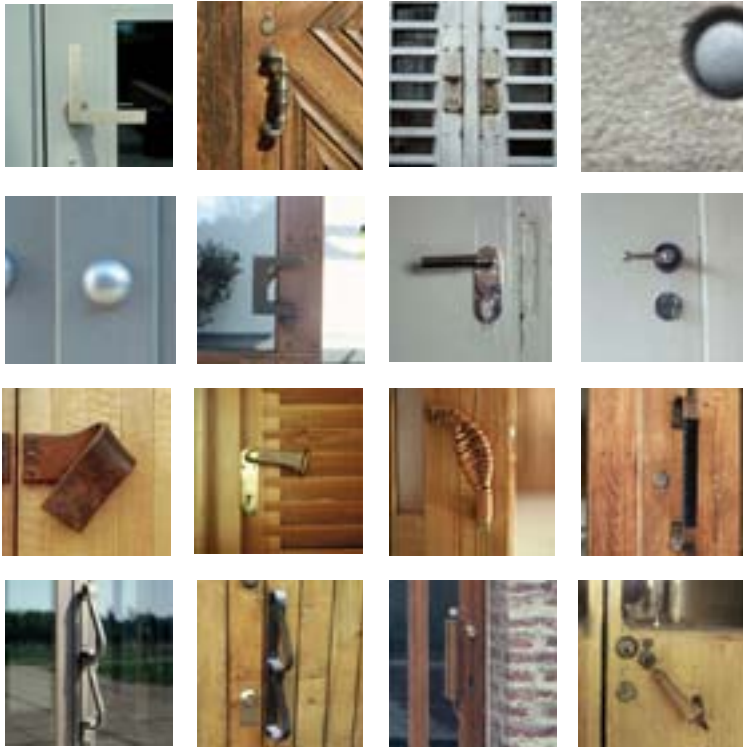


**SS DOOR HANDLES-
OR WHAT IS A DETAIL?**



SS DOOR HANDLES- OR WHAT IS A DETAIL?

What precisely, is an architectural detail? Is detailing nothing more than small scale architectural design, requiring a bit more technical knowledge simply because it is at the end of the process, or is it something else? Many would argue that the concept of the detail is of no importance in Modern architecture. Paul Rudolph and Philip Johnson maintained that Modern architecture has no details, and Rem Koolhaas argues that there should be none.

For those who believe that the idea of detailing has relevance, the simple, popular view is that detailing is the extension of the large scale ideas of the building into the small. Good detailing will enhance those ideas; bad detailing will obscure them. Good detailing is simply a question of consistency.

A smaller group holds an opinion not so much contrary as the inversion of the above, that architecture is about details, that the whole is the sum of its parts. Within any phase of Modernism there are buildings whose architecture is inseparable from its components and the characteristic ways in which they are assembled. The Greenes, Mies, Rietveld, and Scarpa designed buildings which without their details would lack all unity and coherence.

There is an even smaller group who believe details undoubtedly exist but not serve this function. They do not relate the part to the whole; they do not establish a visual unity. This type of detail consists of parts which are autonomous, in which detailing constitutes an independent arena of design.

The question of the appropriate detail, and thus of the appropriate door handle, is part of some larger questions. What is the appropriate relationship of the architectural part to the architectural whole? What, exactly, do we mean by scale? If the forces acting on two architectural elements-structure, performance, program- are the same, how is the solution changed by differences in size, if at all? Let us begin with three handles that encapsulate the basic argument followed by five sections on answers to the question of what is appropriate detail, all illustrated by door handles, albeit sometimes through their absence.



Peter Eisenman, Wexner Center

The handle replicates the pattern of the building as a whole—a three-dimensional cage of square tubes—at a small scale. This is an example of what might be called the cloning theory of detailing, the detail as a kind of DNA from which the building is generated.



Walter Gropius, The Dessau Bauhaus

Unlike Eisenman's handle, it lacks a one to one formal correspondence with the building itself, which contains few cylinders, yet it unquestionably belongs there. For Gropius in the 1920s, the industrial was manifested in the geometric, and the Bauhaus- the school as factory- was very much in conceptual alignment with the prisms and cylinders of the handle. It does not replicate the geometry of the building but it is ideologically sympathetic. It is an example of consistent detailing, of a conceptual if not formal unity of part and whole.



Alvar Aalto, Saynatsalo Town Hall

There is nothing anywhere in the building anything like it except perhaps the exterior door handle. Why is it then, that it is the most easily recognizable of these examples, that we know immediately that it is Aalto's? Perhaps because the form and concept are recognizable as connected to his other work than to this building. In relation to its immediate context it is both autonomous even subversive; it works against rather than with the concept of the building as a whole. This is the essence of the argument, that the significant detail is not that which is formally or conceptually consistent but that which is formally and ideologically autonomous.

The Detail as Ornament

The concept of the detail is relatively young; the concept of ornament is much older and is a subject with its own much broader and longer history, but two attitudes toward ornament and its relation to buildings as a whole have found their way into Modernism.

The first is the idea of a building whose parts are the small replicas of its totality. It is a concept particularly associated with Gothic. Wilhelm Worringer wrote: *Gothic man seeks to lose himself not only in the infinity of the large, but also in the infinity of the small. The infinity of movement which gets macrocosmic expression in the architectonic form of the whole, gets microcosmic expression in every smallest architectural detail . . . It repeats in miniature but with the same means the expression of the whole . . . A pinnacle tip is a diminutive cathedral.*¹

For Gothic rationalists, ornament was about structural expression, and, in theory, the same forms could not be used for different purposes if the material and functional considerations were not the same. This was however, a frequently broken guideline.

