



Examining the striking and unsettling architecture of buildings within buildings, with reference to diverse buildings and texts, focusing on their emergence from museum and preservation practices.

Buildings-in-buildings: museological theatres of preservation and display

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A 'house for a house'

Saturated and crumbling from persistent water damage, the Hill House by celebrated Scottish architect Charles Rennie Mackintosh is today in need of extensive repair. Built in Helensburgh, west of Glasgow in 1904, the simple massing of the house, with its unadorned façade, marks it as a seminal work of early twentieth-century architecture. Unfortunately, its coat of Portland cement render has failed to withstand more than a century of Scottish rain from penetrating its walls. Damp now threatens the survival of the building and its interiors, which have been described as 'dissolving like an aspirin in a glass of water'.¹ Given the small number of built works by Mackintosh, and the recent loss of his School of Art building in two devastating fires (arq 22:4, 310–24), conservation efforts to save his 'domestic masterpiece' have now begun with urgency and determination.²

The first stage of works to stabilise the house, and to rectify its damp walls, began in 2019 in radical fashion with the aptly named 'Hill House Box' by London-based architects Carmody Groarke. This large roof and chainmesh-wrapped steel structure encases the house like an oversized raincoat, or a protective suit of armour, pulled five metres away from its walls in every direction.³ Designed to permit views and breezes through while excluding the rain, the enclosure will allow the original building to dry out slowly over several years before many more years of conservation works can begin [1].⁴

The new 'house for a house'⁵ incorporates a series of walkways through the interstitial volume, enabling visitors to observe the old building from new vantage points during its renovation [2]. As such, the enclosure not only forms a protective case but effectively turns the building – and its extended period of conservation – into a museological exhibit. In the architects' own words, the original building becomes an artefact within a 'temporary museum', offering 'a remarkable public visitor experience of the conservation in progress'.⁶

For this essay, the Hill House Box, with Mackintosh's iconic residence nested inside, serves



to capture a broader interest in the often perverse but strangely appealing architecture that results from placing one full-scale building inside another. The study also begins to reveal some of the ways in which such architectural enclosures shift the perception of its contents and draw attention to the artifactuality of the building within. Drawing upon a diverse array of extant projects and texts, the discussion attempts to establish formal and theoretical frameworks through which to understand such buildings-in-buildings, not just as radical acts of architectural preservation, but as fascinating and fantastical intersections of distinct architectures, old and new.

1 Charles Rennie Mackintosh's Hill House, Helensburgh within the Hill House Box by Carmody Groarke.

2 Interior of the Hill House Box by Carmody Groarke.

Inside-outside-in: an overview of buildings-in-buildings

There are countless examples of buildings-in-buildings to be found throughout the history of architecture, and a huge variety of ways in which one building can end up encased within the interior of another. Certainly, the concept of a building inside a building is a nebulous one, making any comprehensive or definitive survey unthinkable. Nevertheless, I argue that it is possible – and productive – to identify certain patterns across groups of examples to help navigate this vast and sprawling field of projects. What follows, therefore, begins to describe the shape and size of the phenomenon of buildings-in-buildings. It highlights particular cases, themes, and issues deserving deeper consideration. The discussion proceeds by examining eight kinds of buildings-in-building, paying close attention to their formal juxtapositions – particularly the correspondence between the interior and exterior spaces of contained and container buildings. If, as Robert Venturi argues, the contradiction of insides and outsides is a source of richness and complexity in architecture, for this study, the discontinuity of interior and exterior conditions also offers a means to differentiate and characterise the many kinds of mongrel structures that might be described as buildings-in-buildings.⁷ Crucially, this survey also helps to distinguish those key cases and categories that help to illuminate more precisely why buildings-in-buildings have such intrigue and appeal, and what is at stake more generally in the combination of two buildings in one time and place.

Layered

One of the most obvious processes through which buildings become consumed by other buildings is through the accretion of new layers that are tightly bound to the original structure. The fifth-century BCE Temple of Athena is a good example, ensconced within the walls of Syracuse Cathedral in Sicily [3]. It is a unique example of an ancient Greek structure, wrapped in a seventh-century church, and covered with an eighteenth-century baroque façade. The cathedral thus belongs to a familiar trope whereby older buildings become enveloped by new layers of construction used to remodel or update the appearance of an existing structure. This is also famously seen in Palladio's sixteenth-century Basilica Palladiana, as well as Alberti's fifteenth-century Tempio Malatestiano in Rimini where the earlier gothic windows remain visible behind the newer classical façade – a tell-tale clue to its past [4].⁸ The ease with which the addition of a new façade can transform an extant building means that this practice of adding new layers of building remains popular today, with aging buildings commonly receiving makeovers with new façades. The reverse is also commonplace. 'Façadism' describes the practice of inserting new buildings within the shells of old ones, constituting another kind of layered building-in-building.

Spanning more than two thousand years of history, what these particular structures have in

common is the continuity – and sandwiching – of new and old building fabric. It is a defining quality of this type, where two or more distinct architectures may be more-or-less legible but the lack of any discernible space between them means that they generally share a single interior and exterior. This single spatial continuity arguably results in a much less potent expression of the building-in-building genre when compared, for example, to the Hill House Box, where one structure stands apart from another, each with its own independent interior and exterior.⁹ Indeed, it is often easy to overlook them as buildings-in-buildings at all.

Fragmented

Another group of examples might be defined by the presence of building fragments and *spolia* within the fabric of another building. While it is common for old building materials to be reused in new construction, such relics are generally synthesised or absorbed by their hosts, creating a single undifferentiated architecture, and cannot therefore be readily legible as a building inside another. The recently renovated Burrell Collection in Glasgow (designed by John Meunier, Barry Gasson, and Brit Andresen, opened 1983), and the Isabella Stuart Gardiner Museum in Boston MA (by Willard Sears, opened 1903) are notable examples. Here, diverse collections of building pieces are collaged into a single work. Likewise, another famed museum – The Metropolitan Museum of Modern Art's Cloisters in Upper Manhattan – is assembled like an architectural *capriccio* of larger scale building fragments. These include a collection of doors, windows, glass panels, and the apse of an abandoned twelfth-century Spanish church, alongside the eponymous suite of four medieval French cloisters, brought together within an archaistic construction that melds these fragments into a continuous architectural experience of a fabricated past.

Like the layered examples discussed above, spoliation generally lacks the complexity of spatial juxtaposition witnessed in other building-in-buildings. Not all architectural fragments achieve formal cohesion with their hosts. However, take, for instance, the numerous examples of period rooms scattered across galleries and museums around the world. Many, whether through accident or design, retain a discretely defined interiority. That is, they are legible as interiors inside other interiors – as rooms within rooms – independent of the architecture of the museum. Put another way, they are legible as a kind of building inside a building precisely because the disjunction between the host and guest architectures is pronounced. In the case of period rooms, these breaks in continuity are often easy to see. In addition to stylistic junctures, it is common to discover small residual cavities between period rooms and the walls of the museum proper, as well as more carefully constructed gaps built to accommodate light fixtures that recreate daylight effects through windows, or house *trompe-l'œil* backdrops that attempt to re-establish long-lost vistas. It is here, in these interstices, that the period



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3 Syracuse Cathedral,
Sicily.

4 Alberti's Tempio
Malatestiano, Rimini.

room as a fragmented type of building-in-building is founded.

