

Frascari, Marco. "The Tell Tale Detail" VIA 7: The building of Architecture. 1984.

The Te'He-Ta'e Detail
Marco Frascari

Architect Marco Frascari, like Vittorio Gregotti, locates the source of architectural meaning in construction, in particular in the "formal and actual joints" between materials or spaces. In this influential essay, Frascari privileges the joint—the original detail—as the generator of construction, and therefore of meaning. The tectonic detail is thus the site of innovation and invention. Frascari defines architecture as the result of the design of details and their resolution and substitution.

While functioning pragmatically, the "fertile" detail can also be seen as an aesthetic expression of structure and use. Frascari's semiological reading suggests that the detail is the minimum unit of signification within the architectural production of meaning. As in Gregotti's "The Exercise of Detailing," (this chapter) Carlo Scarpa's work is chosen as exemplary because "each detail tells us the story of its making, of its placing, of its dimensioning." The idea of narrative permeates the article; for instance, in the intriguing idea that joints are pretexts for generating new texts. This is possible, Frascari claims, because the detail or joint can impose its order on the whole. Thus, located within tectonics is an endless set of architectural ideas.

The "techné of logos," which can be understood as the production of discourse, is the aspect Frascari calls *construing*. Like Martin Heidegger, Frascari is interested in the etymological connections between words, in this case between *constructing* (building) and *construing* (giving order and intelligibility to the world, i.e., constructing meaning).

In Heidegger's discussion, building (*bauen*) is linked to constructing, dwelling, and cultivating, with connotations of edifying. Furthermore, Heidegger asserts that dwelling is the purpose of life and depends on building. The linguistic connection to phenomenology lends credibility to Frascari's link between constructing (details and meaning) and construing meaning. A slight digression into perceptual psychology nonetheless

makes a contribution to his argument, in positing the detail as the perceptual structure for apprehending architecture as meaningful, in its emphasis on returning architecture to its origin in tectonics, seen as generative of meaning. Frascari's essay touches on several important postmodern themes.

THE TELL-THE-TALE DETAIL

The architectural community has traditionally ascribed the maxim "God lies in the detail" to Mies van der Rohe.¹ The German version of the adage, *Der liebe Gott steckt in Detail*, perhaps the original source of Mies's maxim, was used by Aby Warburg to indicate the foundation of the iconographical method for researching in art history. The French version has been attributed to Gustave Flaubert, and in this case the maxim indicates a manner of literary production.² The common denominator in these different forms and uses indicates that the detail expresses the process of signification; that is, the attaching of meanings to man-produced objects. The details are then the *loci* where knowledge is of an order in which the mind finds its own working, that is, *logos*.³

The aim of this paper is to indicate the role of details as generators, a role traditionally ascribed to the plan, and to show that technology, with its double-faced presence as "*techné of logos*" and "*logos of techné*"⁴ is the basis for the understanding of the role of details. That is to say the "construction" and the "construing" of architecture are both in the detail. Elusive in a traditional dimensional definition, the architectural detail can be defined as the union of construction, the result of the *logos of techné*, with construing, the result of the *techné of logos*.

Details are much more than subordinate elements; they can be regarded as the minimal units of signification in the architectural production of meanings. These units have been singled out in spatial cells or in elements of composition, in modules or in measures, in the alternating of void and solid, or in the relationship between inside and outside.⁵ The suggestion that the detail is the minimal unit of production is more fruitful because of the double-faced role of technology, which unifies the tangible and the intangible of architecture. As Jean Labatut, a French Beaux-Arts-trained Princeton professor

of architecture notes: "Whatever the air spaces, areas and dimensions involved, it is the precise study and good execution of details which confirm architectural greatness. 'The detail tells the tale.'"⁶

In the details are the possibilities of innovation and invention, and it is through these that architects can give harmony to the most uncommon and difficult or disorderly environment generated by a culture.⁷ The notion that architecture is a result of the resolution, substitution, and design of details has always been a latent concept in architects' minds. That is to say, there is truth in the classical commonplace of architectural criticism: "That might have been great architecture if only somebody had worked out the details...." Careful detailing is the most important means for avoiding building failure, on both dimensions of the architectural profession—the ethical and the aesthetic. The art of detailing is really the joining of materials, elements, components, and building parts in a functional and aesthetic manner. The complexity of this art of joining is such that a detail performing satisfactorily in one building may fail in another for very subtle reasons.⁸

The discussion of the role of detail in the architectural process of signification will be developed in two parts. These inquiries analyze the understanding of the role of the detail within two different but interlocking realms, the theoretical and the empirical.