John Ruskin disdained both the idea of ornament as constructional expression and as a means of formal unity, arguing that ornament had its own higher independent purpose. He disliked repetitive ornaments, particularly Classical ones: . . . *We must no more expect to derive either pleasure or profit from an architecture whose ornaments are of one pattern, and whose pillars are of one proportion, than we should out of a universe in which the clouds were all of one shape and the trees all of one size.*

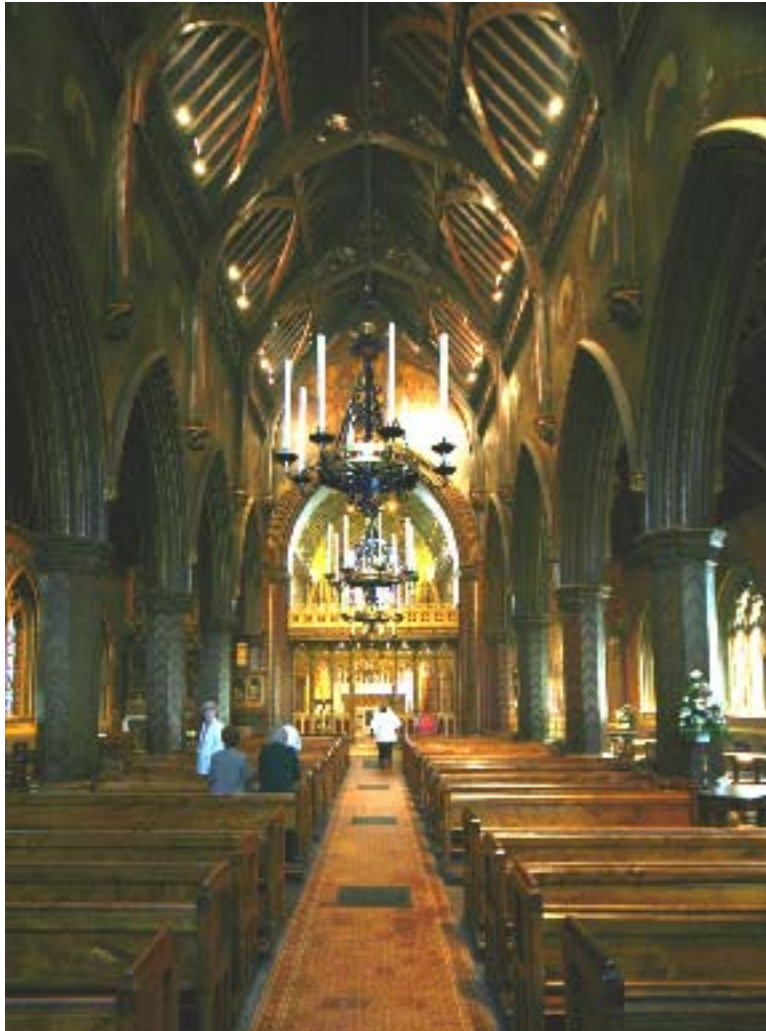
Likewise he saw ornament as having a role autonomous from architecture: *Architecture consists distinctively in the adaptation of form to resist force. . . . but the beauty of ornament itself is independent of the structure, and arrived at through powers of mind of a very different class from those which are necessary to give skill in architecture proper.*²

This opposition, between the concept of ornamentation as a decorative unity relating the parts of building to one another as opposed to the concept of ornamentation as an autonomous activity relating to the world beyond the building, became by extension two attitudes in Modernism—detailing as a formal and conceptual unity or detailing as autonomous design.



Bath Abbey, Restored by G. G. Scott

Late English Gothic- particularly the fan vaults of King's College Chapel, Peterborough Cathedral, and Bath Abbey- are the most extreme versions of the geometric unity described by Worringer. The lancet form occurs in the door, the window, the arch, the railing above the door and is the pattern imposed on the vault. It is sometimes structural, sometimes decorative, and it can be used in any material at any size. It does not however, occur in the door handle.



A. W. Pugin, St. Giles's, Cheadle

Pugin, a Gothic rationalist, disdained the use of characteristic forms of Gothic architecture at the small scale in his writings, although by his own admission he frequently did so in practice. He argued rather for the ornamentation of unclad structural elements. The front door of Cheadle has no handles or visible construction except fasteners. It is rather filled with two facing lions, the emblem of the church's patron, the Earl of Shrewsbury.



A. W. Pugin, St. Giles's, Cheadle

Pugin's primary concerns were religious and social, but he admired the 'honest' expression characteristic of Gothic or 'Pointed' architecture. He wrote of Gothic hardware: *. . . Hinges, locks, bolts, nails &c. which are concealed in modern designs, were rendered in Pointed architecture rich and beautiful decorations.* Here at the side door, actually the main entry, the double lion motif is repeated but hinges and fasteners are used as an integral part of the design.³



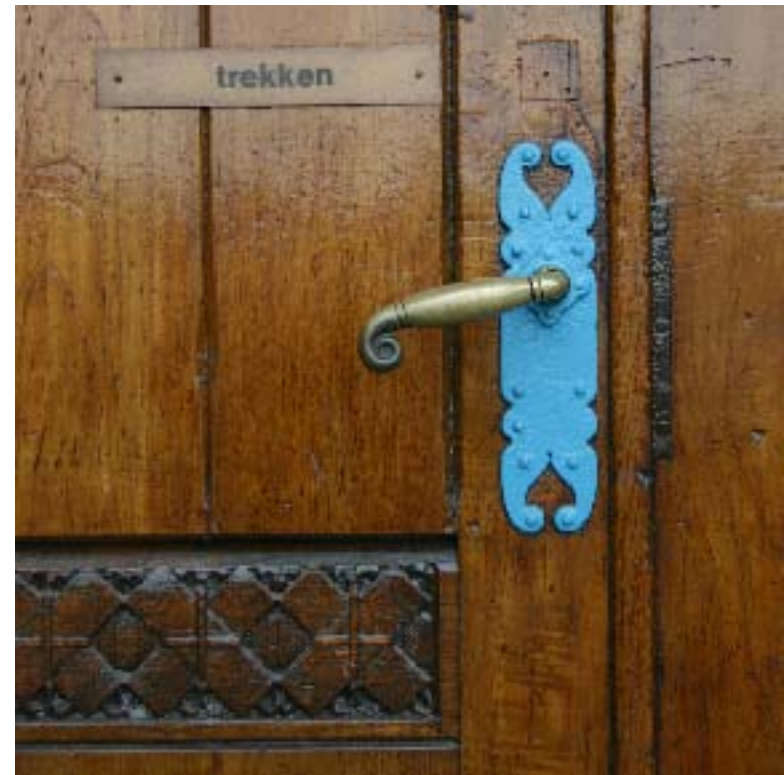
H. H. Richardson, Glasner House

Richardson's hardware, with its exposed bolts and hinges, is similar to Pugin in intent, but the hinge is vastly over designed and the door handle underdesigned.



Deane and Woodward, Oxford Museum

Despite the building's constructional inventiveness and rigour, its complex and original ornament has little more to do with the construction than association, as in the floral iron capitals. John Ruskin, who was one of the founders of the museum, argued that ornament was largely unrelated to construction. This door handle, like the rest of the building, is an expression of the building's content; It is natural history museum. The ornament forms a kind of parallel exhibit, primarily of plant forms in stone and metal.