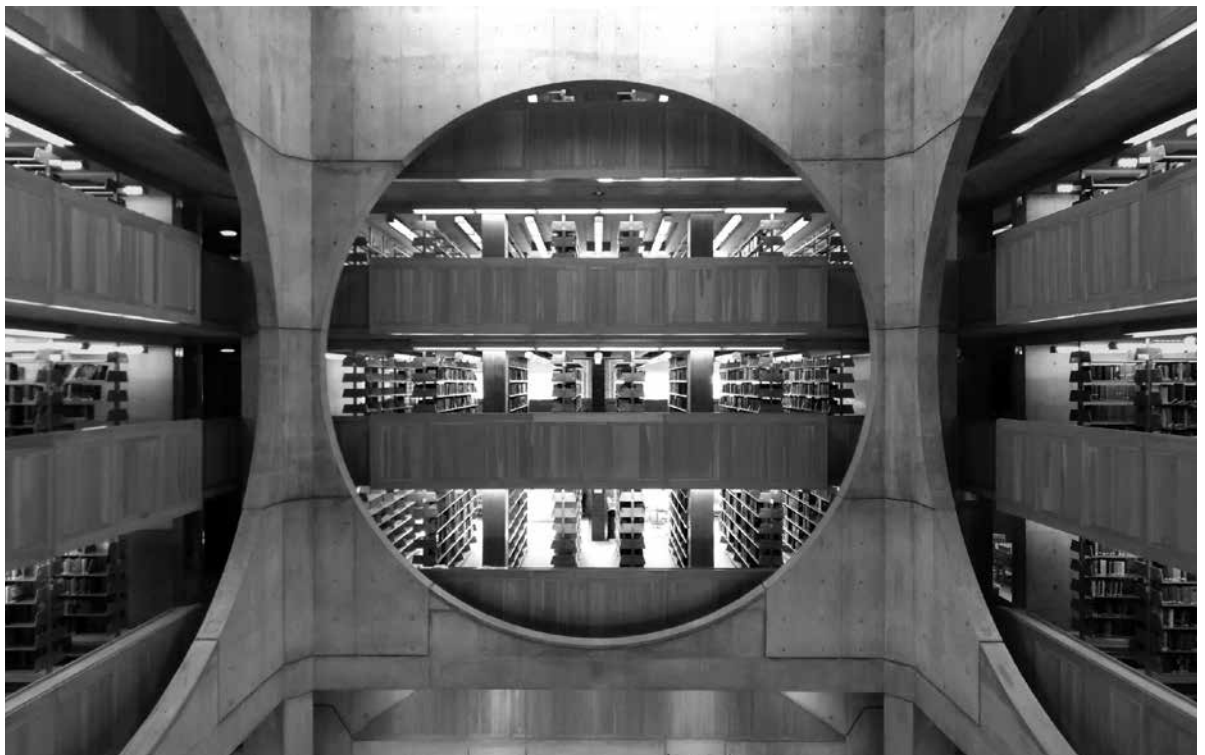
Frank Lloyd Wright's Little House living room at the Metropolitan Museum of Art in New York is a particularly potent example. Originally designed and built between 1912 and 1914, the building faced imminent demolition in 1972 when the museum stepped in to purchase much of its fabric. The living room of the house was installed as a permanent display in the museum, opening in 1982. What makes the Wright period room so remarkable is that

both the interior and exterior of the room were recreated to reinforce the continuity of the design between inside and out [5]. Visitors can not only enter parts of the interior, but also circumnavigate its perimeter, peering inside the detached room like a life-sized diorama.¹⁰ What is important for this study, however, is that the recreated exterior walls emphasise the discontinuity of the interior from the museum proper, intensifying its experience as a fragmentary kind of building inside a building.



5 Frank Lloyd Wright's Little House Living Room installed at the Metropolitan Museum of Art, New York.

6 Louis Kahn's Phillips Exeter Academy Library, Exeter, New Hampshire.



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Articulated

There are also a great number of structures purposely designed to evoke the spatial qualities of such rooms within rooms by articulating, exaggerating, and pulling apart multiple layers of enclosure to separate one interior from another. This is what Robert Venturi described in *Complexity and Contradiction* as 'intraspatial'.¹¹ Louis Kahn's Phillips Exeter Academy Library (1966–8) is a good example where a carefully articulated gap is introduced between the concrete shell that defines the large central atrium and the timber balustrades and bookshelves that sit behind it in a concentric plan arrangement [6]. Kahn is known for his use of doubled walls and the prying apart of interior and exterior surfaces, first explored in the design of the Luanda Consulate project (1959–62) where offset walls with an unoccupied gap between were planned as an architectural means to mitigate glare.¹² Kahn wrote of the project: 'I thought of the beauty of ruins [...] the absence of frames [...] of things which nothing lives behind [...] and so I thought of wrapping ruins around buildings; you might say encasing a building in a ruin.'¹³

At a more intimate scale, many of the houses that Charles Moore designed for himself – including the important early projects at Orinda (1962), Sea Ranch (1963–5) and New Haven (1966) – consciously construct rooms inside rooms as symbolic centres.¹⁴ Based on the concept of the aedicule found in the writings of John Summerson (which I will return to later), Moore developed the idea of an aedicular room within a room. This was repeated as a poetic motif that became associated with the most private and intimate experiences of his domestic designs.¹⁵ Hence: a bath was placed under one of the two aedicules at Orinda; loft beds were located atop the

structures at Sea Ranch; and a dome-capped cubic form enclosed Moore's bed at New Haven.¹⁶ Despite being designed and built within a single unified architectural language, muting the expression of one building inside another, their evocation and articulation of spaces exemplifies this important group of works.¹⁷

Inserted

In contrast to the complex spatial articulations of Kahn and Moore's rooms, the idea of buildings 'inserted' into others needs little explanation. It also constitutes what is arguably the first proper building-in-building category, whereby the complete exterior of one building is clearly contained and identifiable within another. Commonly seen in museums, one of the best-known examples is The Metropolitan Museum's Temple of Dendur. Gifted to the United States by the Egyptian Government in 1965, the building was awarded to the New York institution in 1967 and reconstructed in 1978 in the Roche Dinkeloo designed vitrine of Gallery 131 (formerly known as the Sackler Wing) where it remains on permanent display today. Other more recent examples include Architecten De Vylder Vinck Taillieu's 2016 interventions at the partially demolished PC Caritas building that forms part of a psychiatric facility in Melle, Belgium. The project involved the insertion of small greenhouses within the stabilised remains of a roofless nineteenth-century villa, providing protected spaces for its community of users. In contrast to the Temple of Dendur, which is given sanctuary by the museum's glass enclosure, here it is the building envelope itself that is offered protection: the insertion of miniature glass structures within its ruined shell lending a new purpose to the old.¹⁸



7 Levitt Bernstein's theatre in the Royal Exchange, Manchester.

Elsewhere, much larger and more complex structures have been successfully inserted into the interiors of existing host buildings, such as the 700-seat theatre constructed within the former trading hall of Manchester's Grade II listed Royal Exchange building [7].¹⁹ Designed by Levitt Bernstein, and completed in 1976, the theatre is pulled back from the interior walls to preserve the integrity and legibility of the existing room. In fact, it is structurally anchored to just four original brick piers, and the only interior surface the structure touches is the floor.²⁰ Critically, this gesture of preservation also permits the 'exterior' of the theatre – a High-Tech assembly of expressed steel trusses, stairs, platforms and lighting rigs – to be read as a distinct building inserted within the existing historic structure.