The first part is a search for an understanding of the concept of details in different levels of architectural production. The result of this inquiry is the conceptual identification of the detail with the making of the joint and the recognition that details themselves can impose order on the whole through their own order. Consequently, the understanding and execution of details constitute the basic process by which the architectural practice and theories should be developed.

The second part is an analysis of the architecture of Carlo Scarpa (1906–1979), a Veneto architect. In Scarpa's architecture, as Louis Kahn pointed out, "detail is the adoration of nature." The architectural production of this architect, in which the adoration of the making of joints is almost obsessive, allows an empirical interpretation of the role of detail in the process of signification, seen within culturally definable modes of construction and construing. In Scarpa's works the relationships between the whole and the parts and the relationships between craftsmanship and draftsmanship allow a direct substantiating *in corpore vili* of the identity of the processes of perception and production, that is, the union of the construction with the construing in the making and use of details.

Dictionaries define "detail" as a small part in relation to a larger whole. In architecture this definition is contradictory, if not meaningless. A column is a detail as well as it is a larger whole, and a whole classical round temple is sometimes a detail, when it is a lantern on the top of a dome. In architectural literature, columns and capitals are classified as details, but so are *piani nobili*, porches, and pergolas. The problem of scale and dimension in those classifications and the relationship between aediculas and edifices makes the dictionary definition useless in architecture. However, it is possible to observe that any architectural element defined as detail is always a joint. Details can be "material joints," as in the case of a capital, which is the connection between a column shaft and an architrave, or they can be "formal joints," as in the case of a porch, which is the connection between an interior and an exterior space. Details are then a direct result of the multifold reality of functions in architecture. They are the mediate or immediate expressions of the structure and the use of buildings.⁹

From *VIA 7: The Building of Architecture* (1984): 23–37. Courtesy of the author and publisher.

The etymological origin of the word "detail" does not help at all in understanding the architectural use of the term.¹⁰ In architectural literature the term appeared in the French theoretical works of the eighteenth century and from France spread all over Europe. This spread was caused by the coupling of the term with the concept of "style" and by the active influence of French literary criticism and theory on the French neo-classical architects. In 1670 Despreaux Nicolas Boileau, in the first part of his *L'Art Poétique*, warning against the use of superfluous details in poems, set an analogy between an overdetailed palace and an overdetailed poem.¹¹ By the eighteenth century this analogy was commonplace and, ascribing it to Montesquieu, Giovanni Battista Piranesi attacked it as trivial in his defense of his architectural theory of overdetailed buildings.¹²

The French theoreticians of the *architecture parlante* were the ones who formally consolidated the role of detail in architectural production. In the analogy of the "speaking architecture," the architectural details are seen as words composing a sentence. And, as the selection of words and style gives character to the sentence, in a similar way the selection of details and style gives character to a building. This powerful role of the detail as generator of the character of a building was also pointed out by John Soane in one of his lectures on architecture: "Too much attention can not be given to produce a distinct Character in every building, not only in great features, but in minor detail likewise; even a moulding, however diminutive, contributes to increase or lessen the Character of the assemblage of which it forms a part."¹³

In the Beaux-Arts tradition the understanding of the role of detail as a generator of the character of buildings determined a very peculiar graphic means for the study of it, the *analytique*. In this graphic representation of a designed or surveyed building the details play the predominant role. They are composed in different scales in the attempt to single out the dialogue among the parts in the making of the text of the building. Sometimes the building as a whole is present in the drawing, and generally it is represented on a minuscule scale, and so it seems a detail among details. The origin of the *analytique* and its role in the construing of architecture can be traced back to the technique of graphic representation and composition developed by Piranesi in his etchings surveying the *Magnificenza* of Roman architecture. These are a graphic interpretation, with a stronger Vichian bias, of Carlo Lodoli's understanding of the built environment as a sum of inadequate details to be substituted with more appropriate ones.¹⁴ Another form of the *analytique*, illustrating the architecture of Italy, can be found on the back of Italian lire notes today.

It is important to notice that the *analytique* as graphic analysis of details had its development in a period in which architects did not have to prepare working drawings showing the construction of the details. The drawings carried few if any details and dimensions. The designer could be almost entirely dependent on his craftsmen. Builders had no need for drawings to show details whose execution was a matter of common knowledge. Construction of details was parceled out among the various tradesmen, who supplied the necessary knowledge for making them. The same craftsmen who furnished the information for the [Denis] Diderot and [Jean le Rond] D'Alambert *Encyclopédie* were able to construct the drawing with the exact eye of the artist, and the *analytique* was simply the source for the understanding of the ordering role of a single detail in the overall composition.¹⁵

