A Heroic and Admirable Machine: The Theater of the Architecture of Carlo Scarpa, *Architetto Veneto*

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> All that which has been in the past and is at the present will be again in the future. Francesco Guicciardini, *Ricordi*, 1530

The role of the architect is to make tangible what is intangible. In the present state of architectural production, too many anomalies in the relationship of theory and practice have obscured this fundamental role. The result is a vision of architecture as a corrupt abstract art coping with technical and pragmatic requirements whose theoretical basis depends on theoretical and critical frameworks developed in other fields of human knowledge.[1] Architectural doctrine is not "normal" anymore. Most architects are playing "solitary" games. They are playing with the puzzle of architecture without following the rules of the game, merely using the pieces of the puzzle as construction blocks. Although architects can make the pieces fit together—indeed, one of the requirements for practicing the profession is that designed buildings must stand up when they are constructed—the results of solitary play are solipsistic compositions in which the image has been sacrificed to the concept.[2] Current professional and academic inter-

1. A survey of the different courses of architectural theory taught in architectural schools will show a full range of approaches: formalist, semiotic, historicist, feminist, sociological, and so on. No one seems to be teaching an architectural approach.
2. An indirect warning of this more or less conscious intellectual danger in the present teaching of architecture was given by Manfredo Tafuri (1979) in the quotation of Carlo Ginsburg he used as an introduction to his discussion of the "Historical Project."

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est focuses only on these solitary visual compositions. The traditional disembodied image present in the architectural puzzle is obscured by these new compositions, and there is no interest in the Janus-like image embodied in the pieces of the puzzle. The traditional solution of the puzzle—the representation of a body in a body, a perspicuous image of the facts of architecture—is completely disregarded. Moreover, the representation of a human body is traditionally incorporated in the constructed body of a specific monument, the theater. Both these bodies are involved in the process of making meaningful architecture. Sometimes they are so near that they merge; sometimes they are far apart. But the tension between them allows the elaboration of a meaningful constructed world. The theater-body relation rules the constructing as well as the construing of architectural artifacts.[3]

Architecture is not an art but an understanding of arts that produce tangible expressions. Consequently, the architect deals with and produces the physical and perhaps metaphysical frameworks of any interart relationship. No art can interrelate with another art without the presence of architecture. A floor is necessary for dancing, acting, or playing music; a wall for painting or writing; and a pedestal for sculpturing, orating, or singing. If a dance has to relate to a painting, and the reading of a stanza of a poem has to relate to both of them, it is necessary to have a floor, a wall, and a pedestal, and the result is a room. Of course, all these arts can be performed or located in a landscape, or more philosophically, they can dwell in the clearing of a forest, but, as Heidegger (1977 [1954]: 319–40) has pointed out, building and dwelling are the same, especially in the clearing of a forest. The understanding of the arts is essential for the making of architecture. Without dancing we cannot design a nontrivial floor; without painting we cannot design a nontrivial wall; without orating we cannot design a nontrivial pedestal. However, although the pedestal devised for sculpturing is completely different from the one for orating, it can be used for delivering a speech. This shows that the different arts may transcend the functional and pragmatic sides of architecture, that they can define their interrelationship irrespective of this functionalism, but that they cannot transcend the phenomenon of the theater of the constructed world.

The constructed world is the physical embodiment of the art of living well and of all the arts—the fine arts as well as the trivial ones which make good living possible. The embodiment is accomplished through the "science of architecture." Architectural science deals with

3. This dual bodily image results from a new understanding of corporeality as the central focus of architectural presence. For a discussion of the other side of this Janus-like image see Frascari 1986.

edification and culture, since it is in physical expression an incorporation of the history of the arts and their diverse relationships within time and space in a specific place. A historical clue to the notion that architecture is not an art is that although the architectural profession was held in high esteem during the Middle Ages and the early Renaissance, there was no guild or *arte* of architecture. The guilds were always organized around the various artistic and building trades—masonry, painting, smithing, and so on. Architects joined them according to their initial artistic or trade training. An amazing case is that of the Florentine architects and artists who joined the *Arte dei Medici e degli Apotecari* (the Guild of Physicians and Pharmacists) on the grounds of their common interest in anatomical drawings (Frascari 1982).[4]

When a translator of a Greek text encounters the word *techne,* almost automatically he translates it with the Latinate word "art," following a process of simplification begun by the Romans with their wholesale, unrestrained borrowing of Greek culture and consequent need of finding equivalent Latin words for Greek terms. *Techne* is a strange word. It has always been difficult to define its semantic realm, and it becomes more complicated when coupled with the word *logos*. The changes in meaning, at various times and places, of the word *technology* are thus quite astonishing. The most surprising occurred during the Enlightenment when the two components of the word were reversed. Dividing *technology* into its original components, one can set up a mirror relationship between the *techne* of *logos* and the *logos* of *techne*. At the time of the Enlightenment, the rhetorical *techne* of *logos* was replaced by the scientific *logos* of *techne*. In architecture, however, this replacement did not take place, since technology existed with both forms in chiastic presence in the constructed world. Translating this chiastic presence into a language proper to architecture, we might say that there is no construction without a construing, and no construing without a construction. The decoration of a Doric temple is a construing in stone of the elements of a wooden building, whereas the construing of a cosmological order is constructed in a Renaissance villa. Nontrivial buildings are always devised with this chiastic quality. They are thinking machines in which the wood, stone, concrete, metal, mortar, and glass are unified by design into a stereographic whole.

