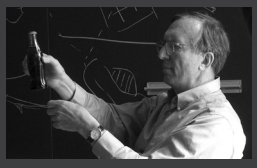


Douglas Graf

The Ohio State University

Douglas Graf received an A.B. in architecture and urban planning from Princeton and a M.Arch. from Harvard and currently teaches courses in design and architectural theory at the Knowlton School of Architecture at the Ohio State University. His teaching career has included the Kentucky, Washington, and Yale, as well as positions in Britain, Germany, and Finland, where he first went on a Fulbright to study the work of Alvar Aalto. He has received five teaching awards. His interest in design theory has a primary focus on formal analysis, which is applied not only to architecture but also to urban form, landscape, photography, painting, product design, and graphics. One of his signature investigations has been into the structure and use of diagrams as tools for 'close reading.' Many of his investigations have explored 'metaphoric time' as a central design strategy. He has written about the idea of the 'encyclopedic set' as a persistent means of modeling complexity and the use of 'fictive landscapes' to derive narratives for the city. He currently divides his time between Columbus (the one in Ohio) and London (not the one in Ohio), where he has been researching the design strategies in English gardens and the formal structure of the pre-industrial village. He is one of the principals in Mid-Ohio Design, a firm of architects and urban designers whose work elides from the real to the academic and who have won a number of urban design competitions.

FORM'S FALLOW FUNCTION

Le Corbusier said that there was no such thing as primitive man. Only primitive means, but even so it might seem that architecture betrays a degree of primitiveness that staggers the imagination. However it is described, it manifests the sort of vocabulary that seem shockingly simple: plane and line, point and volume. And at a basic level, architecture is about relatively simple things: boundary, centrality, intersection, extension, attachment, juxtaposition, resemblance, dissimilarity. The use of these is not optional. They cannot not be employed. Although some aspects of architecture are clearly progressive—materials, technologies, motifs, programs, etc.—there are clearly other aspects that resist this progress and insist on a conservatism, not so much by design as by indifference. Corresponding to this situation, there are equivalent limitations on the part of homo sapiens to respond to sensory input, both because of the hardware employed and because of the pesky way this hardware is wired. Although some of my students might disagree, it is not possible to say "Architect X decided to use the Gestalt laws of grouping". It is not that the laws of perception are available, it is that they are unavoidable. This is an empire that can be ignored but not denied.

Form is a primary means of communication and closely links perception and cognition, as evidenced at least in part by the connections implied by language: form/information, image/imagination, sign/ significance, a figure/to figure, to stand under/to understand, to take a position, to see. Relational opportunities might be limited, but they are varied enough, so that it would be silly to lament the impoverishment of English with its pitiful number of characters, 26, compared to Chinese or Cherokee. It would be strange to argue that more stories can be told in these other languages than in English or German. In form as in language, communication depends on the superimpostion of larger configurational entities

so that certain questions focusing on smaller components, such as "How many times does Shakespeare use the letter T in MacBeth?" seem unimportant. One of the differences between language and architecture is that in the former, there is a break in the continuity between its representation and its meaning, whereas in architecture, the connection is more seamless, and simple structures can quickly lead to consequences of profound significance.

The linkage is figurality between presence, and representation means that there is a strong presence of ideality in any configuration. It would be useful to have some sort of device that could, for a moment, eliminate conflicting arguments and present a reduced version of the object, and among potential candidates for this role is the diagram. Although we can think of diagrams as relatively artificial and particularly visual, they are in reality already embedded in many things, even language, acting as a sort of meta-criticism, both dependent on but separate from a particular object. The word 'wall', for example, can be read as a diagrammatic construction which records its evolution from the Latin word 'valus', a wooden stick or log. The Roman legions would have placed these linear elements in a row to produce a defensive barrier for their camps. Although this would result in the accumulation of lots of lines , or 'vali', the new construction seemed more singular than plural, and thus a new word was crafted, 'valum', the lateness of its appearance being signaled by the adoption of the neuter gender and abandoning the masculine. Thus, Pythagoras' notation of the connection between lines and planes has been embedded in English by the inventions of the Roman armies to produce the word 'wall', derived from the multiplication of many lines to produce a single plane.

Etymology is essentially diagrammatic in nature and it would be useful to have something in architecture that could perform a similar task, although in this case, the connections need not be historical, but only formal. Typologies are a form of diagram, but they remain too limited and too static to deal with the quickly transformative nature of figure and fail to articulate the strategic use of form. Even at a primitive level, formal constructions can quickly change their characteristics, or exemplify multiple characteristics.

Diagrams do not tell us what to do, so they are not theory, and they are not predictive , so they are not science, but similarly to the former, they can illuminate opportunities, so they are critical, and similarly to the latter, they can reveal surprising connections. In terms of science versus philosophy, the development of an expertise in diagrammatic analysis is probably similar to the sort of expertise one develops with differential equations, handy, a bit inelegant, but definitely scientific, even if only through the back door. Unlike differential equations, and

unlike German, where for the most part the gender of things cannot be derived, but must be memorized, diagrams can be derived, which means that they are the result of a sort of laboratory of scrutiny, and they can lead to discovery, so they must be a science. When Zaha Hadid refers to any drawing she has ever done as 'research', if she is referring to their intrinsic diagrammatic nature, she must be right.

Oddly, we live in a world where, to many, the formal dimensions of configuration seem foreign, if not cryptically Masonic, regardless of their availability, common recurrence, seeming universality, and sheer necessity of existence. Diagrammatic meaning embedded in form is relentless, even if it seems to be invisible to some. It is as though someone named 'Dolores' wonders why she seems to be unhappy. Configuration offers us the opportunity to figure, to think and to see and inform ourselves via form, and perhaps we could better avail ourselves of the openings it presents.

When Colin Rowe wrote "The Mathematics of the Ideal Villa" for *Architecture Review* in 1947, he continued the diagrammatic methodology that had been developed by Wolfflin as transmitted through Wittkower. The purpose of the diagrams in this article was to compare two buildings, Palladio's Villa Foscari (or Malcontenta) with Le Corbusier's Villa Stein. These particular buildings were selected because Rowe wanted to reveal something about the buildings of Le Corbusier and a connection with the strategies that were organizing a 16th century Italian villa would be suitably revelatory.

The juxtaposition was clearly meant to be somewhat provocative. But he was also particularly interested in the buildings of the 16th century because a fascination with Mannerism had arisen with its recent elevation to the status of a full-fledged art historical era, which was caused, at least in part, by its affinities with early 20th century architecture, possibly in a similar way that Modern Art elevated the status of Primitive Art. Mannerism often involved ambiguity, complexity, exaggeration, and wilfulness. Palladio's revisitation of the architecture of Rome resulted in discoveries concerning the ability of Roman architectural vocabulary to produce suprising spatial readings and effects presumably unintended by the original designers. Unmasking connections between 20th century architecture and Mannerist precedents would be surprising, but it wouldn't condemn contemporary practices.