The production of details, as it was established before the development of the industrial society and motivated by different cultural needs, began to become problematic in a predominantly economically motivated society. No longer considered as long-lasting cultural and social repositories, buildings came to be viewed as economic investments with an intentionally planned short existence. Two polar reactions had developed from the change that occurred in the scope of edifices. One of the reactions was that the various building trades no longer inferred the construction of the detail from design drawings. The details were studied and resolved on the drawing boards. Draftsmanship was substituted for workmanship, and the development of "real details" was replaced by "virtual" procedures. From this point of view the detail was no longer part of the building. The detail was no longer seen as a joint; instead, it was seen as a production drawing. In an *American Glossary of Building* the term "detail" is defined as "the delineation to full size or a large scale of any portion of an architectural design."¹⁶ A French glossary was even more precise in this understanding of detail: "Detail: Specification or description of the work to be performed in the execution of a building."¹⁷ In this interpretation "details" are verbal and graphic means for controlling the work of variable crews of vocationless workers who are unprepared for their own jobs and possibly even financially dishonest.

The second reaction to the change that occurred in the role of detail is the one that can be exemplified by the architecture produced by the Arts and Crafts Movement. The detail, in this movement, was seen as the means for the redemption of workers. The skill and knowledge of the making of details were given back to the workers. Workmanship was seen as the sole parameter for the details, which in themselves were seen as refinement of building tradition. The knowledge of details and of the related skills was the necessary means for the architect to practice his profession, since it was his task to select the appropriate workers for the appropriate details.

This duality in the physical production of detail is also found in the mental production. Using a conceptual analogy, it is possible to define architecture as a system in which there is a "total architecture," the plot, and a detailed architecture, the tale. The detailed architecture is based on "the constant process of drawing extrasystematic elements into the realm of the system and of expelling systematic elements into the area of not system....The stone that the builders of a formed and stabilized system reject for being, from their point of view, superfluous and unnecessary, turns out to be the cornerstone of subsequent system."¹⁸ From this point of view architecture becomes the art of appropriate selection of details in the devising of the tale. A plot with the appropriate details becomes a fully developed and successful "tale."

Architecture as art of the appropriate is the theme of Leon Battista Alberti's architectural theory. Alberti sees architecture as the art of the selection of appropriate details whose result is beauty, which is a meaningful goal. He defines beauty as "the 'concinnity' of all the details in the unity to which they belong"; in other words, beauty is the skillful joining of parts by a normative by which nothing can be added, subtracted, or altered for the worse. Generally this principle has been interpreted as stating that a building should be a complete and finished whole, a total architecture. Alberti, however, does not apply this concept to the actual edifice, but, rather, to the mental one.¹⁹ The joint, that is, the detail, is the place of the meeting of the mental construing and of the actual construction. A perfect instance of this union of mental function and

physical representation is in the façade of Palazzo Rucellai, designed by Alberti in Florence. Although the façade is incomplete and its incompleteness is clearly shown, the detailed architecture is complete, and nothing can be added or subtracted for the worse. The grooves of the joints of the stone slabs composing the thick veneer of the Florentine *schacciato* (representing the post and beam structure of the three superimposed classical Orders, related with arched windows and infilling walls) are the solution of the mathematical problem set by the relationships existing among the parts of the façade. In many cases the joints are not real ones, and the shapes of the stones are not as regular as they appear; fake grooves were carved in the stone to make the detailed architecture complete and to offer at the same time its own proof.

Alberti's search for "Beauty" is the setting of a precise relationship between the detail and the attached meaning. Beauty is the result of the process of signification, and *concinnity* is the process for achieving it. Concinnity is the correspondence of three basic requirements: 1) Number, 2) Finishing, 3) Collocation.²⁰

Number is a system of calculation. "The technique of calculation is part of the technique of house building."²¹ Numbers in this way are tools for giving meaning. In architecture there are elements, and, in order to build, it is necessary to draw numerical correlation among them. In a triforium, three arches are correlated to four columns to make a serliana. The proof is in the details, and it is expressed in terms of mouldings, capitals, bases, and keystone. "Numerology," then, is for Alberti a technique for the selection of figures, thereby signalling that the details are related to memorable shapes such as the human body or cosmological figures.²²

Finishing is a mathematical procedure for the definition of the dimensions of the directions in which the space of architectural objects is articulated. The edges of the tri-dimensional bodies of architecture are defined by a system of proportions. Proportion or "analogy" is the use of relations in a measurement.²³ An analogical system is a set of norms for the creation and combination of details. A basic measure, or module, is the norm from which all the lengths, widths, and heights are derived, and any single detail is measured after it. Then all the parts of the building will stand to each other in a direct and intelligible relationship. This relationship stands even when its form does not yet have a verbalized expression.

