce the book now, as technology has become more invisible.  

This book, in acknowledging that the photocopy is not a transparent vehicle for processing data, documents reproduction.

An analogous example, of sound recording, operates in the same way. Alvin Lucier’s *I am Sitting in a Room* (1969) similarly documents the process of recording. In Lucier’s work, text is spoken and recorded, then replayed, and recorded again, multiple times. Each recording is influenced by the shape of the room as well as the speaker and recording ability. This leads to distortion and loss of resolution but there is some smoothing out of the voice’s irregularities. In this example, and Burns’s work, there is a reliance on analogue technology, but it is not about the copy becoming less precise, but that something else is produced. These are examples of the altering effects of reproduction.

This exploration of notions of the original and the copy within the fields of architectural drawing, the building and the book, reveals the indefiniteness and interchangeability of each term. The associated qualities of authenticity and chronology are able to shift the presence of the original and the copy. There is no one straightforward reading of these notions, as each may be interpreted in multiple ways. With this in mind, introducing another word to the discussion proves beneficial in regard to the role of artists’ books in documenting architecture. The notion of translation is valuable in moving the discussion towards the book as a vehicle for the documentation and exhibition of architecture.

While reproduction is a structural possibility of drawing, the building and the book, it is the representation of reproduction that is of most interest. Robin Evans’s essay ‘Translations from Drawing to Building’ examines the act of translation within architectural representation. The Latin roots of the word and its original meaning imply that to translate is to convey, to move something without altering it. However, this assumes, as Evans’s quote earlier demonstrates, that there is a ‘uniform space through which meaning may glide without modulation.’ Rather, writes Evans, things can get ‘bent, broken or lost on the way.’ Cadava offers the analogy of translation in

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regard to language: that the task of translation is not to render a foreign language into one we may call our own, ‘but rather to preserve the foreignness of this language.’83 With this in mind, the book as translation of drawings and built form, is appropriate.

Mark Wigley writes that translation is not the transference, reproduction, or image of an original. Rather, the ‘original only survives translation. The translation constitutes the original it is added to.’84 Hence, in constructing the original as original, the translation constructs itself as secondary, exiled.85 For this not to occur, the abandonment of original is needed. In transforming the original, there is seen to be a ‘gap’ in the original; it is not an organic whole, a unity, but fissured.86 So rather than translation seen as a violation of the purity of the work, instead it may be said that translation occurs in the transition between forms. In the case of the book as translation, the book exists within the mutable zone between drawing and building.

Cadava refers to translation as characterising the relation between a photograph and the photographed. An original can only live on in its alteration, which is then to say that translation demands the death of the original.87 But instead, Cadava argues, the original lives beyond its own death in translation.88 He cites Walter Benjamin in his 1923 essay ‘The Task of the Translator’: ‘no translation would be possible if in its ultimate essence it strove for likeness to the original.’89 The Benjaminian translator, like the photographer who must acknowledge the infidelity of photography, must give up the effort to reproduce the original faithfully.90 Or rather, in order to be faithful to what is translatable in the original, the translator must depart from it, ‘must seek the realization of his task in something other than the original itself. “No translation,” Benjamin writes, “however good it may be, can have any significance as regards the original”’91 Benjamin also acknowledges the process by which techniques of reproduction increasingly influence and determine the structure of the artwork itself92: that is, translation as altering.

The process of the artist Thomas Demand is useful as a case study of reproduction as translation which involves a process of cumulation. Demand makes a full scale paper model

83 Cadava, Words of Light, 17.
85 Wigley, “The Translation of Architecture, the Production of Babel,” 8.
86 Wigley, “The Translation of Architecture, the Production of Babel,” 8.
87 Cadava, Words of Light, 17–18.
88 Cadava, Words of Light, 17–18.
90 Cadava, Words of Light, 17–18.
91 Cadava, Words of Light, 16–17.
92 Cadava, Words of Light, p. 43.
from a two-dimensional image, found in the media, of architectural spaces, exteriors and natural environments. But it is not the building in the image that is made, but the space of event, for example the hallway leading to Jeffrey Dahmer’s Milwaukee apartment in Corridor (1995), or the Florida recounting of ballots in the 2000 US Presidential election in Poll (2001) [Fig. 25, 26]. He then photographs the model and destroys it. Hence, the photographs are triple removed from the scenes or objects they depict.93