Wrapped

In contradistinction to the idea of inserting one building into another, 'wrapped' projects describe a process wherein a new building is built around or over an existing one. This group of buildings-in-buildings differ from those aforementioned 'layered' examples insofar as the wrapping – like that of the Hill House Box – is expressed as a distinct architectural envelope or surface that remains separated from the building nested within. The concept might also be extended to include more loose-fitting, open, or incomplete shells, such as Office Kersten Geers David Van Severen's 'After the Party' exhibition for the Belgian Pavilion at the 2008 Venice Architecture Biennale, which used a temporary seven-metre-high wall of steel scaffolding to partially shroud the extant building. In addition to creating a new garden courtyard, the wall radically changed the approach and entry sequence to the existing structure. Forced to enter through a side door, the experience of the buildings was defamiliarised. And, with the primary façade contained and framed within the walled garden, the pavilion was represented to visitors as an exhibit in and of itself.²¹

A more extreme example was designed by Oswald Mathias Ungers, for the German Architecture Museum in Frankfurt. Housed in an existing nineteenth-century villa, the original structure is wrapped at its base with the new museum programme, turning the house itself into the largest object inside the collection.²² Taking the idea further, Ungers hollowed out the villa's core to insert the abstract white form of a five-by-five metre square 'house' (complete with openings for doors and windows) which rises up four floors and culminates in a small exhibition space under a gabled roof [8]. Ungers says of this project that the experience of entering one space, only to arrive outside of another, reinforces a visitor's consciousness of spatial perception.²³ This outcome is, of course, apposite for a museum of architecture, but this architectural Matryoshka doll of concentric spaces also underscores a theme of houses in houses in Unger's work to which he returned time and time again.

Ungers explained his interest in the concept of houses in houses, writing that: 'Its fascination lies in the idea that it contains an element of continuity whose end cannot be conceived.'²⁴ Here, he also exposes one of more unsettling and uncanny aspects of buildings-in-buildings: the sense of there being more buildings, larger and smaller, multiplying and extending endlessly in both directions, within and without: a *mise en abyme*. In her discussion of an architectural *mise en abyme* illustrated in a *New York Times* cartoon, Naomi Stead describes its dizzying, even terrifying effects:

We see into a labyrinth of nested spaces, containers within containers [...] It feels impossible to escape from: spaces forever captured inside other spaces. [It] contains both the gigantic and miniature, the microcosm and macrocosm, the minuscule and the infinite.

She adds, more disturbingly, that 'it is an interior which actually has no exterior, or rather, its exterior is only ever another interior'.²⁵ It is precisely this possibility that Ungers' nested houses capture so well.

If the projects of Office and Ungers above share a concern for turning extant architecture into an exhibition, similar formal means of wrapping buildings with new outer shells have been employed elsewhere to quite different ends. For instance, media reports in 2015 drew attention to the case of a Swedish family that built a glasshouse over the top of their timber summer house.²⁶ Inspired by the *Naturhus* (Nature House) projects of architect Bengt Warne, the encapsulation of the original structure, including outdoor living spaces, dramatically reduced heating costs while increasing the comfort and liveability of the building during the cold Swedish winter. Despite very different intentions, what all these wrapped projects have in common is that they establish a co-dependence between the two architectures: arguably more so than for other types of buildings-in-building. They also all create a third spatial condition in between the new and old envelopes that radically transforms and reframes the buildings housed within, whether for practical or more poetic reasons.

Engulfed

At a much bigger scale is another related group of cases that vastly inflates (sometimes quite literally) the gap between the container and the contained, producing a more ambiguous relationship between the envelope – typically large, generic, or ubiquitous – and the building(s) it engulfs. The iconic image of R. Buckminster Fuller and Shoji Sadao's 1960 proposal for a gigantic geodesic dome over midtown Manhattan offers an archetypal visual reference, but there have been many built works that demonstrate the diversity of the type and its various spatial consequences. For instance, Haus-Rucker-Co's 1971 heart-shaped inflatable dome titled *Cover: Surviving in a Polluted Environment*, installed over Mies van der Rohe's Haus Lange in Krefeld, Germany, produced an abstract space that evoked a dystopian future world of isolation and containment.²⁷ In other contexts, a more pragmatic, protective function of such covers is employed, as seen in Bernard Tschumi's Le Fresnoy



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contemporary art centre in northern France from 1997 where a small campus of aging buildings were overlaid by a steel-framed canopy roof that soars indifferently overhead [9].

If these kinds of covers all share concerns for protection, another related group of large-scale enveloping structures place their emphasis on display. The monumental glasshouse designed by Joseph Paxton for the Great Exhibition in London in 1851 is a notable case in point, housing a range of thematic Fine Arts Courts with large-scale

architectural reconstructions.²⁸ Later exhibitions such as ‘The Dwelling of Our Time’, led by Ludwig Mies van der Rohe as part of the 1931 German Building Exhibition in Berlin, went a little further and included numerous full-sized model houses built within an exhibition hall alongside other apartment interiors and building fragments.²⁹

8 Oswald Mathias Ungers' German Architecture Museum, Frankfurt.



9 Bernard Tschumi's
Art Center Tourcoing.

This pair of nineteenth- and twentieth-century examples demonstrates a familiar kind of exhibitionary relation between the architecture of the envelope and the built objects on display, like the 'wrapped' and 'inserted' examples already discussed. Nevertheless, it is a category of building-in-building that still produces novel approaches. For instance, OMA has complicated the idea of the large exhibition hall as envelope for an extant building in their unrealised 2006 proposal for the Riga Contemporary Art Museum. In this design, the first two floors of an existing powerhouse are surrounded with a large, 'neutral' exhibition space with a continuous glass façade – effectively a flexible hall housing contemporary art – rendering the old structure not so much as an object of display within the hall but a utilitarian series of support spaces.³⁰

Staged

Another large group of buildings-in-buildings deserving mention are defined not so much by their formal qualities, or scale of interior and exterior spatial relationships, as they are by the kinds of objects they contain. These extend the exhibitionary dimension of the aforementioned projects (like the model houses and apartments included in the German Building Exhibition) further into the realm of fantasy and can be defined by their intersection of a 'real' building enclosure and a 'staged' architecture within. Examples take on many different forms. Most obviously, the construction of full-sized architectural

models or mock-ups – including entire streetscapes – within theatres or soundstages establish the essential characteristics of the type, where the staged building is housed inside a real one.

While there is some overlap between the scale of such large soundstages and the previous discussion of large, generic shell-like structures that engulf smaller ones, there are some instantiations of the type that are more idiosyncratic. One of the most unusual of these was documented in a 2019 HGTV special titled *A Very Brady Renovation* in which the fake two-storey interior set used for the iconic Brady Bunch television series was recreated inside the original split-level house in Studio City used for the exterior shots of the fictional family's home. After being put up for sale, the 1959 house, designed by architect Harry M. Londelius, was purchased by the broadcaster to become the subject of the reality TV transformation. But shoehorning the double height interior of the Brady House set into the shell of the somewhat smaller actual home was not easy. To maintain the exterior appearance and roofline of the extant structure required the lowering of the house's foundations, and the addition of nearly 200 m² of floor space to the rear.³¹ This is clearly an exceptional example of a building-in-building, albeit without the kind of interstitial spaces that would more clearly explicate the radical combination of architectures that has taken place. But the themes of fantasy, temporal, and spatial dislocation that it engenders are all common dimensions of this group of staged designs.

These fantastical constructions can also be identified in in other commercial contexts –



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10 Fountain of the Gods, Caesars Palace, Las Vegas.

11 The Pergamon Temple in Berlin.

shopping centres, theme parks, casinos, and the like – where smaller storefronts, pavilions, and kiosks spread out under large, all-encompassing roofs that provide all-weather environments for entertainment, leisure, and consumption. The Forum Shops at Caesars Palace in Las Vegas, built in the early 1990s as an extension to the existing casino, epitomises such fabricated worlds [10]. There, a Roman *via* wends its way past classical fountains, semi-detached temple fronts and colonnades fitted out with boutique luxury stores, all under the welcoming glow of an electronically controlled sequence of sunrises and sunsets.³²

More surprisingly, ‘staged’ buildings-in-buildings are also commonly found in museums. The Pergamon Temple in its eponymous Berlin museum is a notable example. The building that today stands inside the venerable institution is a highly speculative fabrication of a long-lost structure, while the original carved frieze which once wrapped the temple exterior is now displayed inside-out around the walls of the room housing the reconstruction [11]. Another strangely distorted building-in-building can be seen in Buffalo’s Pierce Arrow Transport Museum, where an unbuilt design for a gas station by Frank Lloyd Wright was posthumously constructed inside its walls. Given its protected interior location, the decision was made to not glaze the structure’s windows, lending the building an uncanny, model like appearance.