Collocation is the composing by place, that is, the functional placement of the details. The function in this case not only is limited to the practical and structural dimensions but it embodies, as well, historical and aesthetic dimensions.²⁴ The placing of details, then, is deeply related to the other two requirements: numbers and analogies. The detail in this manner is not defined by scale, but, rather, the scale is the tool for controlling it.

The geometrical and mathematical construction of the architectural detail is in no sense a technical question. The matter should be regarded as falling within the philosophical problem of the foundation of architecture or geometry, and ultimately within the theories of perception.

The processes of designing, ordering materials, and building a house are techniques in the same way geometry is a technique by which the designer, the builder, and the user of a house transform the appropriate sign with a view to predicting the occurrence of certain events. This technique (geometry) provides us with a structure for describing the

built world, a conceptual framework into which the designer, the builder, and the user can fit their empirical experience. Geometry shows how to derive a shape from another shape by transformation.

In this guise geometry does not state facts, but gives us the forms in which to state facts. It provides us with a linguistic or conceptual structure for the construction and the construing of a building. The geometrical structures embodied in the architectural details do not state facts but rather provide a structure for stating facts within a "scale." They give us a way of making comparisons that meaningfully relate visually perceived architectural details. The notion of the individually perceived details can be illustrated with the phenomenon of "indirect vision" as explained by Hermann von Helmholtz:

The eye represents an optical instrument of a very large field of vision, but only a small very narrowly confined part of that field of vision produces clear images. The whole field corresponds to a drawing in which the most important part of the whole is carefully rendered but the surrounding is merely sketched, and sketched the more roughly the further it is removed from the main object. Thanks to the mobility of the eye, however, it is possible to examine carefully every point of the visual field in succession.²⁵

Helmholtz's research on visual perception persuaded him that sensory stimuli only supply signs of the presence of architecture, but do not give us an adequate understanding of it. Such signs, that is, the details, acquire a meaning by virtue of which they become a vehicle of knowledge through a long process of association and comparison and through a set of geometric relationships.²⁶

The geometrical relationships embodied in the details in a built environment as well as in a natural environment set the understanding of the large field of vision. The geometrical relationship or proposition at the base of the compound pier of the High Gothic architecture expresses in itself every feature of the imposed superstructure. Such relationships are the results of the transformation in stone of the second requirement of Scholastic writing, of an "arrangement according to a system of homologous parts and parts of parts."²⁷ The details in this way, while forming an indivisible whole, are individually perceived and understood.

The problem of perception of details within the sphere of architectural appropriation is stated by Walter Benjamin:

Buildings are appropriated in a twofold manner: by use and by perception or rather by touch and sight....Tactile appropriation is accomplished not so much by attention as by habit. As regards architecture, habit determines to a large extent even optical reception.²⁸

This is an empirical theory that regards all perception of space as depending upon conventions and takes not only qualities, but even details as nothing more than signs, the meanings of which are learned only by experience. These conventions are the basis for architecture understood as existence, form, and location of external objects. These Helmholtz calls perceptions.²⁹ Perceptions are the ideas or signs of objects resulting from an interpretation of sensations that is carried out by processes of unconscious geometrical inference. The placing of details has a key role in these processes of inference. The

visual sensations guided by the tactile sensations are the generator of the geometrical propositions. In architecture, feeling a handrail, walking up steps or between walls, turning a corner, and noting the siting of a beam in a wall, are coordinated elements of visual and tactile sensations. The location of those details gives birth to the conventions that tie a meaning to a perception. The conception of the architectural space achieved in this way is the result of the association of the visual images of details, gained through the phenomenon of indirect vision, with the geometrical proposition embodied in forms, dimensions, and location, developed by touching and by walking through buildings.

The art of detail is in its most sophisticated and learned form in the work of Carlo Scarpa. An analysis of the concept of detail in Scarpa's architecture can best be begun with the words of Louis Kahn:

In the work of Carlo Scarpa
 Beauty
 the first sense
 Art
 the first word
 then wonder
 then the inner realization of Form
 the sense of wholeness of inseparable elements.
 Design consults Nature
 to give presence to the elements.
 A work of art makes manifest
 the wholeness of Form of the
 symphony of the selected shapes
 of the elements. In the elements
 the joint inspires ornament, its
 celebration.
 The detail is the adoration of Nature.³⁰

The "adoration of the joint," in Scarpa's architecture, is a perfect realization of Alberti's concinnity. Each detail tells us the story of its making, of its placing, and of its dimensioning. The selection of the appropriate details is the result of singling out its functional roles. The details of Scarpa's architecture solve not only practical functions, but also historical, social, and individual functions.³¹