The machine-edifice analogy is a long-standing one, and has always been used to judge architecture. Liane Lefaivre and Alexander Tzonis (1985) have clearly shown that buildings have been praised for being machinelike and condemned for the same reason. This long tradition

4. To this fact we can also trace the problem of the present professional modus operandi of architecture, which was modeled after two great arts, the *ars medica* and the *ars iurisprudentiae*.

began with Marcus Polio Vitruvius (1933: I.ii.1), who saw the devising of machinery, *machinatio,* as one of the three branches of architecture. The doctrine dealing with the dual nature of machine and edifice is that of technology. Technology is the theory as well as the practice of architectural production. Architecture exemplifies and suggests rather than determines or imposes, and technology becomes the expression of pleasure. Technology becomes a reality acting between sensory experiences and physical expressions, being the union of the *homo faber* with the *homo ludens.* Technology is a subjective presence rather than an objective procedure to which the client and architect must be subjected. The use of these binomials returns architecture to her original nature as a discipline with a proper knowledge of her own, which can then be transformed into the instrumental knowledge necessary to practice construction.[5] The theater-body solution of the puzzle tells us that architecture has her own class of reflective objects. Those architectural objects are not necessarily physical (such as stone or cement), nor technical (such as geometry or the science of construction), nor historical (such as typology or decoration[6]), nor literary (such as composition or criticism). The objects proper to architecture result from a knowledge internal to architecture concerning sensible human nature and its way of organizing time, space, and artifacts in a place. Physical, technical, historical, and literary objects are the necessary embodiment of true architectural objects.

In many old architectural treatises, the writer or commentator focuses on the meaning and etymology of the words *architecture* and *architect.* The word *architect* is easily traced. It is a Greek compound word: *arkhe,* "chief," and *tekton,* "builder." In the case of the word *architecture,* however, the solution is not so obvious. Among the many discussions of this matter, the most illuminating is the one given by Daniele Barbaro (1513–70), the most learned of the patrons of Palladio. In his commentary on the *De Architectura,* facing a passage where Vitruvius states that architecture is "a knowledge of many doctrines, adorned by several teachings, and all the works accomplished by the other arts are approved by her judgment" (Barbaro 1556: 7), Barbaro (ibid.: ll. 60–67) discusses the "power of the compound name" before demonstrating what architecture is:

> He who wants to express the power of the said name in the vernacular will say chief-mistress. . . . The dignity of architecture is close to wisdom,

5. As the traditional iconographic representation of architecture is a beautiful woman of middle age (Ripa 1984 [1675]), it is appropriate within the topic of this paper to refer to architecture as female.

6. Architectural Italian has better terminology: *caratteri stilistici* (decoration) and *caratteri distributivi* (typology).

> and as heroic virtue she dwells among all the arts. . . . Seeing architecture as such, Vitruvius says that is *science* and by science he means cognition. (Translation mine)

Architecture is a "chief-mistress" who lives among the arts and knows how to judge and arrange them in a proper environment. A vignette marking the opening of the first chapter of the first book of the treatise written by Vincenzo Scamozzi (1552–1616), a Palladian pupil who completed many of the buildings of his master, is a clear representation of this image of architecture as chief-mistress. In the vignette Lady Architecture is sitting enthroned among the arts—three on the right and four on the left—and on the predella is carved the title *Domi(na) Artium* (Lady of the Arts) (Scamozzi 1615: 9). The iconographical composition of the vignette gives the traditional representation of Mnemosyne, the mother of the muses, sitting among her daughters (the result of nine nights the goddess spent in the bed of Zeus).

The theater of the muses is the museum. In his play *Momus*, Leon Battista Alberti evokes the tradition of the theater as the central paradigm of architecture. Alberti began writing this play in the same year (1540?) he started work on his major architectural text, *De Re Aedificatoria*. *Momus*, a comedy with a complicated plot, is based on a set of philosophical and practical jokes organized by the god of mockery, Momus, during the search for a Golden Book. In regard to the theater and the role of architects, the key statement is formulated by Jove after a major event toward the end of the play. Looking over a Roman theater after asking who devised such a wonderful piece of architecture, Jove regrets that he did not give the commission for the construction of the world to the architects rather than the philosophers. This statement falls within the tradition of the *theatrum mundi,* the embodiment of human corporeality and memory in the theatrical machine of the world (Bernheimer 1956).

Palladio, Barbaro, Scamozzi, Serlio, and many other architects and architectural theoreticians working in sixteenth- and seventeenth-century Venice were interested in the embodiment of memory and corporeality in architectural constructs, and in the analogical thinking related to it. The power of this analogical structure is clearly suggested by Scamozzi in describing the structure of his architectural treatise. The aim of Scamozzi (1615: vii) is

> to reduce to a perspicuous and ordered body all the precepts of such a celebrated and illustrious faculty as architecture in such a way that anybody located in the middle of it, as in a large theater, by turning his eyes around at handy range, could descry and retrieve the majority of the most beautiful definitions and most real and sublime understandings—which, until now, have been as if vanished and almost lost. (Translation mine)

What Scamozzi is describing is a memory device to help rediscover architectural principles. This is a clear reference to an intellectual framework dominant in Venice in that period, the *memory theater*. Many contemporary Venetian architects and architectural scholars were under the influence of a man whose mastery of the art of memory was so great that he could not talk anymore, the *divino* Giulio Camillo Delminio.[7] Delminio's *Theatro della Memoria* (1544) is one of the most fascinating adventures of the Venetian mind of the Renaissance.