H. P. Berlage, Stock Exchange, Amsterdam

Berlage's ornaments are minimal but significant. Some are drawn from Gottfried Semper; some manifest political themes, but many, including the door handle, are inspired by images plants and animals drawn from Ernst Haeckel's *Kunstformen der Natur*. It recalls the delicate foliage of Jugendstil but this ornamental language is confined to only the small elements of the building- hardware and lamps- forming a kind of autonomous narrative within the whole.⁴



Burnham and Company, Reliance Building

The detail as advertising.

The Detail as Motif

Modernist claims to the contrary, the ornamental tradition of motival detailing of Gothic and Art Nouveau found its way into Modern architecture in a variety of ways, and what it lost in decorative exuberance it gained in conceptual importance. For many Modernists the motif, in various modes, became the basis for whole languages of design- as the expression of organic form, as cultural/spiritual symbols, as repetitive types of joinery, as a repetitive symbol, or simply as repetitive geometry used to achieve stylistic unity or simply style. Motival detailing is not associated with any historical period. Josef Hoffmann, Aldo van Eyck, and Carlo Scarpa especially can be numbered among its practitioners.

The most popular of these modes was the organic. Its origins lay in the German Romantic concept of organic life- a primitive if inaccurate theory of biology something like our modern understanding of DNA- the part from which the whole is generated. It began with Goethe, who wrote in *Italian Journey*: *It came to me in a flash that in the organ of the plant that we are accustomed to call the leaf lies the true Proteus who can hide or reveal himself in all vegetative forms. From first to last the plant is nothing but leaf. . . The same laws will apply to all living organisms.*⁵

Emerson brought the idea in to American Transcendentalism: *A leaf or the eye of the leaf is the unit of botany, and that every part of a plant is only a transformed leaf to meet a new condition: and by varying the conditions, a leaf may be converted into any other organ, and any other organ into a leaf.*

Emerson expanded the idea to include all natural forms organic or otherwise. He wrote in 'Compensation':
. . .the universe is represented in every one of its particles. Every thing in nature contains all the powers of nature. Every thing is made of one hidden stuff . . . Each new form repeats not only the main character of the type, but part for part all of the details. . . Each one is an entire emblem of human life.

Thoreau agreed. He wrote in *A Week on the Concord and Merrimack Rivers*: *Every where it is nature's business constantly to create new leaves and to repeat this type in many materials (nature is) a vast manufactory of leaves- the leaf is her constant cipher. It is grass in the field. . . it flutters in the oak,- it spring in the mold on a jar- and in animal vegetable and mineral- in fluids and in crystals-plain or variegated- fresh or decayed it acts how a large part in the economy of the universe*⁶

It is not then surprising that Frank Lloyd Wright, who was brought up on Emerson, should restate this idea in one of his first writings on architecture in 1900:

*We marvel with a tinge of envy at the simple inevitableness with which the life principle in so slight a thing as a Willow wand, for instance, will find its fullness of expression as a Willow tree. . . .the secret of the acorn is the glory of the Oak. The fretted cone arises as the stately Pine. . . we walk in the cool, calm shade of the trees, and they say to us as they said to Emerson long ago, "Why so hot, my little man?"*⁷



Louis Sullivan, Guaranty Building

Either by influence or accident, Sullivan's methodology for designing ornament coincides with the transcendentalist idea of a geometrical structure underlying all organic forms, apparent in both the terra cotta blocks and the door handles of the Guaranty building.



Louis Sullivan, Charnley House

The motif on the projecting bay is repeated on the door, but turned 90 degrees.



Frank Lloyd Wright, Dana (Lawrence) House

The motif for Wright was far more than a device for controlling ornament but a pattern that determined the plan, section, and elevation. Wright wrote . . . *From one basic idea all the formal elements of design are in each case derived and held together in scale and character . . . its grammar may be deduced from some simple plant form that has appealed to me, as certain properties of line and form of the sumac were*



*used in the Lawrence (Dana) house at Springfield but in every case the motif is adhered to throughout.*⁸

There are several motifs in the Dana house-Sumac is used in the typical windows and the dining room frieze, Wisteria in the second floor windows above the entry, and butterflies in the lamps and fanlight at the entry, but the geometry of the Sumac motif also determines the upturned eave and the pointed bay windows.



Frank Lloyd Wright, Marin County Civic Center

The use of the organizing motif, although subdued in the work of Wright's middle years, dominates the work of his last decade; the circle in particular seems inescapable. Here it is used for arches, window openings, the circular ramp, handrails, cornice ornaments and everything in between, in plan and in section, large and small. The circles of the site plan find their way down to the door handles.



Eliel Saarinen, Hvittrask

Eliel Saarinen's view of organic form was similar to that of Goethe and Wright and based on two phenomena- *the existence of individual cells, and the correlation of these cells into individual tissue*. The part contained within it the character of the whole: *every single cell in these organisms becomes an expressive exponent of the species it belongs to*. These same principles, particularly correlation, were present in the constructions of man: *Whoever, if he were sensitive has traveled in those countries where towns were built in ancient times has no doubt felt that correlation is not an empty aesthetic theory. . . .*





Eliel Saarinen, Hvittrask

He has felt that the proper correlation of forms was consistently carried through the whole organism, beginning with the minor things in the rooms and residences and ending with the highest pinnacles of towers and turrets.⁹

The result, as with Wright, was a design strategy based heavily on motifs. Thus at Hvittrask the same spiralling form occurs in door handles, hinges, and the tops of columns.



Eliel Saarinen, Cranbrook School Library

The details of the Cranbrook School are organized around a few simple geometric motifs- concentric octagons, hexagons or squares, as in the concentric squares of the door itself. This door handle, however, sits outside the motival framework of the whole complex and is a welcome departure from this geometry. Saarinen wrote: *A healthy organism, through an orderly set of vibrations, always has rhythmic configuration of cell pattern; Whereas an unhealthy organism, through is disorderly set of vibrations shows a distinct leaning to disintegration.*¹⁰



Eliel Saarinen, Kingswood School, Cranbrook



The ornamental motif of Saarinen's early work evolved into more geometric patterns. The motif in the Academy is a flattened C shape, used in the benches and door handles. This is motivial detailing at its least convincing. The same shape is made to function as bench, hardware or ornament, in stone, bronze, or wood. Differences of function, material, structure and scale are suppressed in favor of a stylistic unity.