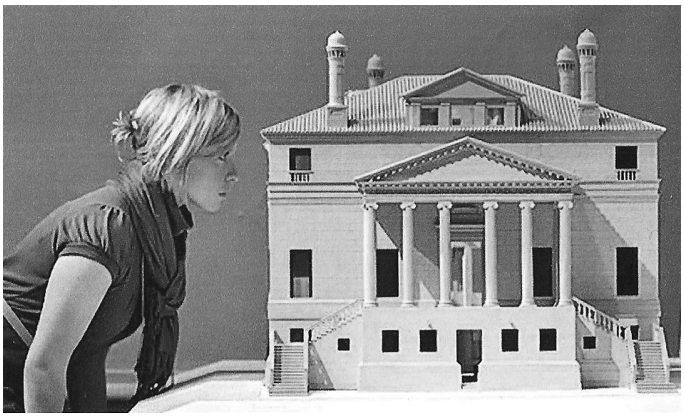
Practices more contemporary to the present moment can be argued to have similar connections, whether it be Koolhaas's loving reveries based at least in part on the architecture of early Le Corbusier and that of the fifties in general, or Gehry's insistence on using at least some of the devices that would have been cen-

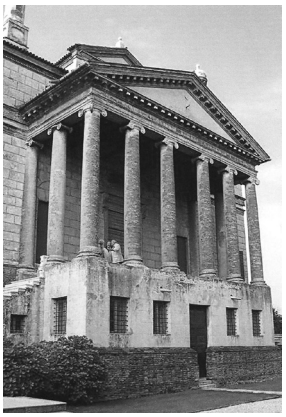
tral to the production of Beaux Arts architecture. In this regard, something akin to Rowe's analytical inspection of potential similarities might again be fruitful in the work of designers like Koolhas and Gehry, but probably not as surprising, since we have long ago become accustomed to the idea of influence contaminating the presumed novelty of contemporary design invention.

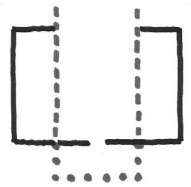
Revisiting Rowe's comparison of Palladio and Le Corbusier reveals that the analysis was somewhat incomplete in at least three ways: one, in that the work of the former was used to illuminate the latter rather than the opposite; two, significant devices present in Villa Foscari are never remarked upon, even though they are representative of similar strategies in a range of buildings over time and, thus, could only increase the significance of Palladio's work and influence; and three, that Rowe never explores the implications that even diagrams based on the simplest principles could reveal a complex world that lay just behind, yet structured and focused some of the most significant arguments made by a building.

The basic methodology of Rowe's analysis was the juxtaposition of the comparable drawings of the two houses, side by side, plans and elevations. The argument was clearly meant to appeal as much to the eye as to the seduction of the text. It wasn't really meant to provide new illumination to Palladian devices, more to assure us that there were strong connections which linked the two buildings together. Among the arguments made was the point that the two buildings both displayed a similar proportioned matrix, which in the case of Villa Stein determined the position of the columns, while in the case of Villa Foscari it determined the positioning of the walls. In the case of both buildings the boundaries which formed the outer perimeter of the matrices were coplanar with the exterior walls. That two types of buildings, bearing wall and structural frame, could share a common organizing scheme and be seen immediately to be comparable by the simple act of juxtaposition were the foundations of the argument. The potential irony is that they might also be seen as the basic argument that was being made not just by the comparison of the two buildings, but as the central argument that was made by the composite nature of the composition of Villa Foscari, that it represents the collision between two different buildings of two different types, the "wall building" that encloses most of the program and the "columnar building" that is perhaps most evident at the entry porch.

Juxtaposition is, thus, also a basic element of Palladio's scheme and possibly one of the things that most distinguishes the building as a Mannerist exercise. As with many Palladian projects—one need only think of his church elevations—the strategy seems focused on an idea of superimposition of several buildings and a resultant transformation in the idea of density. In the case of Foscari, what is be-





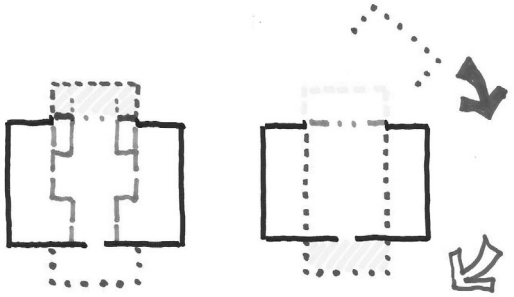


Left: Fig. 1.
Right: Fig. 2.
Bottom: Fig. 3.

ing superimposed are two different buildings which are easily distinguished by their structural systems, one walled and one columnar. While hardly unique to this building, the entry stairways are quite unlike those found at all four facades of Villa Rotunda. Here, they are almost independent of the architectural scheme, placed off to either corner to require the arriving visitor to move up along the wall of the façade and to be inserted through the side of the portico's colonnade in a manner that might seem somewhat unceremonious (fig. 1). What the route permits, however, is a close view of the column of the portico which is engaged in the wall of the Villa itself (fig. 2). The nature of this engagement might be ambiguous. Is it a half round column attached to the smooth surface of the wall, or is it a full column that is disappearing into the wall itself, like a hot knife through butter (fig. 3)? The details Palladio has chosen to employ here tend to favor the latter reading. The light rustication applied to the wall serves to flatten its appearance as though it were merely a surface, which contrasts greatly with the three dimensional figurality of the column itself and the visual momentum of the plane of the colonnade as it intersects the wall.

At Villa Rotunda this detail is different, too. Here, the columns on the side of the portico are replaced with walls each of which contains a slightly off-center archway. The walls almost touch the corner columns and the off-centeredness of the archway argues that at least some of the mass of the column should be incorporated into the ensemble (fig. 4). Although the configuration is different, the theme is similar to that of Villa Foscari, that the perimeter of the portico is intersecting and possibly penetrating the volume described by the wall of the building. This superimposition can be seen as the cause of the gridded matrix described by

Top: Fig. 4.
Left: Fig. 5.
Right: Fig. 5a–b.
Opposite page: Fig. 6–8.



Rowe, as in both buildings, the interior walls seem to be aligned with the porticos, as though they were tracing the outlines of embedded structures. On the garden façade of Villa Foscari, there is no portico (fig. 5). However, there is something that argues for something of a kinship. The surface of the façade projects slightly, there is the suggestion of a pediment above, and the "thermal windows" group together to describe a large void, as though a cavity used to extend beyond the surface of the existing façade (fig. 5a). What seems to be described are the remnants of an attachment that might have been similar to the entry façade, except in this case, it seems to have been removed rather than added. And what specifically seems to have been removed is, more or less, what seems to be on the other façade of the building (fig. 5b).

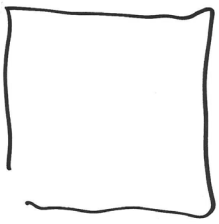
Thus, Villa Foscari offers us a bit of a conundrum. The entry façade shows us the collision between two buildings, the garden façade shows us a late revision of that collision with a removal, and the missing piece now seems placed on the opposite front of the building as an attached fragment rather than an embedded whole. The initial dilemma which the close observation of the portico half column provokes returns to play a central role in this conundrum, in which it seems to be contradictorily, both a protrusion and an attachment, an addition and a subtraction, something both early and late. The idea of superimposition implies the existence of a narrative, a story which describes a series of events in the build-

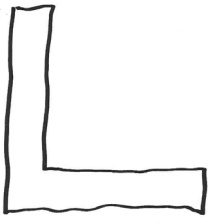
ing's evolving creation, and perhaps nowhere else is that narrative stronger than at Villa Foscari.

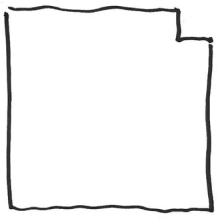
The word 'narrative' shares a similar derivation as the word 'know'. Rather than just being a description of a series of actions, in the case of Foscari those descriptions are seen as a consequence of 'knowing', of reading the forms to derive their meaning. The relationship between the words, form/information, sign/significance is typical of many languages where a word describing shape is closely linked to a word involved with meaning or thinking: figure/figure. The association between shape and thought was a central concern of Gestalt psychology as it evolved in the early 20th century and the distinction between perception and cognition proved to be in fact not so distinct.