Another, particularly rich, subcategory of such not-quite-real architecture staged or displayed inside other buildings can be found in a diverse set of art practices where architecture becomes the subject, or medium, of practice. Notable examples of buildings-as-art-in-buildings include: Gregor Schneider’s long-running *Haus u r* project, which has involved the nightmarish construction and manipulation of rooms within rooms; Rachel Whiteread’s extensive casts of building interiors; Michael Landy’s *Semi-detached*, a 1:1 replica of his parent’s house installed at Tate Britain in 2004; Mark Dion’s practice of inventing and fabricating ‘period rooms’; and, Inigo Manglano-Ovalle’s upside-down reconstruction of Mies van der Rohe’s 50x50 house project at MOCA in 2009, complete with interior furnishings suspended from the upturned floor. Such examples add to the diverse array of staged architectural forms presented within other architectures, albeit establishing very different kinds of spatial relationships between the works and the exhibition spaces, and generating a spiralling array of connections and overlaps with other buildings-in-buildings types.

Superimposed

A final, striking intersection of two architectures is captured by the self-explanatory idea of ‘superimposition’: the literal collage and interpenetration of two or more forms in which the distinction of host and guest buildings becomes less clearly demarcated. OMA’s exhibition design for restaging the seminal 1969 exhibition ‘When Attitudes Become Form’, curated by Harald

Szeemann, is a key example. Originally shown at Kunsthalle Bern, the exhibition was remounted more than forty years later inside Ca’ Corner della Regina in Venice in 2013. Rather than reimaging the exhibition for its new context, the plan of the original exhibition – including the walls of the Kunsthalle itself – was reproduced in its entirety, transposed into the historic Venetian palazzo, colliding the two architectures through an operation of superimposition. This is not a unique case. In 2014, architects for the German Pavilion at the Venice Architecture Biennale, Alex Lehnerer and Savvas Ciriacidis, partially reconstructed the home of the German Chancellor in Bonn, designed by architect Sep Ruf in 1964, within the original 1909 Giardini pavilion.³³ In both cases, the coexistence of new and old fabric produce a hybrid condition: a collision of architectures that, despite belonging to distinct stylistic and temporal moments, are frequently difficult to interpret as independent, let alone as one building inside another.

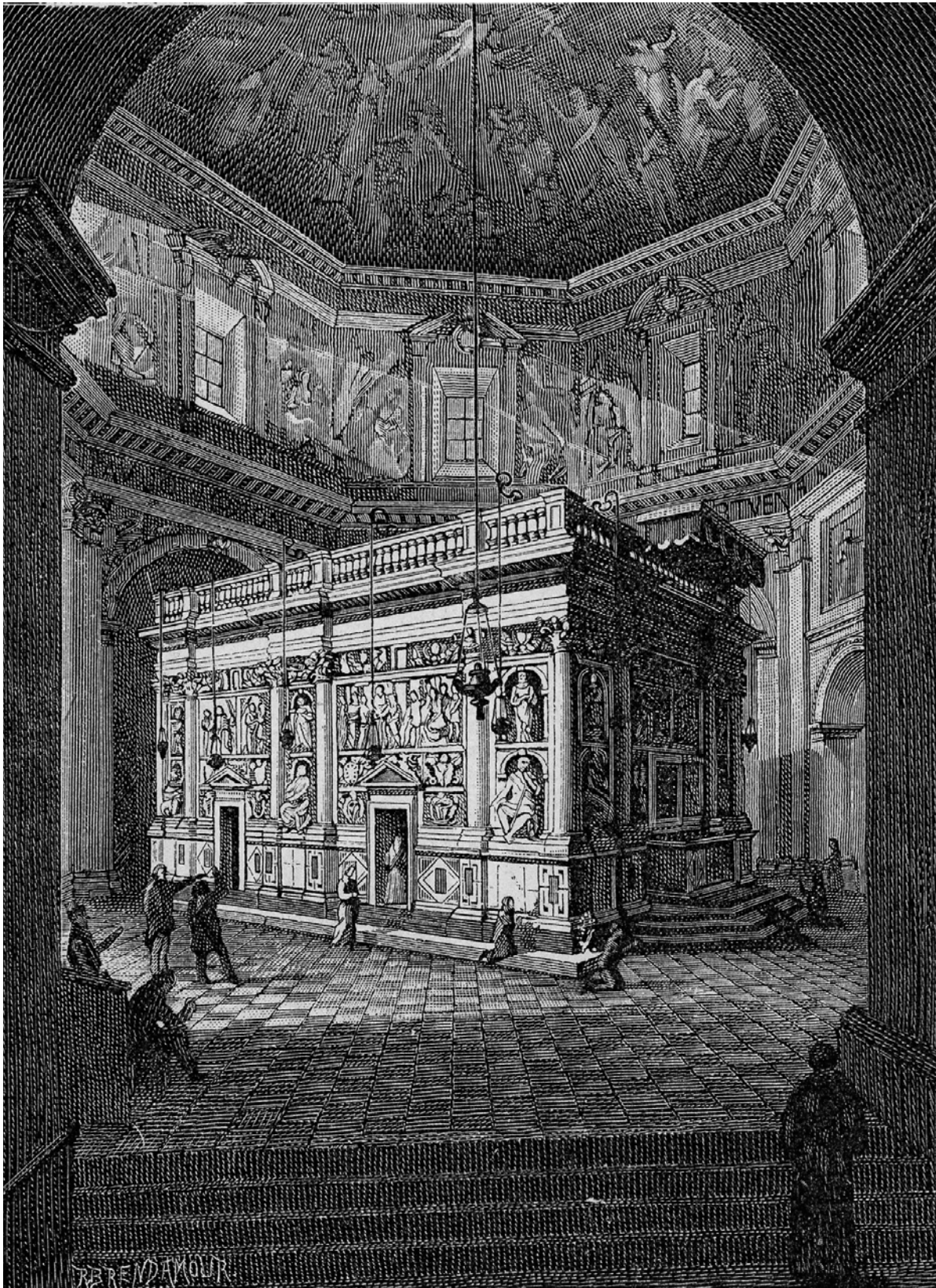
Gaps, disjunctions, and experiences

The buildings-in-buildings discussed so far represent only a small selection of the most conspicuous and diverse examples. Many more exist that would no doubt expand and challenge the classification presented here. So, before the endeavour of categorising various kinds of buildings-in-buildings consumes this whole paper, I will offer some general observations.

First, having surveyed this collection of buildings-in-buildings, what emerges as most critical is the clear articulation of an interstitial space to separate the container from that which it contains. Such gaps are most often pronounced in museums and other related spaces of display or preservation where the separation of one building from another for exhibition and conservation reasons is key.

Second, I suggest that the most marked examples of buildings-in-buildings generally occur when two distinct architectures of different times (and often different places) are allowed to meet, but are in no way integrated or formally resolved with one another. Arguably, what makes such architectural combinations so strangely evocative is their jarring temporal and stylistic disjunction – the kind often seen when one building becomes an object of display in another. I would also suggest that this architectural tension is stronger, more potent and disarming when ‘real’ buildings are the objects on show.