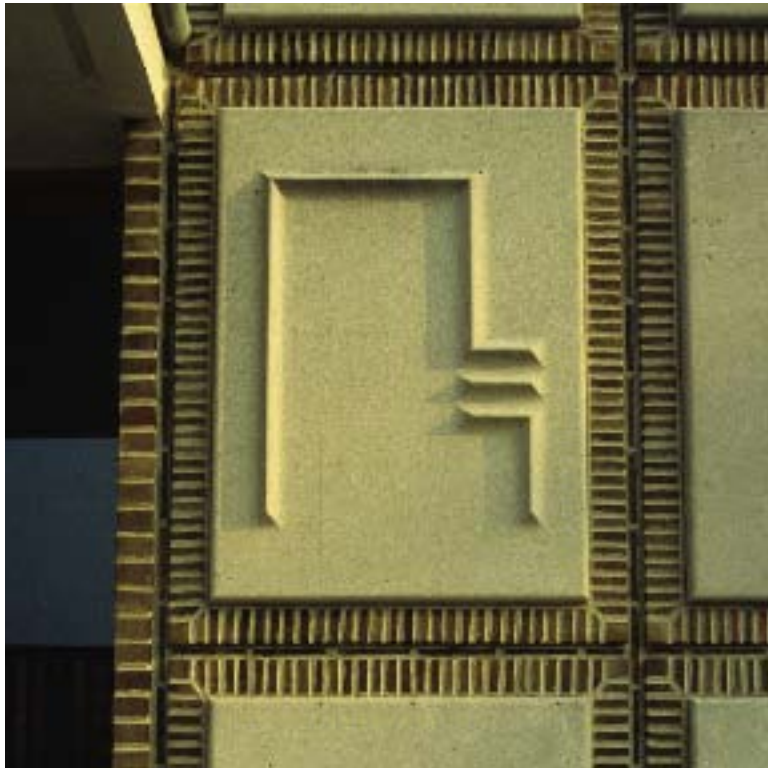
Cranbrook Academy Library, Exterior Door Handle, Interior Door Handle, Bench



Eliel Saarinen, Cranbrook Academy



Eliel Saarinen, First Christian Church, Columbus, Indiana



Eliel Saarinen, First Christian Church, Columbus, Indiana

The motif of the door handle is repeated in the stonework of the facade.





Thorncrown Chapel, Fay Jones

Jones work owes a great debt to Wright, so it is no surprise that he is a motival detailer. The triangles of the handle replicates almost exactly the rhomboid shape of the steel connectors at the intersection of the rafters of the interior wood truss, and the rhomboid occurs in both the window mullions and the intersection of the truss chords. It is also the primary motif in Wright's Robie house.



Marty Leonard Chapel, Fay Jones

The motif here is a 45 degree triangle, used in the doors, roof rafters, the cross bracing, the joist hangers, the candle holders and the door handle.



Thorncrown Worship Center, Fay Jones

The flat rhomboid shape that forms the steel connector for the roof truss rafters is replicated in the geometry of the window mullion and the shape of the door handle.



Fay Jones, Cooper Memorial Chapel

The Cooper chapel returns motival detailing to its Gothic origins. Roof, door, and handle take the shape of a stone Gothic arch, though the materials are steel, wood, and aluminum respectively. Jones here simply accommodates, rather than expresses, requirements of structure, construction, and comfort, sacrificing all other articulation to geometric unity. While some of Jones' work shows what can be accomplished with motival detailing, the Cooper Chapel does not. It is an example of motival detailing at its most superficial.



Gate to the Brion Cemetery, Carlo Scarpa (T(h)ed Ferringer)



Brion Cemetery, Font, Carlo Scarpa

To many Scarpa is the quintessential modern detailer, but his work relies heavily on motifs, often to its detriment. While Scarpa drew on the decorative traditions of Italy and Vienna, he also drew heavily on Wright, and one of his favorite motifs was also one of Wright's- the double intersecting circle. Another Scarpa favorite was the stepped echelon or ziggurat pattern, which is used on seemingly every surface at the Brion cemetery. These two motifs occur in one of the largest elements, the gate, and one of the smallest, the Holy water font.



Carlo Scarpa, Brion Cemetery, Door Pivot

The ziggurat motif occurs in the concrete walls, the concrete canopy and, in a miniature version in the door pivot.



Dogan Houses

(Huib Blum)

Aldo van Eyck argued that the chief problem with modern architecture was the absence of 'identifying devices:' *I am not so sure we are sufficiently aware of the fact that it is those identifying devices- call them images- which not only articulate visually but also frame civic association between people, i.e. which still posses direct physical meaning and still bear witness to this decay by day, which remain in our memory most persistently.*¹¹

What precisely these identifying devices were was represented in two cultures van Eyck admired- the Anasazi of the American Southwest and the Dogan people of Africa. The Dogan cosmic symbol is a circle in a square representing their view of the universe and is used in baskets, granaries, and ceremonial masks. Van Eyck wrote: *There is no limit to what the Dogan basket can hold, for with tits circular rim and square base it is at once basket and granary; at once sun firmament and cosmic system at once millet and the force which causes millet to grow . . . in order to be at home in the universe man tends to re fashion it in his own image, accommodate it to his own dimension. Constructed enclosure was hitherto seldom sufficient. There was always the limitless exterior beyond- the incomprehensible, intangible, and unpredictable. . . so his cities, villages and houses- even his baskets-were persuaded by means of symbolic form and complex ritual to contain within their measurable confines that which exists beyond and which is immeasurable; to represent it symbolically. The artifact- whether large or small, basket or city, was identified with the universe or with the power of the deity representing the cosmic order. It thus became a habitable place comprehensible form corner to corner, familiar and tangible.*¹²

The element, the circle in the square, which he also saw as having cosmic significance, was to become the principle motif of van Eyck's architecture.



Aldo van Eyck Hubertus House, Amsterdam

In a 1959 lecture Aldo van Eyck echoed Goethe's concept of the motif: *tree is leaf and leaf is tree- house is city and city is house- a tree is a tree but it is also a huge leaf- a leaf is a leaf, but it is also a tiny tree- a city is not a city unless it is also a huge house- a house is a house only if it is also a tiny city.*¹³ The motif in all of van Eyck's work is the same as that of the Dogan culture- the circle in a square- used at every scale in every material for every purpose. In Hubertus house, a later work, it has been reduced to a series of curves used in windows, partitions and door handles.