Demand’s models are never things unto themselves, they are a means to an end, painstakingly crafted and then discarded. Their three-dimensionality sits within two flat photographs, one the catalyst and the other, the residue of their making. What might be considered thin constructions are imbued with depth through this process. The smoothness of the photographic surface ‘is countered by the implicit thickness of subject matter.’94 According to Michael Fried, the photographs are ‘saturated’ with Demand’s intentions: ‘the the viewer is called upon to do nothing more than register the “madeness.”’95 However, these new images although completely made, are devoid of evidentiary traces and marks of human use which we associate with the original scene.96

Colomina writes of two-dimensional photographs and publications as the space of architecture as media. In Demand’s work, architecture internalises that space, that flatness and so the three-dimensional world ‘becomes a photographic surface.’97 Brett Steele writes similarly that ‘architecture might yet still exist as (and not only through) its own forms of communication.’98 This is in opposition to Evan’s notion of directionality within architecture.99 Architecture, being brought into existence through drawing, is different from the usual directional tendency of projections which makes things ‘flatter’. Evans calls the process of two-dimensional representation leading to three-dimensional objects the principle of reversed directionality.100 Demand’s process, of moving from photograph to three-dimensional model to photograph again, involves both reversed directionality – in taking information from flat representations to make embodied

96 Fried, Why Photography Matters as Art as Never Before, 271.
97 Colomina, in Thomas Demand, Thomas Demand (London: Serpentine Gallery, 2006), 35.
100 Evans, Robin Evans: Translations from Drawing to Building and Other Essays, 165.
objects, Demand builds the architecture of the image, he builds the image itself rather than a ‘model’ of it\(^{101}\) – and the usual directionality of projection, which makes things flatter – in turning the made model into a photograph again. This shifts the original photograph that Demand works from, from \textit{post factum}, to instead being part of a lineage of representation. The act of photography is different for Demand, from the usual way a model is photographed. For Demand, the position of the camera is already determined by the original image. He is not building a cardboard model to be photographed from any angle. Demand does not move the camera into the model to photograph it. Rather, the camera is already part of the interior being photographed: the model only exists for the camera’s one position.\(^{102}\)

The practice of Thomas Demand, as between representations of architecture, is relevant for the role that the book may play within architectural representation. The book as a mediation of architecture, as operating in the zone of ‘between-ness’ of the various representations of architecture, is able to translate the drawing, the photograph, and the text of architecture, and the building itself. Walter Benjamin describes the task of translation, within language:

> Unlike a work of literature, translation does not find itself in the center of the language forest but on the outside facing the wooded ridge; it calls into it without entering, aiming at that single spot where the echo is able to give, in its own language, the reverberation of the work in the alien one.\(^{103}\)

This description sees translation as giving voice to the intention of the work, not through reproduction but rather as supplement, and hence, places translation within the realm of critique and comment.

The book as exhibition of architecture

\textit{Post factum} documentation is used to interpret, curate, compile and edit work, and thinking. However, the \textit{post factum} architectural artist’s book is not merely concerned with ‘display’ since the question of display takes as a general premise that meaning is an after-effect of the work of technique. This role is similar to the intention of the exhibition of architecture. The usual display

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\(^{101}\) Colomina, in \textit{Thomas Demand}, 35; and ‘Perhaps the word ‘model’ is misleading here. Demand is not simply modelling something that is then transformed into an image: he is building the image itself’, Colomina, “Media as Modern Architecture,” in \textit{Architecture Between Spectacle and Use}, ed. Anthony Vidler (Williamstown, Massachusetts: Sterling and Francine Clark Art Institute, 2008), 68.