My final point concerns the expression and experience of the interstitial space itself, defined by the inside and outside of two distinct architectures. While plenty has been written on interior-exterior dialectics, such discourses tend to concentrate on the formal description and phenomenological experience of interiority and exteriority, or on those liminal spaces that are *between* inside and out.³⁴ Looking at this collection of projects, the spatial conditions of buildings-in-buildings are revealed as something altogether different. Instead of being understood in terms of opposing pairs of spatial



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12 Nineteenth-century woodblock print depicting the Holy House in the Basilica of Loreto by Richard Brend'amour, 1898.

phenomena, or as a blurring of interior and exterior conditions, the most exemplary and affective buildings-in-buildings create spaces that are neither interior nor exterior, but both simultaneously. This simultaneity is unique to buildings-in-buildings and, while at times it may become unnerving, or even threatening, I argue, that it also helps to propel their perpetual fascination.

The miniature: tiny houses of fantasy

Having prised open the question of buildings-in-buildings, and pulled them apart according to formal differences, I want to now attempt to put them back together again using theoretical frameworks that draw out a deeper understanding. Themes including display, fantasy, and spaces of protection and preservation have already come to the fore. But here I wish to expand and connect them to the concept of the miniature, drawing upon John Summerson's discussion of the subject in his classic essay 'Heavenly Mansions: An Interpretation of Gothic'.³⁵ In that text, Summerson begins with a rumination on the symbolic play of children in the spaces beneath furniture, and the imaginary transformation of tables or chairs into little 'houses' of their own. For Summerson, there is a perennial fascination with such miniature shelters – with doll's houses, building models and the like – that is never outgrown. Indeed, he argues that our attraction to these diminutive structures plays out in both the symbolic and ceremonial dimensions of architecture proper.³⁶ He writes: 'The baldachino, the canopy over the throne, [...] the ceremonial shelter carried over a pope or bishop in a procession – these are not empirical devices to exclude dust or rain but vestiges of infantile regression.'³⁷

In this context, Summerson famously homes in on the significance of the aedicule: a key architectural embodiment of such 'miniature houses' that reappear across time and cultures. Originally functioning as a shrine – a miniature temple to house deity figures – the aedicule, according to Summerson, has maintained its symbolic and ceremonial function since ancient times.³⁸ However, at the crux of the essay, Summerson proposes the idea of the aedicule as the 'psychological key' to the aesthetic system of Gothic architecture.³⁹ He understands this as a system in which these little houses are multiplied and echoed throughout the tracery, portals, and arcades of Gothic cathedrals: miniature houses within larger structures, connected through reciprocal forms.⁴⁰ This significance of miniature buildings in the Gothic period is also underscored by François Bucher in his discussion of 'micro-architecture'.⁴¹ Bucher explains that, coinciding roughly with the end of gigantism in Gothic church building around 1300, Gothic aesthetics were increasingly applied to the design of small sacred objects. These included reliquaries, fonts, pulpits, and tombs, which frequently took the form of model buildings and miniature, fantastical architectures. Impossible to realise at full scale, Bucher echoes Summerson's discussion of the aedicule when he argues that these miniature

designs came to embody the basic tenets and essence of the Gothic's complex geometric order and its 'dazzling structural dexterity'.⁴²

Summerson's argument is familiar and hardly needs to be recited here. What is important, however, is that his essay extends an understanding of buildings-in-buildings. For one thing, Summerson explains another dimension to the appeal of buildings-in-buildings through the play-house reveries of children.⁴³ In this way, he reveals such little architectures to be spaces of imagination, highlighting a connection between fantasy and the miniature that has been explored by writers including Gaston Bachelard, Susan Stewart, and Steven Millhauser. Indeed, as Suzanne Menghraj points out in relation to Bachelard's *The Poetics of Space*, the 'deep appreciation' he expresses for huts extends precisely from their capacity to 'invite reverie and the creation of new realms it entails'.⁴⁴ Precisely why such small things should capture our oneiric curiosity is also a topic considered at length by Steven Millhauser in 'The Fascination of the Miniature'.⁴⁵ In this essay, Millhauser argues that our attention is captured by the shock of an unexpected shift in scale. But, whereas a confrontation with the gigantic carries a certain threat and sense of dread, miniatures, he argues, exude a charm that invites their possession:

*And herein lies a deeper secret. For the world is elusive, we do not possess it. Large objects especially elude us. We cannot possess a house the way we can possess a chair, we cannot possess a chair the way we can possess a cup, we cannot see things with true completeness. We can know a house room by room, on the inside, but we cannot take in with the eye all the rooms on a floor. A dollhouse allows us to possess a house in this way, to see it more completely. The fascination of the miniature is in part the fascination of the mountain view. To be above, to look down, to take into the yearning eye more at a single glance: here we are at the very threshold of the lure of the miniature.*⁴⁶

Putting aside this 'lure of the miniature', the other crucial idea that Summerson's text identifies is the central subject of the miniature house itself. As the essay demonstrates, the image of the diminutive house placed inside another 'house' is an old and persistent one. It is an idea that obsessed Ungers as previously discussed, and its familiar manifestation in the form of a dollhouse figures heavily in the texts by Millhauser and Stewart on the miniature. The latter describes them as 'the most consummate of miniatures'.⁴⁷ The miniature house is even commonplace enough in architectural practice today that popular online architecture blogs like Dezeen have a tag dedicated to little houses-in-houses'.⁴⁸

At full-scale too, the house is one of the most common building-in-building tropes. Perhaps the most famous is the Holy House enshrined inside the Basilica della Santa Casa in Loreto [12]. Said to be the house of the Virgin Mary, this tiny structure is alleged to have been flown by angels from Nazareth to the Adriatic Coast of Italy to escape the threat of destruction in the late thirteenth century. After



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13 House of Domingo Sarmiento, Buenos Aires.

making several pitstops *en route*, the building settled in the hill town of Loreto around 1295. A basilica was built over the house beginning in 1469, while a marble sheath over the sacred structure was built in the sixteenth century, making the Holy House another building-in-a-building-in-a-building. There it rests still today, slightly off-axis with the nave as if to remind visitors of its peripatetic tendencies, and that its origins are distinct from the construction of the basilica itself.⁴⁹ Elsewhere, less miraculous but nevertheless impressive forces have led to other houses inside buildings. Notable examples include the Schenk houses that have been squeezed mercilessly inside the Brooklyn Museum in New York; the former home of Argentina's seventh president, Domingo Sarmiento, now preserved in a giant vitrine in Buenos Aires [13]; and Adam Kalkin's Bunny Lane house in Bernardsville, New Jersey from 2001, which uses an industrial shed to house a nineteenth-century timber cottage.

While these encased houses resonate with Summerson's explication of miniature architectures and aedicules, they are clearly distinct, not least because they are actual full-scale buildings confined within another structure. Moreover, the spatial and formal quality of Gothic aedicules differs significantly from those building-in-buildings that interest us here. As described by Summerson, the aedicular system of Gothic architecture is integrative and unifying, wherein the space of the smallest aedicule is contiguous with that of the larger interior. By contrast, the most pronounced examples of buildings-in-buildings examined in this paper stand apart from their enclosures. Still, there is an important connection. While buildings such as the

Hill House are not miniature, their placement inside other buildings can, nevertheless, have the unexpected *effect* of miniaturisation. As Samantha Hardingham has commented on the experience within the Hill House Box: 'Once inside the Box and atop the highest walkway the enormous semi-suburban mansion shrinks to the size of a doll's house and as a viewer one cannot help but become immediately involved, curious and amazed.'⁵⁰ Thus, by containing a building within a building, our perception of them shifts. Captured and domesticated by the interior of another structure, we more readily apprehend the objecthood of the building as an artefact, and as a thing, rather than as a space or environment to be inhabited. Put another way, scale is no longer determined relative to our own corporeal bodies, but to our knowledge of other objects. Buildings-in-buildings invoke our sympathy for the miniature and the appeal of the little house, turning full-sized architecture into real life fantasies.