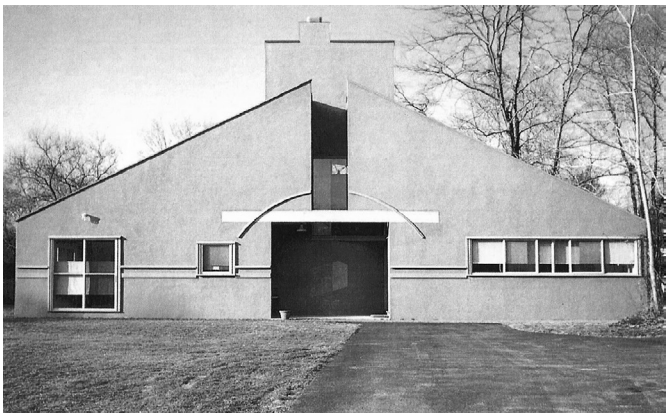
Narrative is built into the way the brain conceives the organization of form because of various Gestalt principles such as various laws of grouping, good continuation, and virtually present norm. All three of these are present in the following figure (poorly drawn square) (fig. 6). There is a strong tendency on the part of observers to describe this shape as a square. It is perhaps interesting to note that this is one of the few of the infinite range of rectangles that has actually been given a name, which is perhaps some indication of its conceptual significance and might explain its ubiquity in architecture across oceans and eons. Very few shapes actually have names and usually they are given the name of something that they resemble. Popular culture is not so far removed from more academic architectural nomenclature in this regard: Villa Rotunda versus the Gherkin. The next figure, (fig. 7), is usually described as an 'L', the alphabet being a useful repository of shape names.

The last figure in this particular sequence (fig. 8) is usually described something like, "A square with a piece removed." This description is very different from the first two which merely involved a search for an apt resemblance. This description involved a narrative, in which a whole story is told. There was a square, something happened, and a bit is now missing. It is a description that invokes a history: there was an early period, followed by a period during which an event







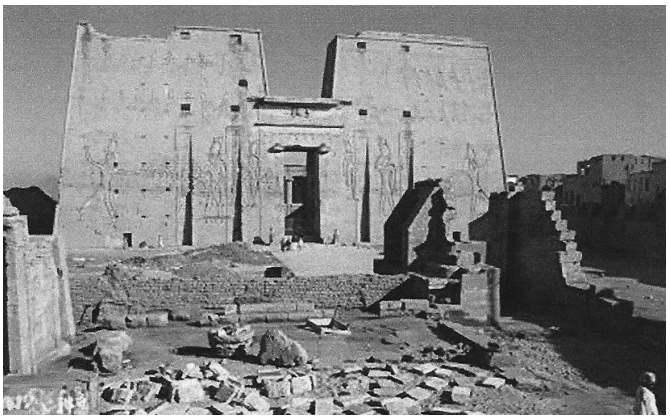


took place, and here we are now, enveloped in lateness and perhaps a certain sense of loss. As a description, it could hardly be more different. Of course, the odd thing is that, as a figure, although the observer usually uses the qualities of a square to initiate the narrative associated with this piece, the shape itself would seem to fit very comfortably within the domain described by L-shaped things. Yet, its L-shapedness will usually go un-remarked upon in deference to the action and theme of the narrative, removal.

The brain will often intercede with what might be expected to be the rather passive activity of vision to produce new arguments. These arguments might extend certain properties that would arise from a casual inventorying of a particular composition. An example of this might be the optical refinements incorporated into the organization of a Greek temple, which seek not to call attention to themselves and not to revise the basic argument, but to support the visual strength of an idealization that doesn't stray from the basic inventory, but merely corrects opportunities for misreading. Although they operate as narratives, they tend to be narratives that wish to remain anonymous and invisible, devices which act more as correctives than as revisers.

However, this is not always the case. The façade of Venturi's house for his mother in Philadelphia is a good example (fig. 9). Here, rather than merely supporting the inventory, the façade is organized to produce a number of revisionist narratives. The most basic of these involve the most primitive description of the organization. Is it made of two pieces, a left and a right, or is it made of two pieces, a void and a solid?

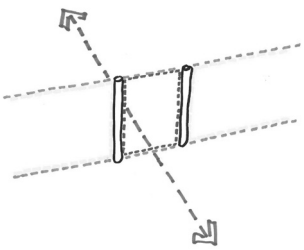
The entry façade of the Vanna Venturi House is the result of years of design study resulting in what one might assume to be a relatively casual organization. Sometimes described as a child's drawing of a house, sometimes with affection sometimes not, it has also been pointed out the perhaps surprising similarities to a typical entry gateway to an Egyptian temple, two configurations that are elsewhere seldom critically aligned as similar, not even in the event that the drawing of the Egyptian temple gateway was also produced by a child (fig. 10).

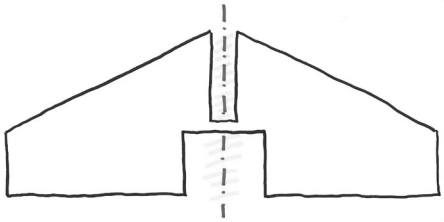


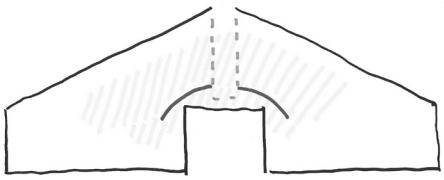
Opposite page: Fig. 9.
Top: Fig. 10.
Bottom left: Fig. 11.
Bottom right: Fig. 12.

In a typical Egyptian example, the upper portions consisted of two pieces, the two pylons, which produced as a consequence of their existence and juxtaposition at least two different things: the partial description of a plane of which they both formed a part; and a residual void between them, suggesting the existence of a pathway that continued through them (fig. 11). The lower portion was formed by the introduction of a figural void into a much larger plane, suggesting a much stronger statement of the existence of the plane and a much more figural statement of its absence or removal to make a doorway. This configuration created a much stronger impression of a defended boundary through which the continuation of a pathway is less assured.

These two variations support the variety of meanings that arise from the concept of 'gate', which are all easily set up by the juxtaposition of two figures (fig. 12). They describe a plane, an opening in the plane, two halves on either side of the opening, and an alternative plane or pathway. The word 'gate' should describe all of these resultants, but over time its various linguistic children have drifted towards specific foci. In English-speaking countries, gate has come to mean a negotiable barrier. In the rest of the Germanic languages, it has come to mean a street or pathway, as in 'Gasse'. But all these readings remain active in the façade of the Vanna Venturi House in Chestnut Hill, Pennsylvania. In the 'pylon reading',

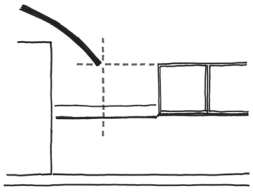


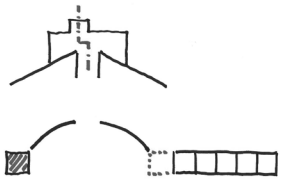




Top: Fig. 13–14.
Below: Fig. 15–16.

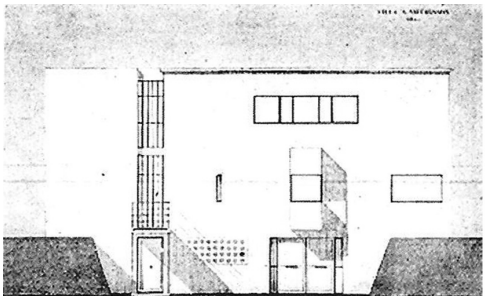
Opposite page:
Top: Fig. 18a–b.
Below: Fig. 17; 19; 20.