During the Renaissance the classical art of memory underwent a transformation at the hands of "occult" philosophers like Delminio. He spent his entire life and a fortune in the attempt to construct a mnemonic theater. It was an attempt to develop a memory system that would embody in its machine-edifice the entire universe of human thought, a theater where the mnemonic powers of images would activate the imagination and thus inspire the speech of the orator and any research into the production of human knowledge. It was to be a kind of corporeal time machine where the past, the present, and the future were architecturally related through memory. Using Scamozzi as a fulcrum, one can connect the various figures interested in incorporating the theater of memory in their edifices. In an attempt to make easier the reading of the books produced by a family friend, Scamozzi's father indexed Sebastiano Serlio's treatise on architecture, *Architectura di S. S. Bolognese* (1978 [1584]). Besides being a friend of the Scamozzis, Serlio was a very good friend of Delminio, to the point that in his will he designated "cordialissimus et amicissimus" Delminio his heir (Olivato 1979: 147). Delminio's secret work on the memory theater was also known by the members of the Accademia Olimpica, for which Palladio designed the theater and Scamozzi the stage. In this theater a mysterious poem was read: Delminio's *Idea del Theatro*, his major surviving writing (Atti Acc. Olimp. Acc. 10 1555–86, quoted by Olivato 1979: 179). It has been suggested that the Teatro Olimpico itself is a memory theater, as well as the botanical garden in Padua designed by Barbaro (Olivato 1979; Barbieri 1980, 1983).

An important statement about the role of corporeality in the theater devised by Delminio occurs in a letter by Vigilius Zuichemus to Erasmus:

> He [Delminio] calls this theatre of his by many names, saying now that it is a built or a constructed mind and soul, and now that it is a windowed one. He pretends that all the things the human mind can conceive and which cannot be seen with the corporeal eye, after being collected together by diligent meditation may be expressed by certain corporeal signs in such a

7. For a general and complete survey of the art of memory see Yates 1966; for a discussion of the particulars of the Venetian situation see Barbieri 1983.

> way that the beholder may at once perceive with his eyes everything that is otherwise hidden in the depths of the human mind. And it is because of this corporeal looking that he calls it a theatre. (Cited in Yates 1966: 132)

Corporeal similitude has a long tradition in the art of memory. The *Loca Corporalia* are the places where the imagination receives the strongest impression. The traditional descriptions of the *loca* or *topoi* as rooms with controlled light containing large or monstrous images resemble the painting of René Magritte, with large objects stored in normal rooms or bodies with hieroglyphic notations. The corporeal dimension of memory is also recorded in its mythical invention. It originated with an architectural disaster, which produced the need to transform the disembodied images of corpses back into their original images as specific human bodies. This happened when the poet Simonides of Ceos was able, through his recollection of places, to identify the corpses of the guests who died under the collapsed roof of the house of the miserly Scopa, who refused to pay the poet because too many long passages in his panegyric were dedicated to Castor and Pollux instead of to him.

The fantastic construction devised by Delminio was never made public, as Ludovico Dolce remarked in his preface to Delminio's *Tutte le Opere*: "The entire machine of so superb an edifice cannot yet be revealed" (1552: xxii). However, in this statement there is a clue to why the relationship between building and machine is fundamental to a thoughtful architecture. In Italian the word *machina,* "machine," once indicated a *fabbrica,* "building."[8] The word was used to indicate Brunelleschi's dome for Santa Reparata: it was a *machina admirabilis,* a machine to be admired, which has in its building design information that leads to its own construction.[9] Another "machine" is Bernini's colonnade for St. Peter's, which the pope who commissioned it termed a "machina heroica." The colonnade is a *machina* because it is ordered as an organic structure, perfect in form and imposing in symbolic and anagogic functions, and *heroica* because it is powerfully humanistic in presence. In this sense, edifices can be regarded as the passive machines described by Jacques Lafitte (1972 [1932]) in his proposal for mechanology as the science of machines. The simplest of these passive machines is a post driven into the ground, which is *admirabilis* and *heroica* at the same time, a construction which allows a construing. In surrealist objects, technology is rendered with both its forms in a chiastic presence and generates artifacts which are thinking machines from materials unified by technology in an artistic whole. Architec-

8. In modern Italian the word *fabbrica* is used to indicate a factory rather than a building.
9. Santa Reparata is known nowadays as Santa Maria del Fiore.

ture, then, exemplifies and suggests rather than determines or imposes. In its dual presence, technology is the essence of the verbal construing of Alfred Jarry's "'pataphysics"[10] and of the protosurrealist Raymond Roussel's novels. It is also the dominant presence in the visual constructions devised by Max Ernst and Man Ray. At the base of surrealist technology is an adoration of the nature of reality, where the real is made surreal through the powerful tool of fantasy, as in Alberto Giacometti's sculpture entitled "The Palace at Four A.M." (1932), a spare scaffolding representing a museum in a dream.

Dalibor Veseley (1978: 7) has argued that the true nature of the surrealist movement has been obscured by the unfortunate identification of the philosophical dimension of surrealism with its artistic doctrine. The doctrinal public persona presented by many surrealists, and uncritically accepted by the audience of the avant-garde, has hidden "the primary goal of the movement: to reach an absolute reconciliation of dream and reality." Another critic of the surrealists, Yves Duplessis (1962 [1950]: 5) has stated that "the notion of surrealism has evolved deviously, but its different values converge towards a central theme, the realization of the integrated man. Humor will open the door to this goal, technology will provide the materials . . . and revolution will make possible its effective achievements." The most amazing side of surrealist inquiry is the role of technology in providing the material for a new creative vision of objects, contaminating the tangible with the intangible. One image, or rather a technological figure, from Comte de Lautréamont's *Chants de Maldoror* encapsulates this attitude: "beautiful as a chance encounter on a dissecting table of a sewing machine and an umbrella" (Ducasse 1967 [1938]). From this point of view, technology helps to generate beautiful images which give us the possibility of not drawing any firm distinction between the concrete and the abstract.