Alison and Peter Smithson, Dormitory, St. Hilda's College, Oxford

In a 1962 essay Peter Smithson used the examples of the Parthenon and the Ise Shrine to argue the validity of 'orders' in architecture. He said of the Parthenon: *The stone-Order is a metaphor of the once-actual construction. A metaphor is an explaining, a magical exact showing-forth. It does not involve exaggeration or falsification.*¹⁴ Smithson's own orders at times come close to motifs, as in the door here. The order of St. Hilda's is a freestanding wood screen over a concrete and masonry core. In true motival fashion the door takes the form of the wood screen. Smithson wrote of the Greek temple: *It is no exaggeration to say that one needs only a fragment of a temple to be put in touch with the buildings whole form.*¹⁵



Otto Wagner, Postal Savings Bank

While not a motival detailer on the order of Wright or Saarinen, Wagner did use geometric elements to unify a design. The horizontal mullions of the door parallel the horizontal lines of the stone facing and the door handles do the same. Though not as bound by motifs as his contemporary Hoffmann, Wagner used a system of what could be called structural motifs, the round fastener in particular. This is another type of motival detail, the repetitive joint or fastener.



Otto Wagner, Postal Savings Bank

Although Wagner used the circular fastener in functional ways, as in the aluminum caps covering the iron bolts that anchor the stone, he also used it as a motif- in ivory inlays in furniture and here in the circular door handle shown above. The technical origin of the patterns in Wagner's buildings give them a validity lacking in some of the other motival detailers but they nevertheless use shapes that tend to unite unrelated, disparate elements.



Otto Wagner, Neustiftgasse Apartments

Although the familiar round fasteners are used in this building they occur only in a few locations since the primary building facing is stucco rather than stone. Aluminum caps are embedded in the stucco, aluminum bolts hold the opaque glass in place, and round fasteners are used in the door. Here Wagner uses a lever handle rather than a round knob, perhaps because the circle is not so prevalent in this building as in others.



Edward Cullinan, St. John's College Library

The motif is the circle and it is used for the bench and plaza in front, the lantern, the columns and arches, the sinks and tap handles, the fasteners and the holes to accommodate them. The virtue of the circle here is that there are none in the surrounding older buildings, allowing Cullinan to use traditional forms without literal imitations. The door is built of circular segments and on a central pivot so that swings in a circle, defined by the tile paving below.



Edward Cullinan, Studley Royal Visitor's Center

Cullinan's use of motifs, particularly the circle, is present here, but more subtle than at St. John's. It occurs in the roof, the benches, and in the doors, both types of which are miniature version of the wall construction.



Steven Holl, Cranbrook Science Museum

The motif is by no means absent from contemporary design, particularly at Cranbrook. While this handle is perhaps not a motivational detail, it is certainly a clone, as the handle is the plan of the museum. It also approximates the J shape of the stone facade. The handle by Holl at the St. Ignatius Chapel takes almost the opposite approach.



Peter Eisenman, Wexner Center

Eisenman's clone-like handle, replicating the pattern of the building as a whole, could illustrate contemporary theories of detailing, which insofar as they exist (Frampton, Smithson), turn the idea of detailing as small scale design on its head, arguing that architectural design is the concept of the detail carried into the larger building.

The Non-Detail

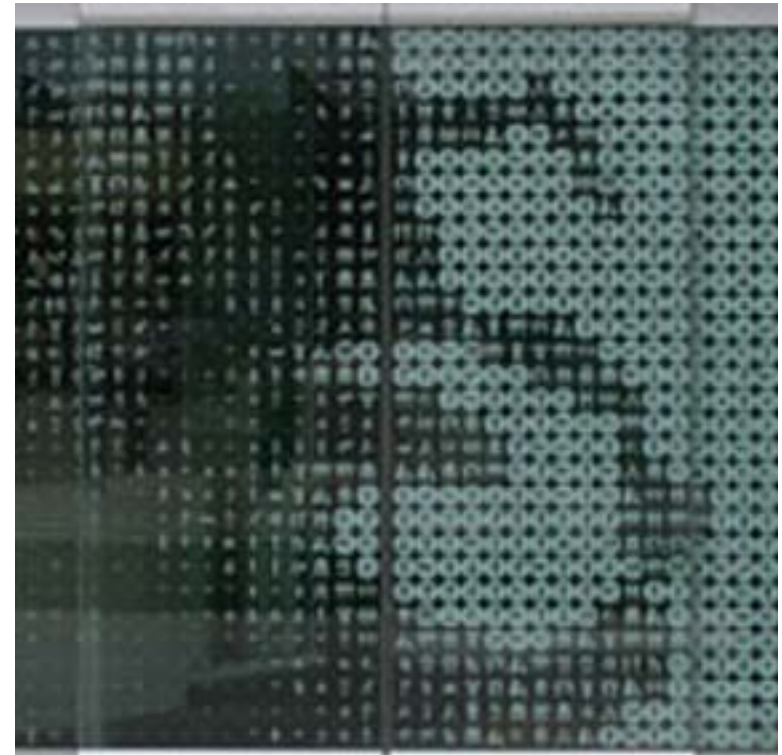
In 1963 the *Architectural Record* asked the prominent practitioners of the day to write a short essay on their philosophy of detailing. Strangely, few of those asked could give a definition of detailing, much less articulate a philosophy, and all seemed to view the concept as being of little importance. Philip Johnson wrote: *Can we ever speak meaningfully of details today? . . . The Robie house of the 1900's is full of beautifully worked out "details." The Guggenheim Museum of the 1950's has none, not even a stair rail. Details today are hardly more than enlarged structural connections and corners.* Marcel Breuer found the concept no less irrelevant: *Today our details tend to exist solely for service of the whole structure, and become inherent particles of the whole. . . . So much so that details often fuse completely with the greater architectural form,* and Paul Rudolph emphatically declared: *there are no details.* While the concept of detailing can be said to be a decidedly modern one, it is a concept that made more than a few Modernists uncomfortable.¹⁶

Rudolph's non-definition- that Modernism has no details- is very much alive today. Rem Koolhaas wrote in 1995: *For years we have concentrated on NO-detail. Sometimes we succeed- its gone, abstracted: sometimes we fail- its still there. Details should disappear- they are old architecture.*¹⁷

The problem with this argument of course is that the word detail has been used to describe a variety of conditions- elements that are purely ornamental, technical solutions to problems of construction that are not visible in the completed building, but most importantly 'detail' has been used to describe solutions to technical problems that do have visual consequences, that become a demonstration that the problem exists and has been solved.

This third condition is the most significant, an element of a building which is some way descriptive about the fundamentals of building- weight, shelter, joinery, and support. But the difference between 'articulate' and 'solve' is a critical one. In any building there are a myriad of elements which solve fundamental problems of building in ways which are obscure or invisible. The typical detail tells us something about a building but it does not tell us everything. The essence of detailing is selective revelation and the most revealing details are often those that tell us the least about the building in its totality.

The door handles that follow are for the most part invisible or hope to be so, and they illustrate the problem of the concept of non-detail perfectly. It can only be achieved by the suppression of information, in this case, how to open the door.