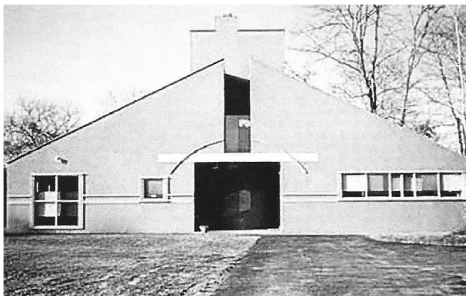


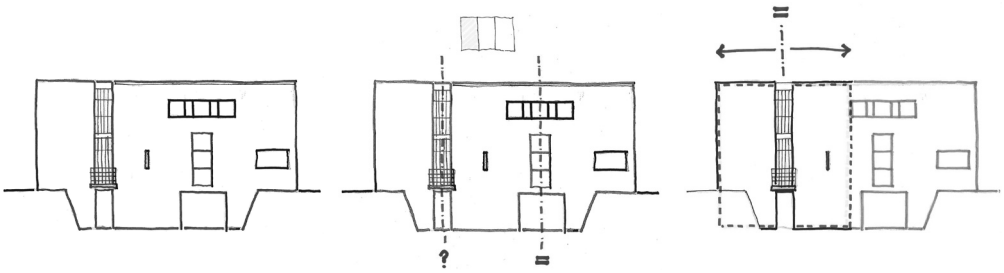


the figurality of the doorway is absorbed into the slot between the two halves (fig. 13). In the 'door reading'(fig. 14), the slot becomes part of the surrounding plane, an operation that is encouraged by the existence of the lintel which serves to staple the two pieces together, and by the broken arch, which also argues for a continuous perimeter around the doorway opening. In each case, something is transformed by its context to become something else. In effect, the doorway becomes a nothing, and the nothing of the slot becomes a something.

Nothing becoming a something is also a theme for another part of this façade. The line of ribbon windows to the right, the 'chair rail' molding just beneath it, and the trajectory and endpoint of the 'eyebrow' combine to activate the area of the façade between all of them (fig. 15). The result is the description of an area of the façade almost as if it were another window, an additional module of the ribbon window to its right. Thus a narrative transformation is set up, from field to emergent figure. In addition, however, another simultaneous narrative is established, through the relationship that is suggested between this implied window and the real one in a similar, mirrored position to the left (fig. 16). Now, instead of the implied window seeming to be a late-comer to the configuration, it seems more that it was actually an original component and an actual window that has been moved, or whipped, to the other side like a contestant in a roller derby match. In this reading, it is the left-hand window that is 'late', an arriving intrusion onto the previously blank left half of the façade, at least for the moment. Its purpose here is open to debate. Is it to reinforce an idea of equivalence between the two halves of the elevation, even as it threatens the momentary symmetry? Is it to reinforce the suggested continuity of the arc implied by the 'eyebrow' moldings and, thus,







the figurality of the doorway and the continuity of the surrounding plane? Is it to reinforce the sense of symmetry by rearranging the windows into something more balanced, at least numerically, 5 and 5, while also maintaining another idea of an equality of window types, square versus ribbon? Is it all of these things?

A similar condition occurs on the front elevation of Le Corbusier's Villa Besnus in Vaucresson (fig. 17). We know from the surviving drawings that the decision to move the stairway to run laterally along the front façade was made relatively late in the design process. What was the strategy? The end result is to compromise the relative purity of a façade that beforehand would have seemed remarkable similar to Venturi's (fig. 18a–b), an almost symmetrical composition made slightly screwy by the size and positioning of some of the windows. To this composition, Le Corbusier added a completely blank wall and the slot between the two. As a result of this move, the nature of the façade is transformed (fig. 19). What was previously the façade's left edge has now become interior to the plane and has become similar to the vertical organizing axis of the 'original' façade, something somewhat akin, in fact, to the French flag, where the whole composition can be read as three equal bands.

If the two on the right can share an axis between them and become a larger whole, can this also apply to the two on the left? In fact, this is exactly what seems to be in the process of happening (fig. 20). Now, the previously inexplicable asymmetries of the windows can be seen as a resultant, the consequence of the façade attempting to reflect the blankness to the left of this new axis of symmetry onto the right. In the process of this, the window on the left is being 'closed' or closed down, as the blankness of the façade fills the area. Somewhat similarly

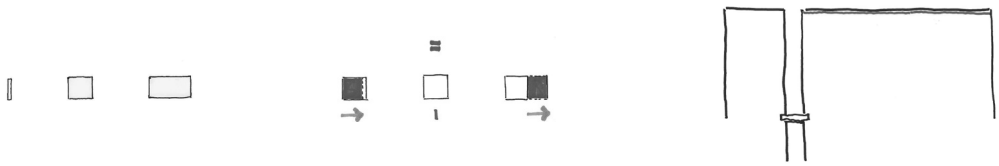
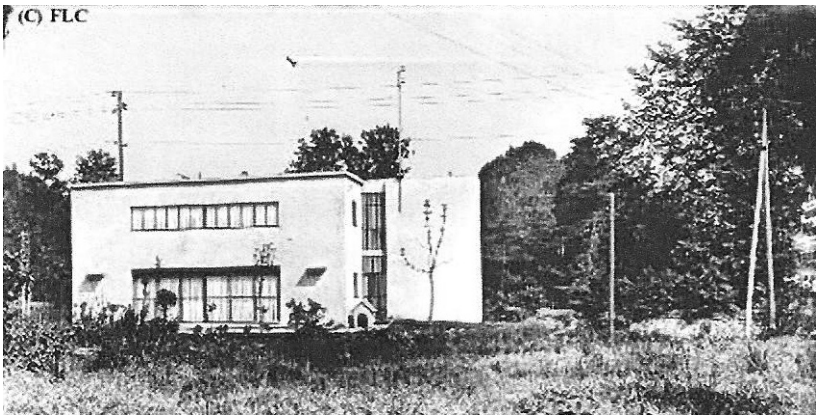


Fig. 21a–b; 22.
Opposite top: Fig. 23.
Opposite bottom: Fig. 24; 27.

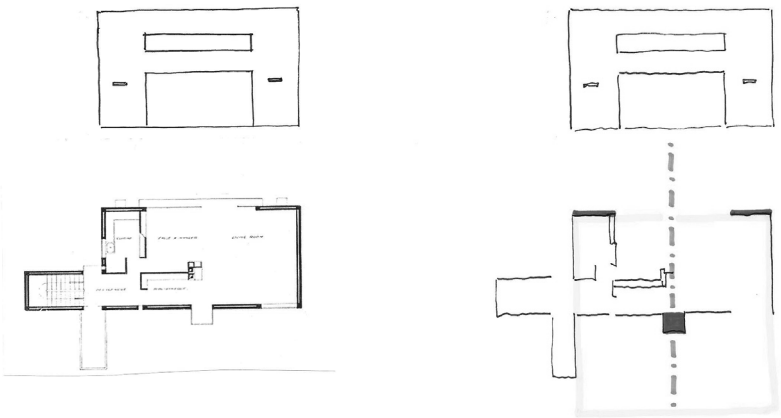
to the Venturi House, the window on the right is linked to this process by an accompanying enlargement (fig. 21a, b). Unlike Venturi, at Vaucesson the process has been caught in the middle of the transition and the narrative has created a sort of 'stop action' aspect to the façade. A very minor detail, the drip cap along the roof edge of the 'original' building is not present in the 'new' blank façade on the left, although it's exactly the same construction on exactly the same roof (fig. 22). What is the point of it? Perhaps it is done as a way of maintaining the absolute minimalist credentials of the left panel in distinction to what, somewhat surprisingly, might be referred to as the Beaux Arts motivations of the axis on the right, as though the composition were meant to be read as the unstoppable consequences of abstraction operating on a historicist organization, perhaps as a way of repositioning his current architectural output with respect to the work almost immediately preceding this building in La Chaux du Fonds.