Theatres of preservation and display

Miniaturisation is not the only side effect of placing one building inside another. As Rob Krier suggests in his studies of architectural composition, defining one space inside another intensifies the experience of that space, creating an almost sacred space within.⁵¹ Sally Stewart, head of Glasgow's Mackintosh School of Architecture, also observes these kinds of effects produced by the enclosure of the Hill House Box. She writes of the new envelope that 'it is a registration; of the degree of intervention required, of just how vulnerable and fragile the Hill House has become.'⁵² At



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the same time, she comments on how the container intensifies, and concentrates, the desire to look and observe: 'It feels as if we are exploring a model of the house at scale one to one, allowing us to analyse and dissect the complex composition of the house.'⁵³

Arguably, the increased attention the enclosure offers that captured object, actually works in combination of the effects of the miniaturisation of the house. As Millhauser writes:

*The miniature [...] has a special and rather complex relation to detail. The very fact of smallness demands in us an increased attention; the face is brought close to the object, and in many instances the size of the face and even of the eyes has become gigantic in relation to the object. The eye, blazing down in an act of fierce attention, experiences a hunger for detail. This is a point of utmost importance, for the eye seized by the miniature will quickly tire if it does not perceive thoroughness of execution, richness of detail.'*⁵⁴

These effects are not unknown to the architects of the Hill House Box, who also explain how their new steel container frames and represents the house within, as if it were a precious artefact or artwork on display, demonstrating the museological and exhibitionary effect of buildings-in-buildings.

Such effects are particularly evident when new buildings are constructed over extant buildings in-situ, such as Bernard Tschumi's Le Fresnoy, with its enormous steel roof extending over a collection of smaller aging structures. As one critic writes of that project:

To cover an existing edifice with an exterior envelope [...] highlights the existing edifice, exhibiting its

archaeology, to the point that the new building becomes the display space, the frame, the vitrine of the old one.

*[Hence, to] envelop the edifice is to suspend it, to hang it much as paintings are hung in a museum.'*⁵⁵

In the case of Tschumi's project, the museological effect of the roof over the complex of existing buildings appears to be an unintended consequence of what he argues to be a practical design strategy that makes 'architecture without resorting to design'.⁵⁶ In other cases, however, the design of new sheltering structures seem to consciously wield this museum effect, intensifying the symbolic and ceremonial act of preservation, reverence, and remembering. This is evident in sites such as the former home of a Nazi SS commander at the Westerbork concentration camp in the Netherlands [14],⁵⁷ as well the retained portion of a café building from the Utøya massacre site in Norway where thirteen people lost their lives in 2011.⁵⁸ Certainly, such buildings are intended to protect sites from the destructive effects of weather but they are also used to transform them into memorials that capture the building, and time itself, within a protective envelope.⁵⁹ Further, they recall Summerson's description of the symbolic and ceremonial function of protective canopies rather than their empirical shelter.

¹⁴ Residence of SS Commander Albert Konrad Gemmeker, Westerbork concentration camp, inside glass enclosure by Oving Architecten.

Of course, the in-situ or ex-situ museological transformation of existing buildings involves not only conceptual shifts, but physical changes as well. Most obviously, being placed inside another structure changes a building by removing it from its context.⁶⁰ All museums create this kind of distance and detachment between objects and their origins, but it is all the more conspicuous for works of architecture because buildings aren't usually movable. Museumification also destroys the utility of buildings, fundamentally changing our relation to them by removing their capacity to be occupied. In the museum, they become more akin to natural history specimens, extracted from the wild and subjected to intense visual inspection. Such changes not only serve to reinforce the objecthood of buildings-in-buildings as previously argued but, in turning them into things to be both preserved and observed, buildings-in-buildings also recalibrate a visitor's physical and spatial relationship to an existing building by installing what Greer Crawley has described as a spectatorial mode of spatial experience.⁶¹ My claim is that by turning users into spectators, buildings-in-buildings establish a kind of spatial theatre, and a theatricality that is produced in the 'perceptual dynamics linking the onlooker with [...] something that is looked at'.⁶² As Josette Féral explains, theatricality can emerge:

*through a spectator's gaze framing a quotidian space that he does not occupy. Such actions create a cleft that divides space into the 'outside' and the 'inside' of theatricality. This space is the space of the 'other'; [of] alterity and theatricality.*⁶³

In other words, by decontextualising an existing building, and turning it into a museological object that is observed rather than used, the outermost structure can establish a distance between the quotidian space of the observer, and the 'other' space occupied by the encapsulated building. This other space is, as Féral suggests, inherently theatrical but, more than this, it is also a representation, and, necessarily, a space of fiction.⁶⁴ We might therefore surmise that another effect of placing one building inside another is, again, a sense of fantasy: of turning

real buildings into stage sets. It is an idea that echoes Summerson's discussion of the miniature, and buildings-in-buildings as a vehicle for the imagination.

Ultimately, what is at stake in these encounters between different architectures concerns precisely how the compounding and conspiring effects of buildings-in-buildings come to alter, and interfere with, our experience and perception of what are often significant pieces of architecture. Rather than simply preserve and protect extant buildings, the act of physically containing them within the museological framework of another building also transforms them into something else: not just into tools of edification, but into instruments of imagination, raising questions of authenticity and the objectivity of the museum as a repository of the truth. In this sense, buildings-in-buildings have a certain affinity to another kind of architecture in the museum: namely nineteenth-century plaster cast collections that occupy a similar space between the authentic and the imaginary, between fact and fiction.⁶⁵

Having arrived at this point, I do not mean to imply that we must respond with despair and disdain at the infiltration of theatricality, imagination, and fantasy into the worlds of the museum and architectural preservation. On the contrary, as Greer Crawley points out, 'the museum has a long-established tradition of being the location for spectacular theatrical presentations'.⁶⁶ The particular drama of buildings-in-buildings makes us more acutely aware of these practices. Moreover, I argue that – while there are a diverse range of buildings-in-buildings to be found in various contexts around the world – it is in the museum, and related spaces of conservation, that such architectures reach their most exciting and emphatic expression: where their language and vocabulary is most fully formed. Indeed, it is largely only in a museological context that such intense and fantastical close encounters between stylistically and temporally diverse buildings – like the Hill House and its box – are able to exist at all.

Notes

1. 'About the Hill House: Charles Rennie Mackintosh's Architectural Masterpiece Turns Art into a Home', The National Trust for Scotland <<https://www.nts.org.uk/visit/places/the-hill-house>>; Niall Patrick Walsh, 'New Video Tells the Story of a Dissolving House Saved by a Record-Breaking Metal Box' (10 February 2022) <<https://archinect.com/news/article/150298217/new-video-tells-the-story-of-a-dissolving-house-saved-by-a-record-breaking-metal-box>> [accessed 3 November 2023].
2. 'The Hill House Box', Carmody Groarke <<https://www.carmodygroarke.com/hill-house/>> [accessed 3 November 2023].
3. Andy Groarke, 'A Temporary House for a House', in *The Hill House: Not Forever*, ed. by Rik Nys (Cologne: Walther König, 2021), p. 60. The mesh enclosure is said to form the largest sheet of chainmail in the world, made up of more than thirty-two million rings. Mechanically fabricated in roles, the chainmail sections were joined by hand on site. See pp. 24, 26. Also Walsh, 'New Video Tells the Story of a Dissolving House Saved by a Record-Breaking Metal Box'.
4. 'Mackintosh's Hill House Reopens Inside a Box' (31 May 2019) <<https://www.bbc.com/news/uk-scotland-48461850>> [accessed 3 November 2023]. The architects for the project suggest that the conservation project could take as long as fifteen years. See: 'The Hill House Box'.
5. Groarke, 'A Temporary House for a House'.
6. 'The Hill House Box'. The architect's website states that: 'Rather than incarcerate the house away from view whilst the restoration is undertaken, a more radical approach to active conservation has been taken [...] Within this safe, sheltered construction working territory, the "museum" will provide a remarkable public visitor