According to a new understanding of the roles of bodies and tradition in architectural design, the work of the Venetian architect Carlo Scarpa (1906–74) is a perfect case study of this hermeneutic view of architecture. Scarpa's architecture refuses an isolated or abstract approach and deals with the construction and construing of architecture through a systematic and profound understanding of the specifics of the architectural discipline. Scarpa was probably the most unusual and anomalous figure among the Italian architects who achieved international recognition after the Second World War. The standard definition of the word *architect,* with its professional limitations, is completely inadequate to define his lifelong engagement with the field. Scarpa was an aristocrat of architecture, but at the same time he was a mem-

10. To avoid a pun, *'pataphysics* requires an initial apostrophe, as Jarry himself has pointed out.

ber of an artistic leading edge, and a knowledgeable craftsman of tradition and of construed and constructed realities.[11] He practiced architecture within the realm of surrealism. Surrealism is not an art. It can be defined as a way of knowing, a process which finds expression in many kinds of ethical positions. Broadly speaking, there are two schools within the surrealist movement: the calligraphers and the descriptives. Max Ernst, André Masson, Mirò, and Mattà belong to the first: Magritte, Salvador Dalì, and Paul Delvaux, to the second (Waldberg 1965: 7). Scarpa belongs to both schools: the first because of his drawings, the second because of his built architecture.

On many occasions, Scarpa (1985: 276) expressed his wish for an architecture with a rich, playful presence: "I always dreamed of building a house with a moveable stone wall: vertical plans which run on bearings and grooves." This playfulness is distilled in a surrealist understanding of the technological presence of machines and machine expressions, as Scarpa (ibid.: 278) stated once when commenting on the detail of a bronze gargoyle designed for the canopy of an extended family burial plot in the Brion cemetery: "I think it's all right, it really looks like the kind of lion's head you see in Greek temples. . . . our bestiary is machines and their products." These two quotations present the dualism embodied in Scarpa's understanding. On the one hand, he uses technology as a way of embedding clues in the fabric of a building for its construing, thus unifying denotation with connotation. The result is a celebration of architectural details. On the other hand, he embodies mechanical devices in his edifices, which by their effects—the physical expression of the reasons for the devices—further increase the connotative dimension of architecture.

Scarpa's architecture eschews mundane reality for the unknown world of surreality—not the unreal, but the heart of the real. The museum designs of Scarpa are based on a surrealist understanding of technology. They result from Scarpa's devising a surrealist sum of events, that is, an architectural setting for the exhibition of historical artifacts. The details of the space and the devices of the exhibitions are playful concretizations of these events in a constructed space which allows construing. Based on a concern for the quality and quantity of materials employed, and for craftsmanship and workmanship, the exhibition generates a Janus-like relationship between ornament and functional expression, the architectural ground for any process of active interpretation. The designs are "figures" of technology, couplings

11. During his lifetime, from the point of view of official records, Scarpa was no more than a teacher of architectural drawing. An honoris causa professional degree was given to the family five years after his death, in 1978. Scarpa died at Sendai in Japan after he fell from an upper-floor platform while walking backward, a habit he developed to focus better on the artifact in front of him.

of devices and artifacts which make the museums passive time machines on the verge of becoming active ones in the mind of the visitor. Scarpa's museographic technology makes tangible what is intangible.

Scarpa devised the museographic solution for many Italian museums, sometimes only for temporary exhibitions. In a few cases the solution for a temporary exhibit evolved into a permanent one.[12] He worked both alone and in collaboration. Scarpa's contributions to collaborative designs are always easily identifiable, since his approach is always "irregular."[13] However irregular, this approach was considered worth teaching. In 1954, Scarpa began to lecture to Fulbright scholars in seminars in Rome at the request of the American committee for cultural exchange with Italy. The first lecture was entitled "Experiences in Museum Design." During the same year, under the sponsorship of the General Directorate of Fine Arts and Antiquity, he delivered a lecture entitled "Problems of Contemporary Museum Design" to an audience of museum directors (Giordano 1985). In 1946, the "irregular" Scarpa marked the end of the dominant museographic paradigm with his first major work, the rearrangement of the Gallerie dell'Accademia in Venice. The paradigm contested by Scarpa had, with very rare exceptions, dominated the museum architectural scene since the beginning of the nineteenth century, creating overcrowded rooms arranged according to positivistic criteria—chronological, typological, or school taxonomies—in an atmosphere of late-romantic historical reconstruction.[14]

Scarpa's detailing produces a rhetoric in built form. His *techne* of the *logos* refuses the metaphors and similes of traditional nineteenth-century museography, and his technological figures are based on me-

12. The museum of Castelvecchio originated in an exhibition entitled "Da Altichiero a Pisanello."

13. The characterization of Scarpa as irregular—l'"irregolare Carlo Scarpa"—is a felicitous intuition by Marisa Dallai Emiliani (1982). Many of the designs produced by Scarpa are presently used by unprincipled professional magazine critics as touchstones for the rejection of the "rigor mortis" of the international style. These critically limited reviews do not fully present the peculiar dimension of Scarpa's architecture, which originated in surrealism.