\(^{102}\) Colomina, in Vidler, \textit{Architecture Between Spectacle and Use}, 68, 69.

\(^{103}\) Walter Benjamin, “The Task of the Translator,” in \textit{Illuminations}, 76.
of architecture in exhibitions presents images of matter, rather than the work of matter, writes Andrew Benjamin in his essay 'On Display: The Exhibition of Architecture'. Sketches, plans and models, produced during the design process, shown with the post-construction photograph are the conventional elements of architectural exhibitions. The simultaneous production of a book of the exhibition, outlining the polemic of the exhibition and propagating it more widely and permanently than the exhibition itself, was instigated by the Museum of Modern Art, New York, as early as the 1930s, and is commonplace today. Together, they are presumed to present architecture. This then leads to the question of how matter’s presence can be exhibited ‘if the centrality of the image – the reduction of matter to its image – is to be distanced and matter reinscribed both as the production of the architectural effect and therefore as the subject to be displayed?’ Rather than subordinating matter to its image, material presence as the object of display allows meaning to be repositioned.

The question arises of how well a non-linear process can be explained by objects within an exhibition. Displaying work as records of a process implies a particular design process. The exhibition of architecture has traditionally aimed to be either a substitute for the experience of visiting the building or city displayed, or explain the architect's methodology of thought and design process. The work is detached from the context within which it was made, surviving to 'bear witness to a particular moment'.

The difficulty of exhibiting architecture is documented in interviews with the curators of the architecture exhibition at the Venice Biennale. Paolo Baratta, president of the Venice Biennale, says that an exhibition of architecture is in itself a contradiction: ‘In art exhibitions you show a work of art, whereas in architecture you don't show the product of the architect. So what do you show? Is an exhibition of architecture at best only an indirect exhibition?’ Aaron Betsky, curator of 'Out There: Architecture Beyond Buildings', the eleventh architecture exhibition at the Venice Biennale 2008, says that since architecture usually resides in buildings, which are difficult to fit inside other buildings, scale models and drawings of buildings are what are placed on the pedestal.

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106 Benjamin, in Abe, Flicker, 108.
107 Benjamin, in Abe, Flicker, 108.
or in the frame in traditional art museums. However, these have no spatial sense of the buildings, no 'sense of architecture.'

Exhibitions that display the artefacts of a process are trying to explain the œuvre:

Exhibitions of architecture present only documents whose relation to the creative process is indirect. The distinction between the ouvrage and the œuvre, used in the French legal and political context, but so difficult to translate into other languages, takes on its full meaning here. It is not the ouvrage, or the completed building, that is physically present in the exhibition, unless in the case of a prototype or a modular building; it is the œuvre, i.e. the project, the intellectual work crystallized in sketches, scale drawings, texts, and of course, models.

This comment relates to displays of models as objects, that take full scale buildings as their referent and impetus. Drawings and models present architecture, because they are taken to be architecture's representation:

The drawing and the model deployed in this way, and with this intent, work with a conception of architecture that has two defining characteristics. The first is that they aim to represent part of the process or envisaged outcome. The outcome and the process are determined by a conception of architecture that is structured by the image. The second is that to the extent that representation and the image are dominant then the architectural effect becomes the relationship between representation and meaning. Architectural effect is the registration of architecture's presence.

According to Baratta, Massimiliano Fuksas, director of the 2000 exhibition, was really the first curator of the biennale to understand this problem, and made the Corderie into a long street that expressed a visual experience, so as to think about architecture. Betsky concludes that his 2008 biennale exhibition proffered a simple argument: that the way you show architecture, perhaps, is not to show buildings, but to look beyond buildings to find architecture and to show it. Baratta is critical of the use of digital images of buildings with regard to the biennale. At a time when