Scarpa's architecture can be generically classified as the merging of the principles of the organic architecture as expressed by Frank Lloyd Wright with a learned distilling of Veneto craftsmanship with a blend modern and ancient technologies. However, the definition is inadequate; whereas Scarpa's understanding of Wright's architecture was passive, based on an appreciation of photographs and drawings, his understanding of Veneto craftsmanship was active, based on his daily working and dealing with the stonecutters, masons, carpenters, glassmakers, and smiths of Venice. The result is a modern architecture that is more than rational structures and functional spaces. The teaching of functionalism is present in Scarpa's work, but the functionality is mediated by the search for representation and expression through the making. Scarpa's architecture stands

against the bare structure of logic; it stands for the union of *res* and *verba*, that is, for the union of representation and function. This concept rules Scarpa's architecture from structure to expression. In his architectural objects the *techné of the logos*, the construing, becomes the manner of production of signs that are the details. The *logos of the techné*, the constructing, which results from the expression of Veneto craftsmanship, becomes the dialectical counterpart in the generation of the details as signs. Scarpa's buildings show indeed a constant search set between the actual form (the built one), and the virtual form (the perceived one). The constant manipulation of the discrepancies between virtual and actual forms is the method used for achieving expression. "In architecture," Scarpa once said, "there is no such thing as a good idea. There is only expression."³²

The analysis of Scarpa's detail can be satisfactorily managed visually only by a continuous comparison between drawings and built objects, on the one hand, and the historical, practical, and formal reference that generated any single detail, on the other. It is also necessary to see Scarpa's details from two different sides. On one side, his detailing is the result of interfacing of design and craftsmanship on the site and of the constant "sensorial verification" of details during the assembly of the building. Scarpa made a practice of visiting the building site during the night for verification with a flashlight, thereby controlling the execution and the expression of the details. In the normal daylight it would indeed be impossible to focus on details in such a selective manner. It is also a procedure by which the phenomenon of the indirect vision becomes an element in the process of decision in the design. The flashlight is a tool by which is achieved an analog of both the process of vision and the eye's movement in its perception field (with only one spot in focus and the eye darting around). Another Veneto architect, Piranesi, used the same technique in visiting the sites of the buildings he was going to survey and represent in his etchings of the *Antichità Romane*. To single out the "expression of the fragments," that is, the details, he used the light of a candle.³³

On the other side, Scarpa's details are the result of an intellectual game performed on the "working drawings" that are the result of the interfacing of design and draftsmanship. That game is the matching of the construction of a representation with a construction of an edifice. The relationship between architectural drawings and buildings is generally thought of as a Cartesian representation based on visual matching of lines. However, Scarpa's drawings show the real nature of architectural drawings, that is, the fact that they are representations that are the results of constructions. They are a construing of perceptual judgments interfaced with the real process of physical construction of an architectural object. The lines, the marks on the paper, are a transformation from one system of representation to another. They are a transformation of appropriate signs with a view to the predicting of certain architectural events, that is, on the one hand the phenomena of construction and the transformation by the builders, and on the other hand, the phenomena of construing and the transformation by the possible users. Consequently, on the same drawing there are present several layers of thought.

A design is developed by the same technique in which the drawing is made. The continuous inference process on which the design process is based is transformed in a sequence of marks on paper that are an analog for the processes of construction and construing. The piece of drawing paper selected for supporting the slow process of the construction of a

design presents concurrently vertical and horizontal sections, as well as elevations of the designed piece. These drawings are surrounded by unframed vignettes that analyze three-dimensionally any joint of the object, as in a prediction of the role of each detail in generating the whole text and in the perception of them in the "indirect vision." Scarpa's drawings do not define future architectural pieces as a simple sum of lines, surfaces, and volumes. Rather they present the process of transformation of the details from one system of representation to another, from drawing to building.

In Scarpa's drawings it is also possible to have the "proof" of the system of appropriation that rules the perception of architecture. These representations of three-dimensional structures on a two-dimensional surface result from the interaction existing between visual and tactile perceptions. The central part of the drawings generally presents graphic constructions that might be labeled a technical drawing. But they are not what are traditionally identified as plans, sections, and elevations. Scarpa's drawings are not merely devices of Cartesian descriptive geometry; rather, they are descriptions of the future perception in relationship to the making of the architectural object. The visual components of perception are analyzed for a detail and not for the whole, whereas the tactile perceptions are verified for the whole. These drawings present components that are not visible but that are the result and the projection of construction and construing, Alberti's mental edifice. They are the result of the memory effects of the organs of touch and sight in the making and using of architecture. These drawings are never fully rendered. Only fragments and parts of them are. This practice shows by analogy that, while it is whole, Scarpa's architecture cannot be characterized as complete. An architectural whole is seen as a phenomenon composed by details unified by a "device," a structuring principle. This principle, in Scarpa's architecture, is the order generated by the use and the understanding of classical architectural ideas such as façade design.³⁴