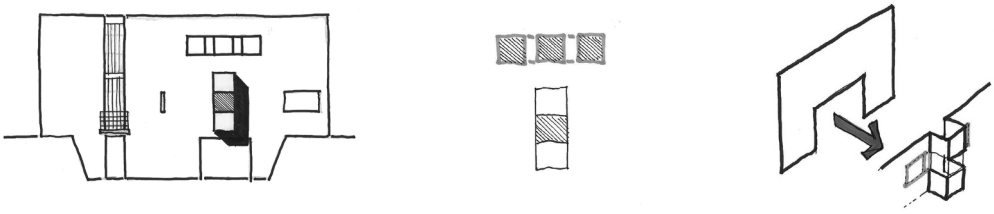
Even if certain aspects of the front façade seem a bit retardataire, the rear elevation seems especially surprising (fig. 23). Here, the classicism is blatantly overt. Comparisons have been made to certain 18th century equivalents, such as the Petit Trianon at Versailles. Although Rowe compared Villa Foscari to Villa Stein, in some ways Vaucresson might have also been appropriate, although the obviousness of the classicizing strategies would have made the comparison less revelatory. Obviously, the two buildings share a model, at least on the facades. They also share a strategy in the superimposition of buildings. On the front façade, this strategy originally places the pieces abutting each other, and then, as has been observed, they begin to integrate. The multiple building blocks, the fragmentation of the pieces, the multiple doorways, the relative complexity, all hint of something more urban, as though this was a series of facades stretched along a street instead of a single building, similar to what Aalto seems to propose along the western façade of his architecture offices in Munkkiniemi. Both buildings even offer the piano nobile of a palazzo configuration.

As a villa, the rear elevation of Vaucresson is in stark contrast to this reading. It sits serenely in the landscape, such as it is. This seems to be part of the pack-



age that Le Corbusier is offering the client. Two houses instead of one, in two places far better than the one the building is actually situated in. One façade is a palazzo, one is a villa. One is in the 'country', one is in the 'city'. In fact, the client gets three buildings, because the interiors make only the most minimal accommodation with either of these two organizations (fig. 24). The interiors are more completely modernist and offer much more of a free plan than either façade would suggest is possible. The tricolor uniformity suggested by the front façade is not particularly evident on the interior, nor is the central axis of the 'traditional' right hand elevation. When the visitor walks out of the house into the unprepossessing back yard and turns around to look at the façade, he discovers that he has just left a building he doesn't seem to have been in. The suggestion of 'villa' at this moment creates a narrative that proposes an alternative condition and an alternative site. The situation is reminiscent of that at Foscari, where a comparison between the two facades creates a reading of transformation, except that, in this case, one façade contains all the complexity and activity and the other is more of a datum, or even a cartoon. This later quality is emphasized by the photograph authorized by Le Corbusier to be used in Oeuvre Complete, in which the dog



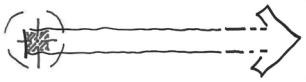


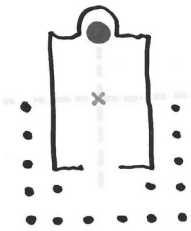
house is allowed to remain, signaling certain affinities between the two structures in their reductionist organizing principles (fig. 25).

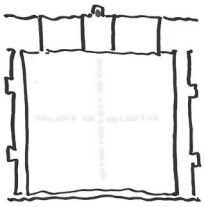
Of course, the rear elevation is also the apotheosis of the classicism suggested by the organization of the right portion of the front façade and is one of the few things that takes any notice of its axis. The feature on the front façade which is on this axis and seems thematically related to the garden elevation is the small box which projects beyond the façade (fig. 26). This element is almost completely idealized, a composition of squares on a plan that could almost have been authored by Bramante. East, west, up, down, why differentiate? It's almost as though someone has glued a telephone booth to the façade of the building as part of some sort of Halloween prank. If the two façades of the building demonstrate relative independence from the plan, this element demonstrates relative independence from both the plan and the facades and perhaps even gravity, given its lack of evident support and its multiple symmetries. In its ideality and scale and relative a-functionality, it might be seen to resemble a garden pavilion in an 18th century landscape garden. In its ideality, the most closely related element is the rear elevation, which also is organized by the same axis. In an extended analogy of reversals, if the rear yard has turned out to also be the surprise garden for the palazzo, this projecting element seems to argue that it is, in turn, the garden pavilion for the villa (fig. 27). And if the relatively weedy back yard is transformed into a garden by its association with the rear façade, the transformation here turns the urban space along the main highway through Vaucresson into the pavilion's garden.

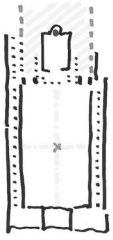
The window pattern on the front façade deserves further scrutiny (fig. 28). The windows above the projecting element bear a strong resemblance to those within the pavilion, three square windows separated by smaller rectangles. The configuration is reminiscent of the manner in which the delicate components in a model kit are packaged, the windows for example, to be broken off at the appropriate time and reassembled into a new object, from a planar armature to three dimensionality. At Vaucresson, the axis is in just the right position to supply the necessary pressure to effectuate the transformation (fig. 29). Is it possible that the two windows are locked into a before and after pairing that illustrates this narrative? If they are, they are only illustrating a condition that is represented in a huge number of architectural configurations.

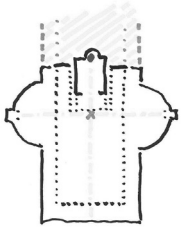
Opposite page: Fig. 26; 28–29.
Right: Fig. 30–31.
Below: Fig. 32a–h (line by line).