14. Scarpa's work in the Gallerie dell'Accademia ended in 1959. During this period he worked on the layout of the Museo Correr (1953) in Venice and the restoration of Palazzo Abatellis (1953–54) in Palermo. For the design of the latter he received the national award IN-ARCH. In 1954, he collaborated with Ignazio Gardella and Giovanni Michelucci in setting up displays at the Uffizi in Florence. From 1954 to 1956 Scarpa worked on the extension of the Canova Gipsoteca in Possagno. After completing this work, he began the restoration and the rearrangement of the museum of Castelvecchio, which lasted until 1973. During this time he renovated the Franchetti Gallery at the Ca' d'Oro in Venice. Then Scarpa designed a sequence of unbuilt projects: the Museo di Santa Caterina in Treviso (1974–76) and the Picasso Museum (1976).

tonymy and irony. Museum design is characterized by a semantic and referential relation to causality made possible by the presence of the semantic and syntactical cause (the mental and physical materials selected). In metonymy, transfer of meaning is achieved by the "causality" or "congruency" between representation and function, which may be physical or conceptual. The relationship between architectural representation and detail is based on substitutability of function, not imitation of form. Architectural detail, by its inclusion in or exclusion from semantic and referential relations, is the site of the real union of function and representation. Irony is a subtle weapon of criticism, a necessary tool for building through destroying. Museography, then, becomes a science of possible solutions to the different kinds of interpretation and time frameworks established by the collective memory in the artifacts preserved in a museum.

Describing Scarpa's most successful museum design, the Castelvecchio in Verona, Manfredo Tafuri (1985: 79) points out the surrealist nature of museum design:

> There is undeniably something "surreal" in the apparition of Cangrande to the visitor of Castelvecchio in Verona whether he reaches it along a catwalk, crossing a sheer drop, or views it from below or from one of the many other angles available. The passage to the other reality is simultaneously mediated by materials and forms. The same thing happens, work by work, with the sculptures installed at the Palazzo Abatellis, the pieces displayed at the Gallerie dell'Accademia. . . . In some way, the works Scarpa installed seem *liberated:* liberated from traditional bonds, set free for new interpretations, liberated as problematic images stimulating us to wonder about their meaning.

The surrealist character of Scarpa's museographic works could earn him honorary membership in the Great College of *'pataphysique,* an institution celebrated in the pages of *Gestes et Opinions du Docteur Faustroll,* a surrealist cultural invention of Alfred Jarry. Scarpa's design is based on an accumulation of signs which are in turn based on a multiplicity of inventions, and "the proliferation of individual elements introduce[s] tensions which are resolved in favor of details, of the exceptional and singular" (ibid.: 77). As Jarry (1965: 192) has stated, " 'Pataphysics will be above all the science of the particular [detail], despite the common opinion that the only science is that of the general."

Scarpa's museography is a branch of 'pataphysics, which "is the science of imaginary solutions, which symbolically attributes the properties of objects, described by their virtuality, to their lineaments" (ibid.: 193). 'Pataphysics is an epiphenomenon, "that which is superinduced upon a phenomenon" (ibid.: 192). Scarpa's designs function like a 'pataphysical time machine devised by Alfred Jarry in which the view of "the Past lies beyond the Future" (ibid.: 115). The technological

figure in the Jarry machine is based on a contrasting and ironic use of materials, and a metonymic use of shapes. Cheap materials are mated with expensive ones, traditional with unusual; ebony and ivory are coupled with nickel, quartz, and copper. A bicycle frame is the support for gyroscopes. This is a machine whose function is to nudge the visitor's thought processes to locate the past beyond the future in a theater of memory. In his designs, Scarpa also follows the cues laid out in the protosurrealist Raymond Roussel's novels. One of these deals with the complex chiastic nature of technology in an imaginary museum set on the outskirts of Paris. The novel, entitled *Locus Solus* (A Place Apart), is the formal and conceptual key to Scarpa's technology. The narrative framework of *Locus Solus* is a visit paid by an unidentified group of people to the ingenious marvels and machines visible on an estate at Montmorency, about twelve miles outside Paris. The estate is owned by Martial Canterel, a very rich scientist, magician, and illusionist. The novel's theme is the restoration of things from the past, a *reintegratio in pristinum,* using a technology similar to the one known by the Greeks and the Romans, who knew the power of steam for making meaningful toys but were not interested in labor-saving devices such as the steam engine. It is a technology of approximation instead of precision, a technology that enriches the perception of reality by making room for the "play" between objects and the parts of construction, rather than by limiting the "design" by defining the "tolerances" among its parts. In Canterel's estate, iron gates have golden hinges, an expression of the power of this technology of play. The nature and effects of these pieces of architecture converge on the problem of discovering the intangible through the use of tangible objects. The power of this technology lies in a surrealist relationship set up among the materials, which indicate and select possible realities. The details are pristine and allotropic realities, with the materials assuming meanings through metaphorical and metonymic games.

As in the principles of 'pataphysics, time in Scarpa's museums can be defined as "the locus of events," and "space the locus of bodies" (ibid.: 114). In the Scarpa design, the locus of bodies generates the locus of the event as it is shown in his drawings, according to the techniques of his surrealist thought. Figures of women predominate in Scarpa's drawings: stupendous nudes formed of contours and lines in constant dialogue with the architectural artifacts proposed in the drawings. For Scarpa, architecture is undoubtedly a woman, but not a prosaic, middle-aged woman with nude arms and an iridescent dress, as in the baroque iconological representation developed by Carlo Ripa (1984 [1675]: 115). The image is poetic; his architecture, like his figures of women, is a continuous research into a beauty not canonical and abstract but real. Scarpa (cited in Dal Co and Mazzariol 1985: 283)

announced this poetic relationship between the body of a woman and architecture in a lecture at the Academy of Fine Arts in Vienna: "We can say that the architecture we would like to be poetry should be called harmonious, like the beautiful face of a woman."