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112 Benjamin, in Abe, Flicker, 108.
113 Paolo Baratta, in Weaver, Architecture on Display, 182.
114 Aaron Betsky, in Architecture on Display, 144, 145.
galleries are ‘being invaded by screens’, whose virtual images allow the simulation of movement and the effect of immersion, merely employing various media is not enough to engage the visitor.\(^{115}\)

Rather, ‘a biennale is a place where you meet things, where you touch things. If you lose that idea you don’t need an exhibition.’\(^{116}\)

A recent editorial by the new *Architectural Theory Review* editors recalls Walter Benjamin’s concept of translation as an apposite metaphor for their own intentions for the journal, which they state as a perpetual re-conceptualisation of architectural theory. According to Naomi Stead, Lee Stickells and Michael Tawa:

> What we have in mind is not the reproduction or faithful adherence to the original texts selected [for review], but to their ‘afterlife’ – that is, to their maturation and transformation through translational speculation in which the objective is not fidelity but the mobilisation of what, in the original ‘does not lend itself to translation’. Ultimately translation, like the kind of review we have in mind, is a praxis of complementation founded on interlinearity – it is a task that works into and in-between the lines of a text, into and in-between its figures of speech and its figures of thought in order to take it elsewhere; into the ‘foreignness of language’.\(^{117}\)

This approach is suggested for the role of the book, in its critique and documentation of architecture through exhibition. Andrew Benjamin writes that matter is not just material presence, it is the site of techniques, which may be understood as the complex relation between architecture’s material presence and the immaterial. Thus the exhibition of architecture becomes the display of technique.

With this description of the display of architecture and the notion of translation in mind, artists’ books provide an immediate vehicle for the exhibition of architecture: central to the concept of technique is the re-making of the representation. Barry Bergdoll, Chief Curator of Architecture and Design at the Museum of Modern Art, New York, in conversation with Brendan McGetrick, is quoted as saying: ‘The more you can multiply the representations [in exhibitions], the more ways that you can reveal aspects of the architecture that are more to do with the nature of making architecture than about the architecture itself.’\(^{118}\) Rather than displaying the artefacts of a process, the exhibition can be made up of *post factum* work, that is the book.


\(^{116}\) Paolo Baratta, in *Architecture on Display*, 184, 196.


\(^{118}\) Brendan McGetrick, *Who is Architecture?: Conversations on the Borders of Building* (Hong Kong: Timezone 8; Beijing: Domus China, 2010), 43.
The examples of buildings examined which muddy the finality of the building process, acknowledge that neither buildings nor beholders are fixed and solid entities: ‘the experience of architecture is not … an occasion of a knowing human subject recovering and deciphering the meanings hidden in an increasingly well-known architectural object.’\textsuperscript{119} Instead all buildings, to some degree, are perpetually under construction; ‘they are never “done” in the sense of fixing and fully stabilizing their meanings … The idea of the fully finished building is a fiction that cannot be sustained.’\textsuperscript{120} So rather than a representation aiming to capture a building in a moment in time, the most exact reproduction therefore, is the one that reproduces reproduction, rather than matter, according to Cadava.\textsuperscript{121} Watanabe’s approach to photographing Ise Shrine had this in mind, it foregrounds ‘the photograph as an interpretive process rather than as a “transparent” medium for the representation of his subjects.’\textsuperscript{122} Coupled with the understanding that what is reproduced is also altered, and that translation occurs in the transition between forms, the book as ‘hyphen,’ as translation between mutable states of architecture, is able to highlight relationships architecture has with the notion of reproduction and critique it. The artist’s book does not place the completed building as endpoint of the design process. Instead, it acknowledges the lineage of representation and is able to insert itself at various junctures of this. In this revision of the potential and territory of \textit{post factum} documentation, the book offers itself as a mode of exhibition.

\textsuperscript{120} Jones, \textit{The Hermeneutics of Sacred Architecture}, 263.
\textsuperscript{121} Cadava, \textit{Words of Light}, 36.
\textsuperscript{122} Reynolds, “Ise Shrine and a Modernist Construction of Japanese Tradition,” 335.