Scarpa is a *Magister Ludi*, and his buildings are texts wherein the details are the minimal unit of signification. The joints between different materials and shapes and spaces are pretexts for generating texts. The interfacing of commentaries with preceding texts in the architecture of Scarpa is always a problem of joints, and in the joint he achieves the change of conventions. That possibility is a consequence of the fact that many of his architectural texts are learned commentary to preceding texts and in many cases, as in a medieval *scholium*, the commentary in its interfacing with the original text is generating a new text. In the design of the addition to Gipsoteca Canoviana in Possagno, Scarpa was able to change the convention that asks for the background walls of a collection of gypsum casts to be tinted. Scarpa's solution was to put the white casts against a white background wall that was washed with light, without directly lighting the casts. The problem and the solution are in the use of light. Scarpa solves it in a detail in the joint of three walls in a corner made of glass. In a lecture given at the University of Venice (1976) he described the architectural making of this corner. The achievement of the effect of light occurs by a formal manipulation. The solution of the formal cause solves the final cause. He described it as "clipping off the blue of the sky," a formal cause, but the result was the lighting of the wall, the final cause. His own words are the best description of the making of an architectural detail:

I love a lot of...natural light: I wanted to clip off the blue of the sky. Then what I wanted was an upper glass recess....The glass corner becomes a blue block pushed up and inside [the building], the light illuminates all the four walls. My bias for formal solutions made me prefer an absolute transparency. Consequently I did not want the corner of glass to tie in a frame. It had been a *tour de force* because it was not possible to obtain this idea of pure transparency. When I overlap the glasses I see the corner anyway especially if the glass is thick. One may as well put in the frame. Then, besides this, if it is a clear day one may see the reflection. Look, when I saw the reflection I hated myself. I did not think of it. These are mistakes which one makes in thinking, acting, and making, and therefore [it] is necessary to have a double mind, a triple mind, the mind like that of a robber, a man who speculates, who would like to rob a bank, and it is necessary to have that which I call wit, an attentive tension toward understanding all that is happening.³⁵

The development of architecture in the works designed by Scarpa proceeds by steps and stages. These are in the details. Each detail represents an interim result that cannot be considered a final result. Scarpa would invent details the precise architectural functions of which would become clear only after they had been used in several different designs. The range of those architectural functions goes from the immediate to the mediate understanding of the meaning of the detail. This creative use of details in design is fully in accordance with [Ludwig] Wittgenstein's understanding of a creative use of language. The "exact" meaning, that is, the function of words, would only become known by a later use. A function of detail in a design becomes clear by re-presentation, that is, by re-use. The detail often appears incomplete and vague in its structuring principle. But, unifying in itself function and representation, the re-use of a detail becomes a creative catalyst. It becomes a fertile detail. The re-use of details is analogous to Richard Wagner's re-use of *leitmotifs*.³⁶ The *leitmotifs* are structural devices used by Wagner to assemble and reconstruct the architecture of opera from within and are the smallest units of signification in the musical text. Scarpa's details are structural devices used to assemble architectural text from within.

A case of *fertile* details in Scarpa's architecture is the use of the "ziggurat" motif. The architectural function of these fertile details emerge in the Brion Cemetery at S. Vito d'Altivole and in the façade and the interiors of the Banca Popolare di Verona. In the Cemetery, the ziggurat is executed in cast concrete, and it is a celebration of the possibility of casting as generator of mouldings. In the bank, especially in the façade, the ziggurat detail is a *prima donna* in Rosso Verona, the brocade-like local red marble in which it is executed.

Scarpa's first use of this detail was a cosmetic treatment of a temporary façade executed by piling up concrete blocks in front of the Italian Pavilion at the 1962 Biennale in Venice. But as Heraclitus has pointed out, the primary root of "cosmesis" is "cosmos." This same cosmetic detail becomes the principle of order in Scarpa's Museum of Castelvecchio in Verona. The ziggurat motif becomes the solution for terminating the layers of the wall of the façade to show the virtual joint between the original walls and the Romantic replica of the façade wall constructed by Antonio Avena in 1924. In the Museum of Castelvecchio, the medieval equestrian statue of Cangrande and



Carlo Scarpa, Museo di Castelvecchio, Verona. Joint, with Cangrande statue.

the structure which supports it are set in a spatial location that allows a view from the balcony, the bridge, and the court below. This location allows one to view the statue from close-up as well as from below, as it was seen in its original location on Cangrande shrine. This joint originates the full text of the spatial organization of the Castelvecchio Museum. It thus becomes the cause for the formal solution of the museum and the text in the context.