- experience of the conservation in progress, achieved by an elevated walkway which loops around and over the Hill House at high level. The museum's enclosure also contains visitor facilities in a timber standalone building.'
7. Robert Venturi, *Complexity and Contradiction in Architecture* (New York, NY: Museum of Modern Art / Graham Foundation for Advanced Studies in the Fine Arts, 1977), p. 70.
 8. German architect Oswald Mathias Ungers identifies this pattern of accumulation and growth as an inherent part of cities and buildings alike. Regarding the later, Ungers writes: 'The church of St. Severinus in Cologne may be seen as the prototype of growth of this kind. Here five different layouts of five churches that were built one on top of the other in succession are superimposed, and elements of each are still in existence and can be distinguished. Here the theme of the doll inside a doll or of the house within a house has operated over the course of time, and therefore more or less by chance.' O. M. Ungers, *Architettura Come Tema = Architecture as Theme, Quaderni di Lotus = Lotus documents* (New York, NY: Electa/Rizzoli, 1982), p. 57. Similar cumulative additions over centuries also have a conspicuous presence in the Great Mosque of Cordoba, Spain. There, however, the primary expression of a building inside a building was established not through its successive expansions, but with the singular insertion of a Catholic chapel, transept, and choir at the centre of the vast structure beginning in the sixteenth century.
 9. See Venturi's writings on the expression of building layers in Venturi, *Complexity and Contradiction*, p. 74.
 10. A similar example exists in northern New South Wales, Australia, where the Tweed Regional Gallery has recreated a suite of rooms from the home and studio of renowned Australian painter, Margaret Olley, including a number of exterior walls.
 11. Venturi, *Complexity and Contradiction*, pp. 70–8. Venturi points out that the disjunction of multiple enclosures, have a long history, despite their rarity in the twentieth century. Modern architecture was, after all, fixated on the flowing continuity of inside and outside. Still, he identifies these intraspatial characteristics in the work of Philip Johnson – namely the doubled canopies of the Guest House at New Canaan, and in the Kneses Tifereth Israel Synagogue in Port Chester, NY – drawing on the architecture of John Soane's famed breakfast room of the Lincoln's Inn Fields house. 'Soane uses interior domes in square spaces even in small areas like the breakfast room at Lincoln's Inn Fields. His fantastic juxtapositions of domes and lanterns, squinches and pendentives and a variety of other ornamental and structural shapes elsewhere work to enrich the sense of enclosure and light. These layered structural-ornamental elements are sometimes vestigial (almost in a two dimensional pattern), but they give the complex effect of actually detached spatial layers.' Venturi, *Complexity and Contradiction*, p. 77.
 12. David B. Brownlee and David G. De Long, *Louis I. Kahn: In the Realm of Architecture* (Los Angeles: Museum of Contemporary Art; New York: Rizzoli International, 1991), pp. 68–70.
 13. Louis Kahn, 'Kahn', *Perspecta*, 7 (1961) <<https://doi.org/10.2307/1566863>> [accessed 3 November 2023].
 14. Charles W. Moore, Gerald Allen, Donlyn Lyndon, *The Place of Houses* (Berkeley, CA: University of California Press, 2000), p. 51. However, Moore notes that the first aedicular house was his design for the Jobson House in 1961. Charles W. Moore, 'The Yin, the Yang, and the Three Bears', in *Charles Moore: Buildings and Projects 1949–1986*, ed. by Eugene J. Johnson (New York, NY: Rizzoli, 1986), p. 18.
 15. Moore, 'The Yin, the Yang, and the Three Bears', p. 18; Jorge Otero-Pailos, *Architecture's Historical Turn: Phenomenology and the Rise of the Postmodern* (Minneapolis, MN: University of Minnesota Press, 2010), p. 111. Otero-Pailos explains Moore's association of the aedicule with the element of fire, suggesting that, at Orinda, the aedicule functions like a replacement of the traditional hearth as the centre of the domestic home. This interpretation of the aedicule is distinct from that of Summerson (examined later), as the alleged source of Moore's interest. It also connotes possible connections to Inglenooks as fireside recesses or 'rooms' within larger spaces, albeit in most cases without a distinct break between their interiors.
 16. More recently, and in a very different context, Japanese architect Sou Fujimoto designed the House N in Oita, Japan (2008) as a series of three concentric shells. There, however, the nesting of rooms in rooms seems to derive more from a formal experiment that places a dining and living room in the innermost space, while the bedroom cast out into a secondary volume.
 17. Frank Lloyd Wright's designs for high-backed chairs to define a discrete dining space within a larger room is certainly related to the kinds of spatial effects created in Moore's interiors.
 18. Many other examples exist, including the Unabomber's cabin, which, for a short time, was on display in the Newseum in Washington, DC.
 19. 'Royal Exchange Theatre, Manchester' <<https://www.levittbernstein.co.uk/project-stories/royal-exchange-theatre/>> [accessed 3 November 2023].
 20. 'Royal Exchange Theatre. Levitt Bernstein, Manchester, 1976' <<https://www.ajbuildingslibrary.co.uk/projects/display/id/2308>> [accessed 3 November 2023].
 21. A similar approach of exhibiting the exhibition pavilion was adopted by architects Caruso St John, with artist Marcus Taylor, for the British Pavilion at the 2018 Venice Architecture Biennale. Entitled 'Island', the project surrounded the existing pavilion in scaffolding, turning the empty building into an exhibit within an open web of steel structure.
 22. Kenneth Frampton has described the project as follows: 'As an initial response to the task of converting an existing nineteenth-century double-villa, the architect opted for the strategy of providing a specific boundary not only in order to augment the capacity of the house, but also to transform, with a simple, symbolic gesture, a pre-existing residential structure into a public institution. At the same time, the erection of a storey-high wall around the entire site was intended to transform the house into an exhibit-in-itself. Once again we are confronted with a scheme which is predicated on the theme of a "house within a house" wherein one membrane of the structure is used to encase another and so on.' Kenneth Frampton, 'O. M. Ungers and the Architecture of Coincidence', in *O. M. Ungers: Works in Progress*,