Scarpa celebrates the dynamic condition of human presence in events generated by an understanding of technology in a sequence of study drawings for the covered footbridge that links the *Mastio* to the *Reggia* in the museum of Castelvecchio in Verona. In a drawing showing one of the first solutions for the suspended passage, two female figures are represented on the inside of the transverse section. One is a nude, shown from the back, walking with a certain majesty. The other is a feminine bust with sketchy bosom, looking out of the continuous window that delimits the passage toward the courtyard. The presence of these two figures indicates the two major technological problems Scarpa faced in his search for the solution to the brief suspended passage, a dynamic joint between the two parts that compose the Castelvecchio museum. The nude seen from the back represents the kinesthetic nature of the passage. Her majestic stride is the resonant step on a sound box created in the space between the pavement and the external covering which accommodates the supporting structure, and which is made with stone slabs suspended on a third level. The frontal head indicates the problem of looking out, an act of reorientation necessary at that point in the museological path. A technological figure, a want of image, a constructional anomaly, is inserted in the composition to catch the eye of the passing visitor where the upper edge of the internal windowsill covers the view of the lower frame of the fixture. In a subsequent study drawing of the transverse section of this passage, the resonant slabs of the pavement are no longer a problem. The technological problem is solved: the slabs are set up over the mitered edges of the cement slab of the parapet and an intermediate beam.

The question of looking out, however, requires further thought, as shown in another detailed study drawing. The visual line generated by the upper edge of the internal windowsill is linked to the eye of the head, with its Renaissance profile. The head is positioned in counterpoint to the circle created by the rotation of the internal fixture. Human attention is the basis of this ultimate architectural meditation, the concern that, in the act of opening the window for ventilation or cleaning, one might bang one's head during the rotation of the glass panels of the fixture. Preoccupation with this consideration leads to the creation of a panel with an inclined edge that gently avoids the risky circle of rotation.

The most significant expression of Scarpa's surrealism is the design of the pedestals and supports for the exhibited works of art. They are

comments on the object, but at the same time they are tools for the immersion of the object in a distant time and space. They develop a silent dialogue, becoming mediation devices for suggesting and explaining the museographic path. They accelerate or slow the visitor's perception of the stereographic reality of the exhibition. In the Museo Correr at the Procuratie Nuove in San Marco Square in Venice, a dominant figure of technology, playing a role quite close to that of Cangrande in Castelvecchio, is the kneeling figure of a Venetian doge—a statue of Tommaso Mocenigo by Jacobello della Mesegne (Figure 1). First, the statue is seen in the visual line opened by the doors of the enfiladed rooms. The room in which the statue is located goes across the width of the building and is crossed twice during the circuit of the museum. The doge will be seen a second time, though a translucent screen and a couple of fragments of a stone balustrade set in a metal frame, which recreates the original dimension of the complete balustrade, separate the two paths. The kneeling doge from the far side of the room (Figure 2) acts as a reminder of the previous passage and suggests one position in the sequence of rooms, a technique similar to that of using the same line in two different stanzas in a poem.[15] The statue rests on a stone support shaped in crystalline geometry, a comment on the geometric composition of the kneeling figure. The stone is slotted over on an inverted kneeling iron support, which thrusts the stone forward in a ritual offering position, a metonymical anamnesis of the original votive function of the minuscule statue, with a slight ironic overtone.

The concluding statement in an essay by Vincent Scully (1985: 267) on the relationship between Scarpa and Frank Lloyd Wright and Louis I. Kahn synthesizes perfectly the surreal dimension of Scarpa's approach:

> How beautifully intricately, always everything is fitted together. In some realm beyond space Scarpa seems to find his deepest love, in the obsessive joining of physical elements and their silent unlocking, suggesting something taking place in one of his haunted museums at night when all the people have gone.

This passage suggests that in the museums designed by Scarpa the reconciliation of dream and reality sought by the surrealists is achieved. Scarpa's architecture results from a surreal sum of events. The details and devices devised by him are a playful concretization of these events in a constructed time machine, a theater of memory, a conception of the building as a machine for engaging through the body the mind of the user or visitor in the corporeal construing of place.