An early design of the platform holding the statue of Cangrande shows it as the pretext for a celebration of the virtual joint determined by its collocation. This drawing shows the idea of the ziggurat as a generator of the wall. The layers of the wall become independent units and each one of them is expressed in a vertical ziggurat. The space opened up by the cutting of the façade wall helps the whole composition of the new arrangement of the museum devised by Scarpa. The space, a virtual joint, is then the key articulation in the museum's path, but at the same time becomes a "negative joint" in the articulation of the masses of Castelvecchio. The open space, instead of separating, helps connect the left and the right masses of the castle. These are situated on the sides of the tower which articulates the joint between the bridge on the river Adige and the castle. The selection of the ziggurat as the ending of the wall mediates the transition between inside and outside of the articulation. It exposes the materials of this complex architectural hinge composed of vertical planes defined by their framing relationship with the statue of Cangrande, the visual pin of the hinge. The ziggurat detail is also used in many other parts of the museum. In a study plan of the entry, this fertile detail is used in solving the joining of the stones used for the floor as well as in solving the deep reveal of the windows in the thick medieval wall.

The ziggurat detail is also used extensively in the Brion Cemetery. The material, cast in place concrete, gives new meaning to the detail. The interaction between form and material moves the fertile detail from the realm of a production *sub specie utilitatis* to a production of *sub specie aeternitatis*. It is construed as a "ruin" loaded with memories before time. It becomes a perfect detail for the architecture of a cemetery, a place of memories. In this use the ziggurat finds its proof of being a fertile detail. A detail proves its fertility when it moves out of a private architectural language and becomes available through a collective production. A famous case of this is the Serliana Window that after being used by Palladio became a standard detail known as the Palladian Window. The Scarpian Ziggurat has indeed been used by many architects in their designs, but now is used in collective architecture. It has become a standard detail of Veneto cemetery architecture. The neoclassical temple *in antis* which has been the type for many family chapels has been modified by a new model reference. The detailing of the Tuscan or Doric Orders has been replaced by a new detailing, a concrete cast-in-place Scarpian Ziggurat, a New Order.

To conclude this discussion on the role of detail as a minimal unit in the process of signification (that is, the manipulation of meaning), it is useful to restate that architecture is an art as well as a profession. This is because of the understanding generated by the detail as joint. Architecture is an art because it is interested not only in the original need of shelter but also in putting together spaces and materials in a meaningful manner. This occurs through formal and actual joints. The joint, that is the fertile detail, is the place where both the construction and the construing of architecture take place.

(Furthermore, it is useful to complete our understanding of this essential role of the joint as the place of the process of signification to recall that the meaning of the original Indo-European root of the word *art* is "joint.") As Kahn has said,

The joint is the beginning of ornament
And that must be distinguished from
decoration which is simply applied.
Ornament is the adoration of the joint.³⁷

- 1 Philip Johnson, "Architectural Details," *Architectural Record* (1964): 137-147.
- 2 W.S. Heckscher, "Petites Perceptions," *Journal of Medieval and Renaissance Studies* 4 (1974): 101ff. The idea of the process of signification in the details can be traced through Leibniz to Ramon Lull.
- 3 In jotting down those data concerning the adage, I had a *lapsus calami*, and instead of spelling God with one *o*, I spelled it with two *os*. Later on the same page of my notebook I scribbled down a note taken from a passage from Vitruvius's treatise on architecture, *De Architectura*, S. Ferri, ed. and comm. (Rome: 1960), 10. A few days later, while reviewing those notes, I was amazed by the presence of the quasi-Platonic transcription of a quasi-Aristotelian maxim—i.e., "Good lies in the detail"—next to a note stating that Callimachus, the mythical designer of the Corinthian capital, whose name in Greek means "He who fights strongly for beauty," had been nicknamed *Katatexitechnos* by the Athenians. By this long and complicated alias the Athenians recognized Callimachus's work as the result of an activity that proceeded with rational method toward a specific productive aim and is a knowing in the doing. *Techné* is reflection in action embodied in the details (M. Isardi Parente, *Techné* [Florence: 1966]). This curious misspelling accident and association of words brought me to consider the role of *techné* in the production of architecture and in the process of architectural signification.
- 4 In the architectural detail, the practical norms (technology) and the aesthetic norms (semiotics) come together in a dialectical relationship. The detail is the unit of architectural production. See for the origin of this theory in the eighteenth century: Marco Frascari, "Sortes Architectii in the Eighteenth-Century Veneto," Ph.D. diss., University of Pennsylvania, 1981.
- 5 For a survey and a discussion of the different elements and theories developed in architectural semiotics see: Martin Krampen, *Meaning in the Urban Environment* (London: 1979), 6-91.
- 6 J. Labatut, "An Approach to Architectural Composition," *Modulus* 9 (1964): 55-63.
- 7 See for a different approach, but reaching the same conclusion: Roger Scruton, *Aesthetics of Architecture* (Princeton: 1979), 77ff.
- 8 A case is the collapse of the Marciana Library in Venice. In his first Venetian building J. Sansovino, indeed a skillful "proto," used Roman detailing (*maniera Romana*), which indeed did not work in Venice. See T. Temanza, *Vite dei più celebri architetti e scultori Veneziani* (Venice: 1778).
- 9 Functions in architecture depend on both the building itself and on who uses it or organizes its use. Custom and repeated usages are the base of functions. Architecture not only performs but also signifies its functions and can be organized in four functional horizons: the practical, the historical, the social, and the individual. For a discussion of the four functional horizons and a typology of functions see J. Mukarovsky, "The Place of the Aesthetic Function Among the Other Functions in Architecture" in *Structure, Sign and Function* (New Haven: 1978), 240-243.