Rem Koolhaas, McCormick Center, IIT

Koolhaas may not have eliminated the detail here as was his stated intention, but he has eliminated the door handle. The door opens automatically. Superimposed on the door is the face of Mies gazing at his own buildings across Michigan avenue. He opens his mouth to allow one to enter.



Sigurd Lewerentz, St. Mark's Church, Bjorkhagen

It is almost a non-handle, one that wants to disappear. Compare this door with the Aalto door on the interior of Saynatsalo. Both emphasize vertical members while suppressing horizontals. It is a non-detail- the detail that would prefer to disappear- a detail that conceptually and to a degree formally is not there.



Rudolph Schindler, Schindler Chase House

Schindler embraced the benign climate of Southern California with a vengeance so that half of the exterior wall is sliding doors opening to the garden. There is almost no door so there is almost no handle.



Huntstanton School, Alison and Peter Smithson

The door is a made from a window section and the handle is an almost unnoticeable angle welded to the frame face.



Querini-Stampalia Gallery, Carlo Scarpa

Scarpa was very much a motival detailer but tended to avoid the use of any type of door handle. There are none in the glass or stone doors here, perhaps because neither door, in Scarpa's thinking, belonged in the restored building in the historical sense. This generic palazzo space the sotto portego, was typacilyope to the elements. Scapa wanted to return the space to something like its original character, conveying the sense of an open portico and a monolithic stone wall.



Kimbell Museum, Louis Kahn

Doors in Kahn buildings are often minor events, but none more so than the one on the left. Most of the doors cover storage cabinets for the bookstore, but the first two are the entry to the library and lead to a stair to the floor above.

The Consistent Detail

Theo Crosby wrote in 1962: *Detailing begins with the first conception and must go purposely from there.* More recently Meinhard von Gerkan wrote: *every detail has to be an integral part of the whole.*¹⁸

This definition for a majority architects is the most popular, probably because a great number of bad details are inconsistent- the too large mullion that destroys the transparency of the wall, the fussy trim that compromises purity of form, the oversized coping that calls far too much attention to itself. Consistency does not of course require formal similarity, only the absence of contradiction. The problem with the definition is that there are a large number of good details that are also inconsistent.

Architecture involves the expression of two qualities of building that are contradictory- the building as a totality, as a form that is transformed, eroded, rotated, broken or peeled, and the building as a assembly of parts that are joined, assembled, and which are so numerous that they cannot be comprehended in their entirety. The detail is often caught between the two, it cannot express one without contradicting the other.



Le Corbusier, Villa Savoye

Conceptual detailing is less restrictive than motival detailing and more responsive to particular functional demands. It is a method that creates a correspondence between detail and building but of a conceptual rather than a formal nature.

This handle has more of an affinity than a formal correspondence with the building. Like most of Le Corbusier's early work it is composed of entirely of prismatic solids- cylinders and spheres. These shapes occur in the building but more important is the rationale for their use- that they are both inherently beautiful and logically industrial.

The handles of the Villa Savoye and the Bauhaus also raise the question of standardized detailing, a concept more proclaimed than practiced- the part that repeats itself a maximum number of applications, as in the repetitive identical windows. The idea is less prevalent in the hardware.



Le Corbusier wrote in *The Decorative Art of Today: The machine is all geometry. Geometry is our greatest creation and we are enthralled by it. The machine brings before us shining disks, spheres, and cylinders of polished steel, shaped with a theoretical precision and exactitude which can never be seen in nature herself.*¹⁸



Walter Gropius, The Dessau Bauhaus

First designed for the Fagus Factory, the handle has no formal similarities with the building. Yet, like the Villa Savoye handle, while it does not replicate the geometry of the building, it is conceptually sympathetic. Gropius believed mass-produced 'standardized' elements should be composed of simple geometric shapes.



Walter Gropius, Dessau Bauhaus, Doorknob at Auditorium Entry

The geometric shape here is a simple sphere.



Tea Service and Lamps, Wilhelm Wagenfeld (sailko)



Wilhelm Wagenfeld, Door Handle

(fsb)

Wagenfeld was Bauhaus student who went on to become a successful industrial designer. His work at the Bauhaus, like Gropius's handle, was composed almost entirely of spheres, cylinders, and rectilinear prisms. He later wrote: *It is characteristic of that moment that Moholy-Nagy who saw me at Jenaer (Glasfabrik) while I changed my earlier cylindrical milk jugs into drop-shaped ones, said to me 'Wagenfeld, how can you betray the Bauhaus like this? We have always fought for simple basic shapes, cylinder, cube, cone, and now you are making a soft form which is dead against all we have been after.'*¹⁹



(David Crowley)



Ludwig Wittgenstein, Stenborough house, Vienna

(fsb)

In 1926, five years after he published *Tractatus Logico-Philosophicus*, Ludwig Wittgenstein designed a house for his sister, including custom made hardware.

The Autonomous Detail

These four theories of detailing described above- the detail as ornament, the detail as a motif, the detail as an extension of concept, and the detail as invisible- are useful, at least to describe certain conditions, but all are in some way problematic. There is clearly another class of details that fit none of these categories. The best detailing is often not of a piece with the building in form or concept, but rather is an independent, autonomous activity, one that makes fewer connections to the total building and more to the world outside- to history, to the architect's previous work or to the work of other architects. It is often not only conceptually disconnected from its container, but actively works against it, proposing alternative attitudes, using other materials and other forms which seem contradictory to the building as a whole, and thus a sixth definition is the detail that is not only autonomous, but is actively subversive.

The history of architecture is full of details that have lives and histories of their own, independent of the buildings that contain them. Thus we can find an affinity between a column by Williams/Tsien and one by Alvar Aalto although the buildings that contain them may have little else in common.

Detailing, if it is not subversive, should at least include the introduction of concepts and ideas beyond those implied at the macro scale. Otherwise we are left with the motival and geometric, whether in the form of Saarinen, Scarpa, or Hadid, and if it is the role of architecture not merely accommodate but to articulate the nature of construction it must do a great deal more.

If the appropriate detail is thus the autonomous or subversive one, what is the source of its autonomy? What rules does it follow that the building does not? First and most important are those associated with scale, but a second characteristic is our perception of the relation of material to architectural form. We may appreciate a building in a tectonic/ intellectual way as in the vault and buttress of a cathedral, or we

may appreciate in an abstract/sculptural way as in the titanium sheets of Bilbao- an ability to suggest a material other than its own. These two readings often occur simultaneously or are mistaken for one another. Much of the minimal nature of Modernism is perceived as tectonic when in fact is abstract/sculptural and the role of detailing in these cases is to suppress the reality- eliminating trim, molding, and cladding- although they are functionally required more than ever. An appropriate concept of detail will recognize to at times articulate rather than hide these functions.