In planning the epitaph for his own tombstone, Carlo Scarpa defined

15. An architectural analogy: the Italian for room is *stanza*.

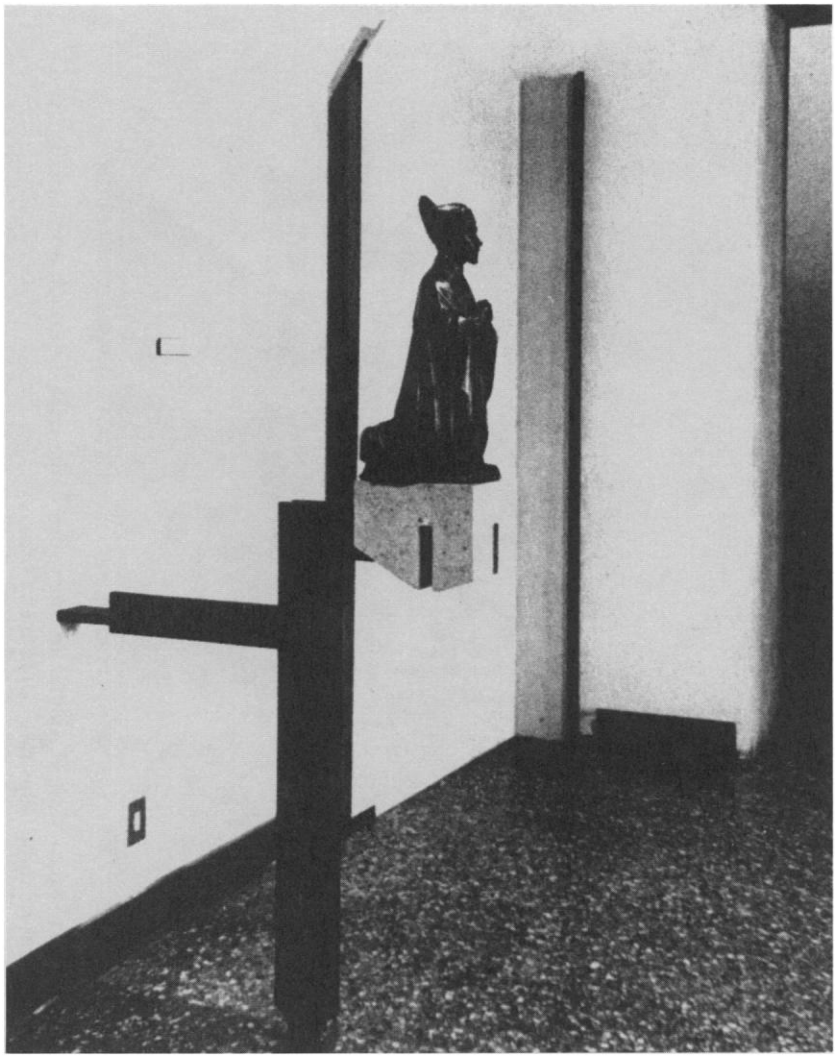

Figure 1. Carlo Scarpa, metal and stone support for kneeling votive statue of Venetian doge Tommaso Mocenigo by Jacobello delle Masegne, Museo Correr, Venice, 1953.

himself as a "man of Byzantium who came to Venice by way of Greece" (Zambonini 1983: 21). Through its sequence of geographical locations, this sentence superficially encapsulates the formal qualities of Scarpa's architecture. However, if we subject the text of the epitaph to deeper scrutiny, Scarpa's view of the double role played by technology in architectural production is revealed. The hermeneutic clues indi-

Figure 2. Carlo Scarpa, central room, kneeling votive statue viewed through translucent screen and fragments of stone balustrade set in metal frame.

cate Scarpa's interest in a technology of play which is also a play with technology. As a "cultural chief-weaver," Scarpa is able at the same time to be a Byzantine *mechanicus* and a Venetian *proto:* a builder of Byzantine *machine admirabilis* and Venetian *machine heroiche* within the order of architecture.

Scarpa's buildings are *machine admirabilis* and *heroiche*. His idea of the architectural machine does not originate in praise of a modern scientific technology generated by Le Corbusier's *esprit,* but has its genesis in the empirical technology of the *proti* (chief-builders) and *marangoni* (carpenters) of the Venice Arsenal, the technological outpost of the *serenissima*.[16] This interaction between fact and reality as a pretext for an architectural surrealist memory machine was celebrated by Scarpa in the design prepared for his own *Personale* in the art exhibition entitled "*Ambiente:* Trends in Contemporary Research," at the thirty-fourth Venice Biennale, in 1968 (Figure 3). Scarpa designed four personal shows of architects' designs together with the general setting for the exhibition held in the Italian Pavilion. The selected architects were two Americans and two Italians, Louis I. Kahn, Paul Rudolf, Franco Albini, and Scarpa himself. The shows of the other three architects were standard exhibitions of documents ranging from drawings to photographs of finished buildings in more or less chronological sequence. For his own show, Scarpa chose a completely different approach. He presented his own architectural search in an emblematic rather than documentary form. In a small abstract space, a few architectural objects were presented by the Venetian architect to show his own architecture. These objects were carefully selected pieces of Scarpa's architectural machinery, ostensive replicas or predictions of his *admirabilis* and *heroiche* machines (Figure 4). They are "ready-made" pieces of Scarpa's architectural dreams.

Located in a double-height cubicle, a kind of inside patio framed by a railing in the upper part and defined by translucent panels on the lower level, Scarpa's personal show was dominated by a long wooden pole, a *machina heroica*. This *machina* was built in the garden of a private residence, Il Palazzetto, in Monselice in the province of Padua, in 1975. The *ratio* of the machine, which is also the ordering principle of the show, comes from a long swinging pole attached to a knuckle joint and balanced by a dormant zoomorphic counterweight. In a detailed drawing (Figure 5), this zoomorphic piece, made of an oval lapis lazuli mounted in a heavy frame of silverplated cast brass, is called *L'oiseau qui dorme* (*sic*) or *L'oiseau bleu*. In the selection of the zoomorphic counterweight, Scarpa is giving us a key to the origin of his