- 10 The French commercial origin of the word, which differentiates between the selling of slices of pizzas and the sale of whole ones, besides clarifying that details are parts, does not help in the understanding of the detail as joint and its nonsubordinate relationship with wholes. A better and meaningful term is the Italian, *particolari architettonici*, which is also connected with the literary theories of the eighteenth century. For instance, Antonio Conti's idea on *particolareggiamento*.
- 11 Despreaux Nicolas Boileau, *L'Art Poétique* I (1670; repr. Paris, 1966), 158.
- 12 G. B. Piranesi, "Parere," (1765) in J. Wilton-Ely, ed., *The Polemical Works* (Farnborough: 1972).
- 13 J. Soane, *Lectures on Architecture* (London: 1929), 177.
- 14 For a discussion of the origin of the *analytique* in Lodoli's garden at S. Francesco della Vigna see Frascari, "Sortes Architectii," op. cit.
- 15 For this role of the *analytique* and the process of detailing see the discussion of Antonio Conti's theory of *particolareggiamento* in Frascari, "Sortes Architectii," op. cit., 141-150.
- 16 G.O. Garney, *The American Glossary of Architectural Terms* (Chicago: 1887).
- 17 D. Ramée, *Dictionnaire général des termes d'architecture* (Paris: 1868).
- 18 J. Lotman, "The Dynamic Model of a Semiotic System," *Semiotica* 21, no. 3/4 (1977): 194.
- 19 Leon Battista Alberti, *De Re Aedificatoria* (Bologna: 1782). The principle of the *nilil addi* is presented in the first book, but it is theoretically developed in the sixth and seventh books. For this new interpretation of the concept see the discussion of the role of "decoration: in the small temples: *eti pare che, & vi si possa, & vi si debba aggiungere.*"
- 20 This tripartite discussion of beauty is developed by Alberti in his seventh book (IX, 5), 229-230.
- 21 Ludwig Wittgenstein, *Remarks on the Foundation of Mathematics* (A, II, 14, j; cf. II, 47 and V, 46) (Oxford: 1956).
- 22 On the use of the human body as basic design reference and generator of measures see Marco Frascari, "The Search for Measure in Architecture," to be published in *Res*.
- 23 For the concept of analogy in architecture see Vitruvius (Ferri, ed.), 50ff.
- 24 Mukarovsky, "The Place of the Aesthetic Function," op. cit., 240-243.
- 25 H. Von Helmholtz, *Über Geometrie* (Darmstadt: 1968), 218.
- 26 R. Torretti, *Philosophy of Geometry* (Dordrecht: 1978), 162-171.
- 27 Erwin Panofsky, *Gothic and Scholasticism* (New York: 1946).
- 28 Walter Benjamin, *Illuminations* (New York: 1968), 242.
- 29 Torretti, *Philosophy of Geometry*, op. cit., 168.
- 30 Accademia Olimpica, *Carlo Scarpa* (Vicenza: 1974), 1.
- 31 Mukarovsky, "The Place of the Aesthetic Function," op. cit., 240-243.
- 32 Carlo Scarpa, "Frammenti, 1926-78," *Rassegna* 7 (1981): 82.
- 33 H. Focillon, *Piranesi* (Bologna: 1962), 166.
- 34 Scarpa, "Frammenti," op. cit.: 83-84.
- 35 Ibid.: 83-84.
- 36 For a discussion of the use of "fertile details" see the analysis of the "fertile motif" in Anton Ehrenzweig, *The Hidden Order of Art* (London: 1962).
- 37 Louis Kahn, *Light is the Theme* (Fort Worth: 1975), 43.

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