- ed. by Kenneth Frampton and Silvia Kolbowski (New York, NY: Institute for Architecture and Urban Studies; Rizzoli International Publications, 1981), p. 4.
23. Ungers, *Architettura Come Tema = Architecture as Theme*, p. 63.
 24. *Ibid.*, p. 57.
 25. Naomi Stead, 'Within and Without Architecture', *Places* (January 2017) <<https://placesjournal.org/article/within-and-without-architecture/>> [accessed 3 November 2023].
 26. Jen Mills, 'This Family Made their Home into a Giant Greenhouse to Keep Heating Bills Down', *Metro* (12 November 2015) <<https://metro.co.uk/2015/11/12/this-family-made-their-home-into-a-giant-greenhouse-to-keep-heating-bills-down-5496940/>> [accessed 3 November 2023].
 27. This project appears to be a likely precedent or conceptual reference for Carmody Groarke's Hill House Box project: an exhibition model of the 1972 inflatable was presented by the London architects for the 2019 exhibition 'Alternative Histories'. Organised by Drawing Matter, the exhibition invited architects to imagine a creative exchange with another architect's work from the past. In this case, Carmody Groarke's model solidified the volume between the fabric inflatable and the Haus Lange, highlighting an interest in the interstitial space between. See: 'Alternative Histories: Carmody Groarke on Haus-Rucker-Co', *Drawing Matter* (22 February 2019) <<https://drawingmatter.org/ah-carmody-groarke-on-haus-rucker-co/>> [accessed 3 November 2023].
 28. Edward N. Kaufman, 'The Architectural Museum from World's Fair to Restoration Village', *Assemblage*, 9 (1989), 22.
 29. Wallis Miller, 'Cultures of Display: Exhibiting Architecture in Berlin, 1880-1931', in *Architecture and Authorship*, ed. by Tim Anstey, Katja Grillner, Rolf Gullström-Hughes (London: Black Dog Publishing, 2007), pp. 104-05. Also see: Dick van Gameren, 'Die Wohnung unserer Zeit Berlin: Ludwig Mies van der Rohe et al.', *DASH: Delft Architectural Studies on Housing* 9, Housing Exhibitions (2013).
 30. 'Riga Contemporary Art Museum' <[OMA: oma.com/projects/riga-contemporary-art-museum](http://oma.com/projects/riga-contemporary-art-museum)> [accessed 3 November 2023].
 31. Carolina A. Miranda, 'What Would the Real "Brady Bunch" House Architect make of HGTV's "Very Brady Renovation"?', *Los Angeles Times* (23 September 2019) <<https://www.latimes.com/entertainment-arts/story/2019-09-23/brady-bunch-house-architect-hgtv-very-brady-renovation-west-elm-modernism>> [accessed 3 November 2023].
 32. Ada Louise Huxtable, *The Unreal America: Architecture and Illusion* (New York, NY: The New Press, 1997), pp. 78-80.
 33. Alex Lehnerer and Savvas Ciriacidis, *Bungalow Germania: German Pavilion - 14th International Architecture Exhibition, la Biennale di Venezia 2014* (Ostfildern: Hatje Cantz, 2014). Similar formal strategies were also employed by artists Michael Asher and Daniel Buren in 1982 with interventions constructed at Mies van der Rohe's Haus Lange and Haus Esters in Krefeld. There, Asher superimposed a copy of the Lange house, turned ninety degrees, while Buren juxtaposed the Lange house plan on top of the Esters house.
 34. Gaston Bachelard's 'The Dialectics of Outside and Inside' is an obvious example, while Ungers' discussion of the 'house inside a house' theme in his own practice is a notable exception. Gaston Bachelard, 'The Dialectics of Outside and Inside', in *The Poetics of Space* (Boston, MA: Beacon Press, 1994); Ungers, *Architettura Come Tema = Architecture as Theme*.
 35. John Summerson, 'Heavenly Mansions: An Interpretation of Gothic', in *Heavenly Mansions: and Other Essays on Architecture* (New York, NY: W. W. Norton, 1963).
 36. *Ibid.*, p. 2.
 37. *Ibid.*, p. 3.
 38. Certainly, he notes the importance of the aedicule to Roman and Hellenistic architecture - including the striking example of the second century BCE Temple of Bacchus at Baalbek, which he describes as a 'temple within a temple'. *Ibid.*, p. 4. He might, however, have also invoked another structure, referred to simply as the Aedicule, which was built around the presumed tomb of Jesus Christ within the Church of the Holy Sepulchre in Jerusalem.
 39. *Ibid.*, p. 16.
 40. *Ibid.*, p. 20. According to Summerson, the cathedral should be seen as growing out of the aedicular, rather than the aedicular a reduction of the cathedral.
 41. François Bucher, 'Micro-Architecture as the "Idea" of Gothic Theory and Style', *Gesta*, 15:1.2 (1976).
 42. *Ibid.*, p. 83.
 43. As Donlyn Lyndon writes in reference to the canonical essay, these play houses also allow children to imagine 'magnifying their presence in the larger world'. Donlyn Lyndon and Charles Moore, *Chambers for a Memory Palace* (Cambridge, MA: MIT Press, 1994), p. 141.
 44. Suzanne Menghraj, 'The Infinite in the Infinitesimal', *Guernica* (15 July 2009) <www.guernicamag.com/the_infinite_in_the_infinitesi/> [accessed 3 November 2023].
 45. Steven Millhauser, 'The Fascination of the Miniature', *Grand Street*, 2:4 (1983).
 46. *Ibid.*, p. 45.
 47. Susan Stewart, *On Longing: Narratives of the Miniature, the Gigantic, the Souvenir, the Collection* (Durham, NC: Duke University Press, 1993), p. 61.
 48. See: <<https://www.dezeen.com/tag/houses-in-houses/>> [accessed 3 November 23].
 49. Alexander Nagel and Christopher S. Wood, *Anachronic Renaissance* (New York, NY: Zone Books, 2010), p. 212.
 50. Samantha Hardingham, 'Not Forever', in *The Hill House: Not Forever*, ed. by Nys, pp. 53-4. Likewise, Sally Stewart writes: 'The sensation of the building being miniaturised is overwhelming'. Sally Stewart, 'Things Change: First-Hand Accounts', in *The Hill House: Not Forever*, ed. by Nys.
 51. Rob Krier, *Architectural Composition* (London: Academy Editions, 1988), pp. 73, 76.
 52. Stewart, 'Things Change', p. 45.
 53. *Ibid.*
 54. Millhauser, 'The Fascination of the Miniature', p. 131. Millhauser later adds while 'the miniature seizes the attention by the fact of discrepancy, and holds it by the quality of precision'. *Ibid.*, p. 132.
 55. Alain Guiheux, 'Critical Workshop', in *Tschumi Le Fresnoy: Architecture In/Between*, ed. by Bernard Tschumi (New York, NY: Monacelli Press, 1999).
 56. He explains that his intention was to 'achieve architecture without resorting to design' while alleviating the costly and intrusive process of restoring, waterproofing, and inserting new services into each independent structure. *Ibid.*, pp. 9-13.
 57. The glass cover was designed by Oving Architecten in 2015. See: Jessica Mairs, 'Oving Architecten Shrouds Concentration Camp House in Glass as a Memorial to

- the Holocaust' (6 October 2015) <www.dezeen.com/2015/10/06/oving-architecten-concentration-camp-house-glass-memorial-holocaust-holland/> [accessed 3 November 2023].
58. The 2016 enclosure by Erlend Blakstad Haffner protects and conceals the existing building fragment while creating a new learning centre and memorial for the victims of the massacre. See: Amy Frearson, 'Utøya Massacre Site Given "New Beginning" by Architect Erlend Blakstad Haffner' (13 September 2016) <www.dezeen.com/2016/09/13/utoya-norway-island-massacre-site-architect-erlend-blakstad-haffner-hegnhuset-memorial-learning-centre/> [accessed 3 November 2023].
59. At the Utøya café, this is particularly palpable. The new enclosure protects the extant structure from weather, permitting its window to be left open – a powerful reminder of the moment in which those people inside tried desperately to escape. Ibid.
60. Note that whereas the Hill House Box attempts to preserve views to and from the building in its landscape, the structure over the Utøya café uses reflective glass to consciously disguise the building within for those who do not wish to see it. In both cases, the enclosures still radically change the relationships of these buildings to their contexts.
61. Greer Crawley, 'Staging Exhibitions: Atmospheres of Imagination', in *Museum Making: Narratives, Architectures, Exhibitions*, ed. by Suzanne Macleod, Laura Hourston Hanks, Jonathan Hale (Abingdon, Oxon; New York, NY: Routledge, 2012).
62. Josette Féral, 'Theatricality: The Specificity of Theatrical Language', *SubStance*, 31, 2:3 (2002), 105.
63. Féral, 'Theatricality', pp. 97–8.
64. Ibid., p. 99.
65. This history of architectural plaster casts has been covered extensively in recent years by Mari Lending. See: Mari Lending, *Plaster Monuments: Architecture and the Power of Reproduction* (Princeton, NJ: Princeton University Press, 2017), still image.
66. Crawley, 'Museum Making', p. 14.

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The author declares none.

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