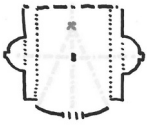


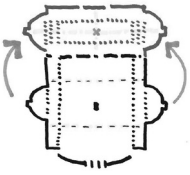


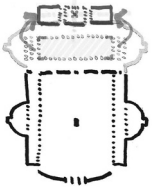


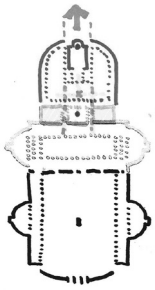










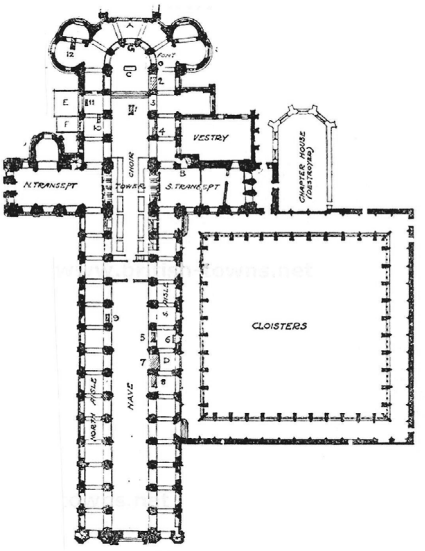


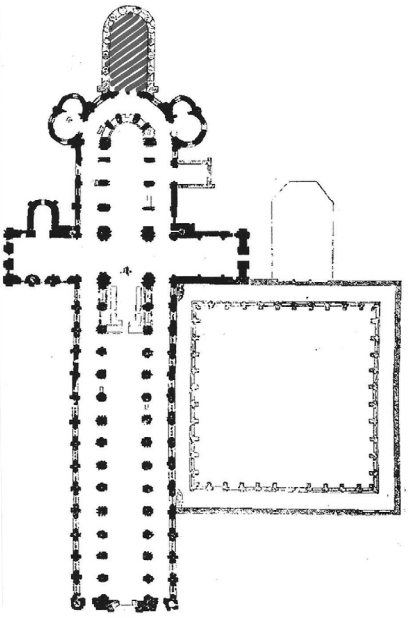
Once created, a line is something that is difficult to control for various reasons. For one thing, it has within itself all the data that would organize its further extension. No further information is necessary. Thus, it could effortlessly be extended indefinitely as a single homogeneous entity (fig. 30). But contrarily, it also seems to authorize conditions of difference at its endpoints. Like a stick of butter, the ends of which make themselves available for distinction, isolation, and potential detachment, in a condition that might be know as 'pavilionization'. The phenomenon can be seen in the cellas of all the temples in the Imperial Fora in Rome (fig. 31), in which a niche occurs when the main axis hits the back wall, which tends to decentralize the space and create an alternative emphasis on the perimeter. In this respect, the configuration imitates the same diagram as that of the fora themselves, as each involves the device of a centralizing object, the temple, employed as an edge to the perimeter of the sanctuary precinct. Although the temple is to varying degrees designed to be an object in space, it is also employed to make space exterior to itself by acting as a boundary. One could put a sequence together to illustrate the degree to which the temple in each sanctuary argued for further extension of the space even as it was involved in terminating it. It would

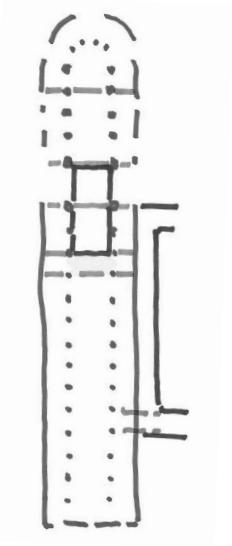
perhaps run Vespasion, Nerva, Caesar, Augustus, and Trajan, but Trajan would have the added feature of providing a complex mini-narrative all on its own, in a sequence of expansions in which the temple succeeds in leaving its own forum (fig. 32a-h).

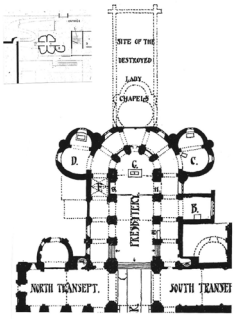
The principles of extendability and pavilionization are also on view in cathedral complexes such as Norwich (fig. 33). When the cult of the Virgin Mary developed after construction of the building, the problem of an addition developed. Where to put it? Almost universally, Lady Chapels were built as an extension of the nave axis behind the choir, behind the altar, as a means of claiming the most authorized position available (fig. 34). The duel principles of extendability and pavilionization assure that the new element has the characteristics of being both part of and distinct from the rest of the organization, creating simultaneously the dual narratives of both growth and separation, continuation and disjunction, dependent and independent. Of course, even prior to the construction of the Lady Chapel, these themes were evident in the organization of the building. For one thing, the central axis itself was already differentiated by a series of distinctions: narthex, nave, crossing, choir, altar, ambulatory, etc., each linked in a continuity of sameness and distinguished by a difference (fig. 35). For another thing, the situation and configuration of the chapels, attached to but somewhat independent from the geometry of the rest of the church, establish a model for future additions (fig. 36). Clearly, Le Corbusier had something similar in mind when designing the side chapel and the visitation rooms at La Tourette, where the components are both partially dependent on their connections to the larger facility but also independent from it, as expressed by the loss of the dominant orthogonality.

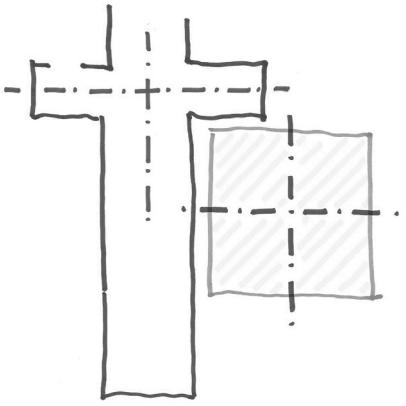
Another example of extension versus differentiation occurs at Norwich in terms of the dialogue established between its different basic components and their arguments about the essential compositional structure of the scheme. Is the cloister an afterthought which, somewhat after the fact, finds the opportunity to nest within the intersection determined by the Latin cross of the church (fig. 37)? Or is the cloister primary and the church involved merely in a sort of subservient framing of it? In the latter case, this framing would also explain the differentiation between the nave and the choir, that the choir is 'outside' the organizational perimeter of the cloister and thus isolated by its extension into new, unauthorized territory (fig. 38). This option is also reinforced by the reiteration within the cloister configuration of the basic structure of a Roman temple, with the chapter house assuming the position of temple, leaving the church in a subservient position, although the chapter house and the choir are linked by a figural similarity and also by the fact that they both represent projects of the axial geometries of











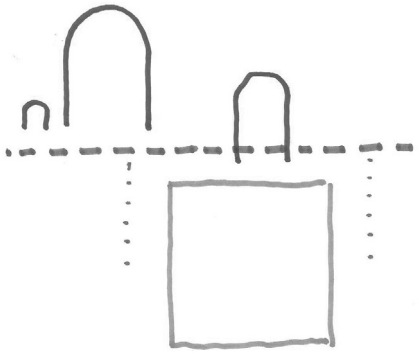
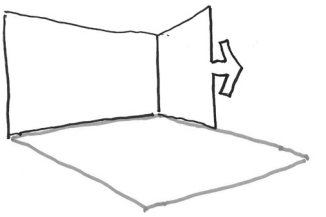
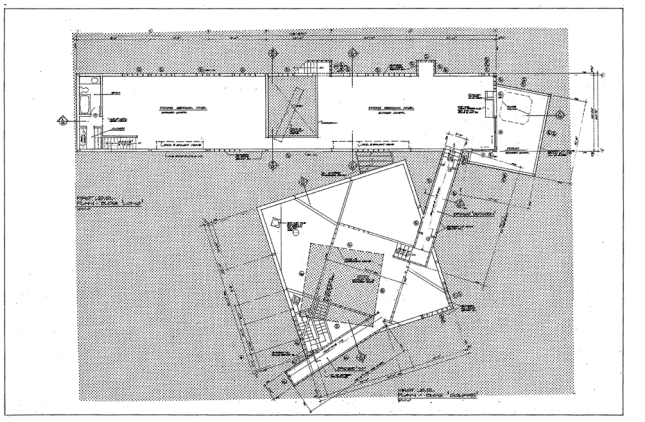
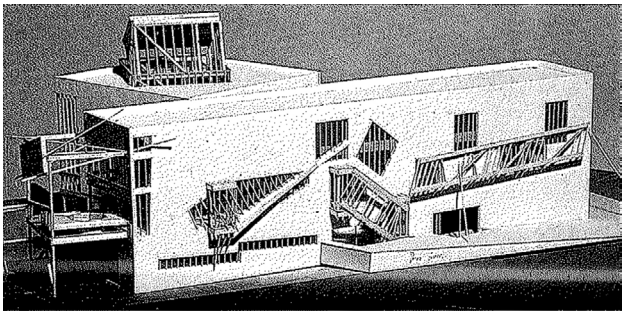


Fig. 33–38
(line by line).