(Eugenio Hansen)



E. G. Asplund, Stockholm Public Library

Other handles of the library, such as the Mercury of the water fountain, were a sculptural addition to a context that was primarily architectural. It was a work of the first, Classical phase of his career, but it forms the basis for later sculptural intrusions in the second, Modern, phase of his career.



E. G. Asplund, Woodland Crematorium

In the door to the left there is no handle because although it is on axis with the chapel and the entry to the courtyard. This is an exit- the end point of the sequence through the funerary chapels. There are handles at other locations, shaped to fit the hand, examples of the "humanized" detail used by Asplund and Aalto, but also a sculptural intrusion in to a geometric assembly as at the Stockholm library.



With Aalto's work we enter a different realm-of detail- the subversive one- in which the detail is formally unrelated, even contradictory, to the form and perhaps the concept of the building that contains it. Like many details in the house the handle juxtaposes different levels of technology and different levels of craft and one can understand the building as an industrial construct subverted by these handicraft intrusions. The leather wrapping on the brass handle is an example of what Aalto called the humanizing of industrialization.



Alvar Aalto, Villa Mairea, Interior Door to the Wintergarden



Alvar Aalto, Saynatsalo Town Hall

Aalto's handles may be humanized, but they are, like Asplund's, a moment of sculptural, even anthropomorphic expression in a context that is otherwise geometrical and abstract.



Alvar Aalto, Baker House

The door handle here is simpler but still "humanized." The perforated grid of circles is more in the nature of a motif, something Aalto used at a variety of scales in a variety of materials for a multitude of functions.



Otaniemi Technical University, Alvar Aalto



Pensions Institute, Alvar Aalto



Pensions Institute, Alvar Aalto



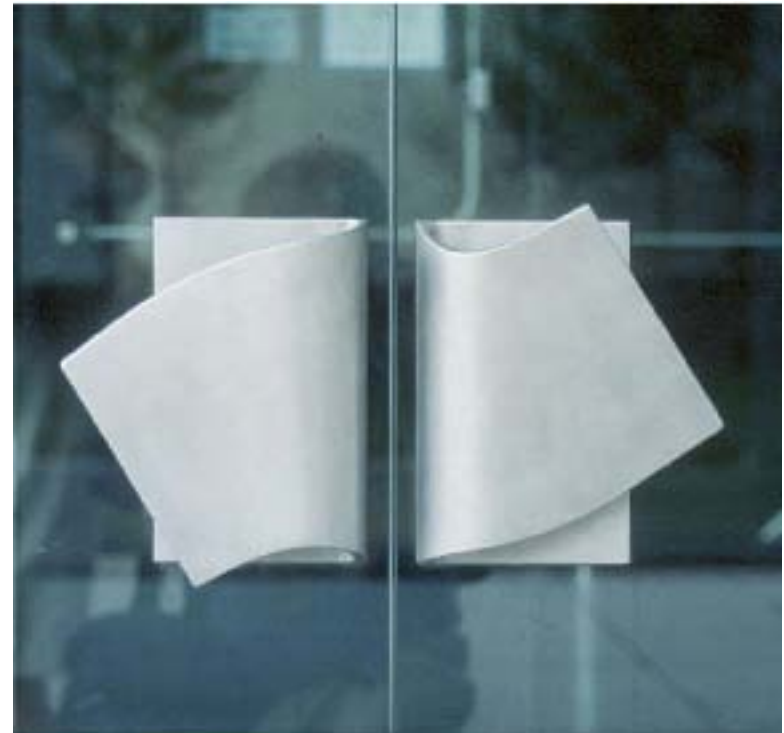
Arne Jacobsen, St. Catherine's College, Oxford

Jacobsen's work is in the tradition of Asplund and Aalto and continues the concept of humanized detail, an attitude that extends as far up in scale as the Master's dining chairs but no farther. Jacobsen's buildings are more regular, minimal and rigidly standardized than his Scandinavian contemporaries so that the contrast to these details is all the greater.



Steven Holl, Chapel of St. Ignatius

Given the religious symbolism of other parts of the building, its form is presumably meant to recall a scroll or perhaps a cincture. The design is in keeping with the general themes of the building but formally independent of the whole and begins to introduce another language- a sculptural one- in that one material, metal, begins to imply another, paper or cloth.



Steven Holl, Simmons Dormitory at MIT

The St. Ignatius handle is replicated here in aluminum but in a different context as the dormitory is composed of two languages- one, the rigid geometry of the rooms and structure, and the organic shapes that weave through the design of which the handles are a part.



Louis Kahn, Erdman Hall, Bryn Marr

The circular openings that were to characterize Kahn's later work appear here in a strange location, as small openings around the door handle.



Steven Holl, Simmons Dormitory, MIT



Williams Tsien, Cranbrook Natatorium

It may be coincidence but the telescoping cylinders of the handle echo the telescoping motifs of Saarinen's nearby buildings. A more autonomous detail is the clustered column of the canopy, a clear reference to Aalto but unrelated to the rest of the building.



Timberline Lodge

Most of the details of Timberline lodge are motival in character. The basic structural form of a a rectilinear opening with chamfered corners, formed by two bracketed columns and beams creating is repeated throughout. athroughout the structure, even in the psnel of teh front door.



Timberline Lodge

The chamfered rectangle of the bracketed beam and column shape is repeated in the chair backs and mirrors.





Timberline Lodge

The custom made wrought-iron door latches and locks of the individual rooms are free of the motif aspects of the rest of the lodge. They are autonomous details at their best.

Conclusion

To summarize this typology of details and their subcategories:

The first general type the detail as ornament, has in Modernism largely morphed into the second, the detail as motif. The common result of the second type- the cloned detail- are repetitive patterns applied to a variety of conditions at a variety of scales in a variety of materials to serve a multitude of functions. These motifs may be geometric; they may be tectonic, or they may be sculptural. There are numerous theories and numerous examples:

- The motival detail as organic form, as in the work of Frank Lloyd Wright and Fay Jones. The origins of motival design lie in German Romanticism and American Transcendentalism and the influence of Louis Sullivan.
- The motival detail as cultural symbol, as in the traditional architecture of the Dogan people the work of Aldo van Eyck, who used of motifs to articulate a world or even a cosmic view.
- The motival detail as stylistic unifier, as in the work of Josef Hoffmann, Carlo Scarpa or contemporary architects such as Peter Eisenman and David Cullinan.
- The motival detail as structure, as in the work of Greene and Greene, Otto Wagner, Santiago Calatrava and Gerrit Rietveld, who achieve visual unity through the use of repetitive, uniform systems of joinery, a strategy that often results in elements that are either vastly under or over designed.