Top: Fig. 39a–b.
Middle: Fig. 40.
Bottom: Fig. 45.

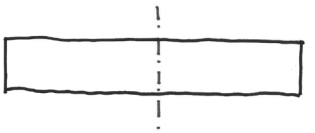


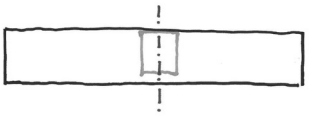


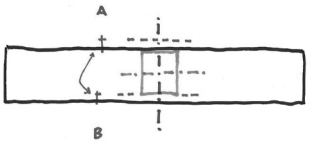
adjacent figures. Rather than the church and the cloister being the juxtaposition of two stationery figures, the view of the crossing from the cloister (fig. 39a) reveals that the nave and the south trancept can be read as a continuous element, (fig. 39b) a bar which has wrapped the corner and is in the process of moving across the eastern edge of the cloister perimeter.

Many of these features reappear in the final scheme for an unbuilt Gehry project of 1978, the Familian House (fig. 40). Not unlike Norwich, a view of the plan shows a conflict between the primacy of the bar versus the square as essential organizers of the project, although here the difference in orientation underscores the conflict between the two. This presumed independence might allow us to focus for a moment on the bar (fig. 41). Although staggeringly simple, there is an unavoidable geometry that occurs internally to the bar. First of all, it has a middle, and secondly it has ends (fig. 42). Gehry has chosen to emphasize the middle by establishing within the plan a double height space in this position, ostensibly the family room, possibly somewhat akin to the crossing at Norwich. The position of this element is not completely neutral as it is slightly off center to one of the long sides (fig. 43), which creates a slight inflection to the surrounding area. It also creates the possibility that some sort of a shift has been made towards one side and away from the other, allowing circulation to remain within the bar along one elevation and possibly implying the abandonment of a similar element on the other side, outside the bar. Oddly enough, a similar situation occurs in Norwich at the corner of the crossing, where the side aisle associated with the nave is externalized and incorporated into the exterior walkway of the cloister along the south trancept (fig. 44). Gehry capitalizes on this situation by revealing what might be interpreted as a 'ruin', not unlike Villa Foscari, in the form of what looks something like a collapsed series wooden walkways that conform to this zone (fig. 45). Two of the pieces are actually usable: a stairway that connects the two levels of the family room and a small projection reminiscent of the projecting box at Vaucresson.

Sympathetic to the principles of pavilionization, there are also bits of geometry that describe the architecture of the ends of the bar similarly, but one as a solid and the other as a void (fig. 46). Like Norwich, these initial disturbances begin to orchestrate additional distinct pieces in the configuration (fig. 47). The implied walkways either reinforce existing elements or suggest new ones, such as the implied module at one end of the bar, seemingly closely akin to the double height space (fig. 48). From this figure emerges the frame of a porch that is similar in size and shape, but 'loosened' from the bar's orthoganality, again reflecting both a sense of origin but also a sense of gained independence. It is almost as



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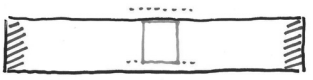
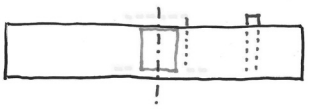
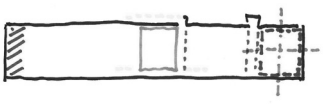
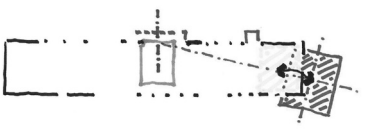
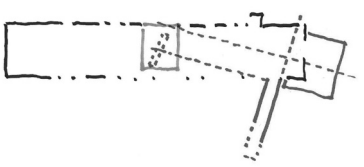
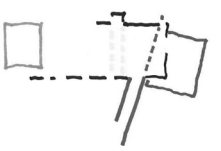


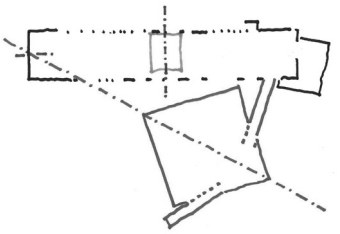


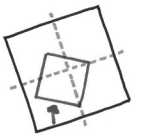


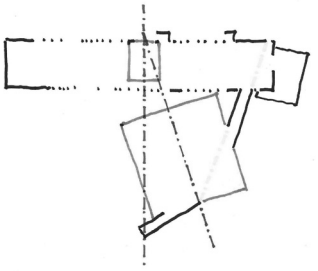


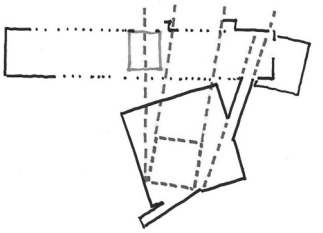


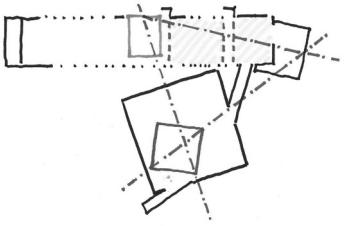


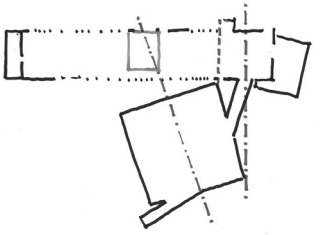


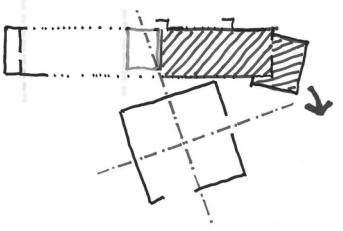


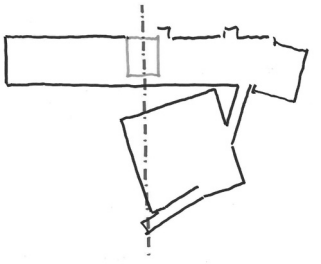


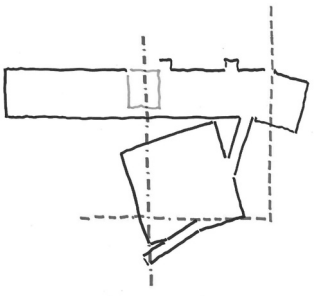


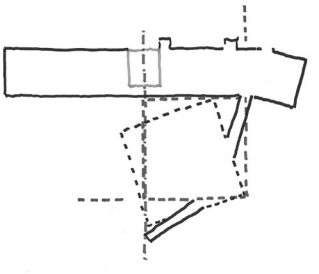


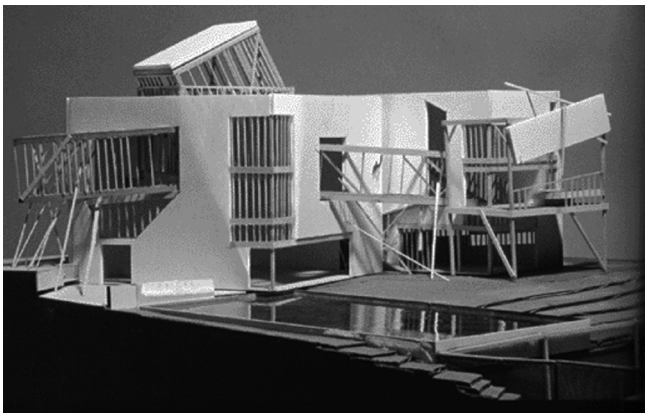












Previous pages:
Left page: Fig. 41–44;
46–51 (line by line).
Right page: Fig. 52; 54–61;
63 (line by line).