To me the concept of the motival detail is not a bad definition of detailing so much as a definition of bad detailing- the fact that these strategies accomplish what they set out to do is often the problem. The result in many cases is a building that is the less rational and more stylized.

The third general type- the detail as an extension of concept- has a variety of manifestations, the most intriguing of which are the standardized details in the work of Le Corbusier, Gropius, Foster and others. Yet there is a conflict between hierarchical systems of structural order in which each functional role is articulated by a separate component as in the work of Mies, Rogers or Grimshaw, as opposed to the multifunctional but ambiguous elements of Myron Goldsmith, Craig Ellwood, and Jean Prouvé.

Of the fourth type- the non-detail- the common, traditional and popular version is the Brutalist detail- the elimination of the middle layer of detail by incorporating the small-scale elements into the overall structural system or eliminating them all together. This is the 'enlarge or eliminate' strategy of detailing, as in the oversized concrete gutters, mullions and furniture of Le Corbusier, Ando, and Erskine.

The non-detail, even if possible, is perhaps the most difficult type to achieve and, if one believes in truth in building, the least 'honest.' Building techniques have not advanced so much as to eliminate the need for visible signs of technical resolution- trim, joints, fasteners- we have simply developed methods for disguising them.

The fifth type, Independent detailing is in two broad categories, autonomous and subversive:

- Autonomous details are independent of the building that contain them, such as the undigested technical fragments in Holl and others, or the Modernist historical references of Gehry or Koolhaas.
- Subversive details posit a position contradictory to that of the building's totality. Aalto, Kahn, Morphosis, and Bohlin, fall in this category. This may take various forms for various reasons- the vestiges of craft such as the clustered columns in the work of, Saarinen, Scarpa, or the tactile humanizing in the handrails and door handles in the work of Asplund, Aalto, Jacobsen, and Foster.

While no building can obviously be composed entirely of autonomous details, they are the most important details, and any building without them is the poorer for it. The good detail is often not only conceptually disconnected from its container, but actively works against it, proposing alternative attitudes, using other materials and other forms which seem contradictory to the building as a whole, and thus a fourth definition is the detail is one that is not only autonomous, but is actively subversive.

A great many buildings are detailed in a way that is the simple, direct extension of general concepts into particular situations, but this type of building in many cases the least rational and most stylized. This definition is very much alive today in the work of many contemporary architects, many of whom go to great technical lengths to achieve a sort of non joinery and non detail in which materials and elements have minimal geometric form and do not so much connect as simply collide. This seamless result is often achieved through considerable technical effort.

The difficulty with the consistent theory of detailing is the architecture is not a consistent process. It requires the consideration of form as an abstract/conceptual form, but it also requires the consideration of form in an assembled constructional way. Very often a detail is the mechanism that mediates between, perhaps by accommodation, but more commonly by a demonstration of the conflict.

A great many of Modernism's finest buildings contain something more than consistency- a transformation, a contradiction, an alternative ordering system as the scale of the problem is reduced, as the typical condition is repeated, something is added, something is transformed, or something is contradicted. These may and often do parallel contradictions, transformations and additions that occur at the large scale and are determined in the schematic phase, but often they are not.

This makes the case in a subtle way for the necessity of, if not subversion, at least the articulation of concepts and ideas beyond those

invisible detail that tells us nothing by hiding everything, or the consistent detail which is in reality inconsistent, and if it is the role of architecture not merely accommodate but to articulate the nature of construction it must do a great deal more.

I have come to recognize and believe that the best detail is not the logical extension of the idea of the whole into the part, is not the element that unifies the whole, is not the cellular building block of the totality, and that the best detailed buildings are often not those that tell us the most about themselves, are not those in which every element of the construction is revealed or expressed, and in which each part is subordinate to the whole.

Notes

1. Wilhelm Worringer, *Form in Gothic* (London: G. P. Putnam's Sons, Ltd., 1927).
2. quoted in Kenneth Clark, *Ruskin Today* (Baltimore: Penguin, 1964), p. 227.
3. A. W. Pugin, *Principles of Pointed or Christian Architecture*, First printed 1841 (New York: Academy Editions, 1973), p. 22.
4. Pieter Singelenberg, *H. P. Berlage*, Translated from the Dutch by G. Schwartz. (Amsterdam: Meulenhoff, 1969) p. 134.
5. J. W. Goethe, *Italian Journey*.
6. Ralph Waldo Emerson, *Essays and Lectures* (New York: Library of America, 1983) p. 289: *Journals of H. D. Thoreau*.
7. Frederick Gutheim, ed., *Frank Lloyd Wright on Architecture* (New York: Grosset & Dunlap, 1941), p. 7.
8. Frank Lloyd Wright, "In the Cause of Architecture" *Architectural Record* 23 (March 1908), p. 161.
9. Eliel Saarinen, *The City* (New York: Reinhold, 1943), p. 8-18.
10. Eliel Saarinen, *The Search for Form in Art and Architecture* (New York: Reinhold, 1943), p. 197.
11. Aldo Van Eyck, *Forum*.
12. Charles Jencks and George Baird, eds., *Meaning in Architecture* (New York: G. Braziller, 1969), p. 183.
13. quoted in Alison Smithson, ed., *Team 10 Primer* (Cambridge: MIT Press, 1968), p. 99.
14. Peter Smithson, "A Parallel of the Orders," *Architectural Design* 36 (November 1966), p. 557.
15. *Ibid.*
16. Philip Johnson, "Details," *Architectural Record* 135 (April, 1964), p. 137; Marcel Breuer, "Details," *Architectural Record* 135 (February, 1964), p. 121.
17. quoted in Ed Melet, *The Architectural Detail*, (Rotterdam: Nai Publishers, 2002), p. 116.
18. Theo Crosby, *Architectural Review*, 1962.

19. Le Corbusier, *The Decorative Art of Today*; translated and introduced by James I. Dunnett. (London: Architectural Press, 1987), p. 103.
20. Reyner Banham, *Theory and Design in the First Machine Age*, 2d ed. (New York: Praeger, 1967), p. 282.

55 Door Handles is not a book. It is subject to change but it is not a work in progress because it has no goal other than getting longer. It is not printed and it is not mass-produced, in fact there are minor differences between each copy.