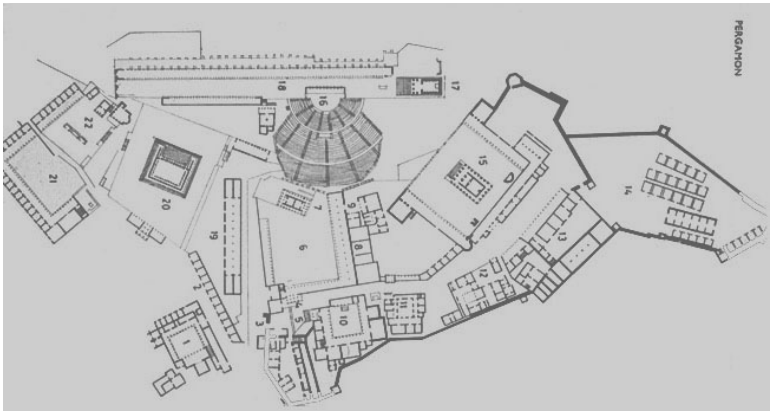
Left: Fig. 53.
Opposite page: Fig. 62.

though we were now able to witness that moment in Villa Foscari in which the removal of most of the elements that constituted the garden façade was taking place (fig. 49). And like Foscari, and like the elements strung along the outer edge of the bar, there is the strong sense of ruin, or hasty reconfiguration with too little material, or too little attention.

The new independent orientation is seemingly disinterested in that of the larger figure (fig. 50), like an errant sock drawer in a decaying clothes cabinet, and yet one of its axes nails the midpoint of the axis through the double-height space, either in suppressed homage or an attempt to reinforce a particular idea of center. The edge of this figure that is still embedded in the bar seems to spawn another projection (fig. 51), this one a bridge that extends out into space. The geometry of this figure seems to align itself with the diagonal skylight that slices across the roof of the double-height space, which is in turn bisected by the line extending from the porch, perhaps again creating a figure that might be sympathetic to other cathedral complexes, Canterbury for example, with its multiple trancepts and its bend to the right.

What the bridge is headed for is not nothing, it is a substantial something, it is the square living room pavilion (fig. 52) that, in the Norwich model, takes on some of the aspects of the cloister. Its orientation at first glance again seems to argue for its independence, and yet there are countervailing arguments as well. First of all, its diagonal axis seems to originate at the far end of the bar (fig. 53). The significance of this relationship is underscored by the manipulation of the opposite corner of the square and the intersection of the matching bridges which are disposed symmetrically around it, in good Beaux Arts fashion. Secondly (fig. 54), another of its axes is fixed on the axis of the double-height space and the far façade, like that of the emerging porch, as though they are both locked back into at least some of the organization of the bar, whatever other arguments they are making about their freedom, like the hands of a clock, sort of George Nelson-esque.

If the living room module were to be read as a cloister, its internal paradise garden might be referenced by the sky light that punctures its ceiling, which re-



produces a perfect model of what might be read as a quadrant (fig. 55). Again, at the same time, this element seems to stress its independence by a new orientation, and yet, again, at the same time, its position seems to reference or be determined by other elements in the composition (fig. 56). For example, the living room skylight is almost equidistant from the axes extending from central double-height space and the connecting bridge; it seems to be claiming an affinity to the module in the bar between the double-height space and the projecting box; and it bears a strong resemblance to the emerging porch. As opposed to the other half of the bar, this half seems to be increasingly delineated into smaller modules which then seem to seek to effectuate a dispersion of these modules or their representatives into the surrounding area, or possibly even their alternative inclusion into the square figure of the living room/cloister.

The living room skylight betrays a further interest in the emerging porch by the alignment of one of its diagonal axes (fig. 57), which intersects the porch's axis at its outer façade. There are a lot of other potentially interesting and integrating relationships indicated by some of the geometries in this area. If the area within the bar that the porch from which the porch seems to be emerging is read as a figure, its central axis determines both the originating point of the bridge and the outer corner of the living room module (fig. 58). The other axis of the living room/cloister seems to be directing the rotation of the porch and to be claiming it as a component, one of its quadrants (fig. 59). The other half of the bar seems remote from all this action, yet potentially equal to it, especially as the living room/cloister seems to be redirecting its attentions to the middle, as opposed to the far end of the bar, as though it wants to contend with the entire composition, not just half of it, unlike the cloister at Norwich, which contents itself with addressing the nave alone.

There is another bridge that mirrors the first one at the outer corner of the living room module. This one appears to be every bit its equal, but turns out to be distinctly less useful in that it seems to be a bridge to nowhere. Of course, it's doing something. Other than marking the significance of that corner, it seems to be

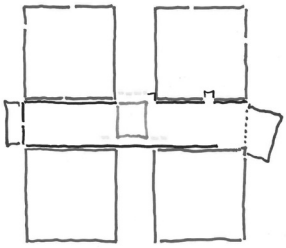


Fig. 64.

tracing the sweep of an arc around a center, like a clock, much like the dispersion of the modules themselves (fig. 60). The sequence of the emerging porch and the cloister together constitute a little less than a quarter of the circuit, which would be determined exactly by the line of the bar's cross axis. And this is the line to which the bridge extends, at least somewhere formally significant if not programmatically so, as if to demonstrate the interconnectedness of the building's various and seeming far-flung components. As much as the square of the living room/cloister strives to establish itself as the originating object, orchestrating the position of the bar as it wraps the corner [not unlike the view of the cathedral from the cloister at Norwich], the implied geometries of the bar reach into space to provide an alternative framework with which to reconstruct and measure the whole composition (fig. 61).

Although a seemingly unlikely comparison, especially given their relative ages, the effect is not unlike the acropolis at Pergamon (fig. 62), where a series of large temple complexes swirl around the organizing bar of the gymnasium, or the gymnasium describes the diameter of the collection of circling objects. Like Pergamon, the winner of the endless struggle is ambiguous. As much as the size and shape of the living room/cloister seems to be determining the bending and decomposition of the bar into pavilions attendant to the square, determined in part by the ability of the geometry of the square to fix the important controlling dimensions that seem to be organizing the manipulation of the bar, this same relationship allows the position of the square to be read as nesting within the armature of the implied cruciform (fig. 63), like Norwich, and thus make the relative dominance less certain.

Just as the square form reinterprets various of the components to become fractured figures of its own incomplete paradise garden, the bar seems to offer the same proposition to the encircling figures (fig. 64); that they are, in fact, dancing to its tune as they proceed around the composition. In this interpretation, another template emerges, on in which the living room square becomes just a subset in the overall composition of another, as of yet incomplete but evolving paradise garden involving all the figures, and one which describes perfectly the initial stages of pavilionization which set the alternative reading in motion.

It is perhaps unlikely that when designing the Familian House, Gehry was tempted to seek inspiration from Norwich or Pergamon. But nonetheless, the works are connected, developed, and perhaps even based on a common interest in the devices proposed by the simplest of diagrammatic organizations. If we were return to the Rowe's original subject of Le Corbusier and the relatively surprising shared affinities exhibited by his work, a possibly equally surprising comparison could be made between the basic organizational strategies of the Familian House and that of the pilgrimage church at Ronchamp, but that is probably best a topic to be covered elsewhere.