16. For a discussion of the difference between scientific and empirical technology see Shils 1981: 80–82.

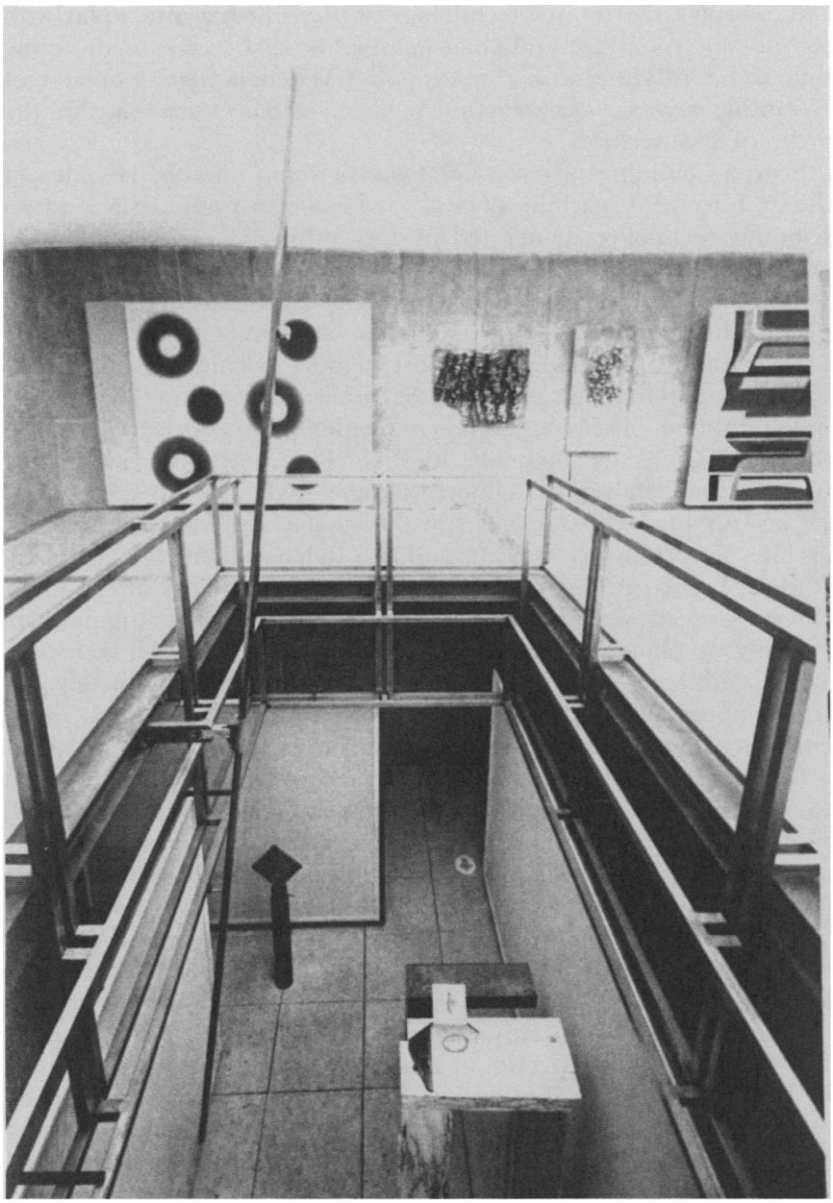

Figure 3. Carlo Scarpa, *Personale*, art exhibition entitled "*Ambiente:* Trends in Contemporary Research," thirty-fourth Venice Biennale, 1968.

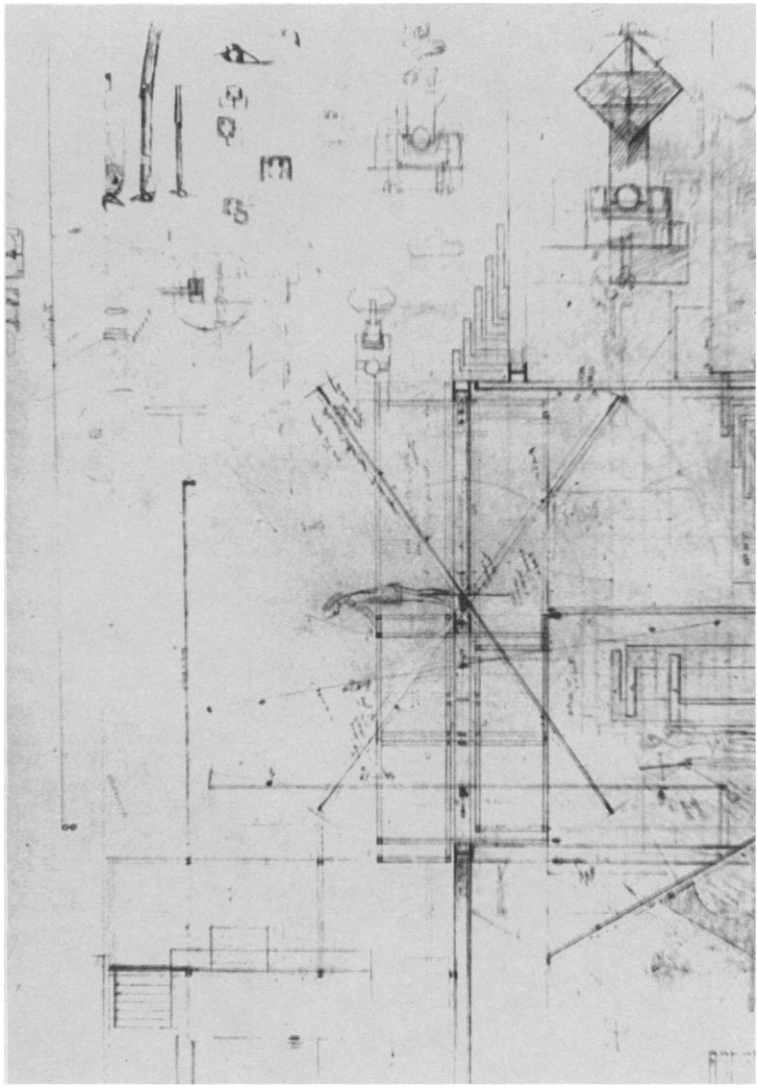

Figure 4. Carlo Scarpa, study drawing of *admirabilis* and *heroiche* machines composing the *Personale*.

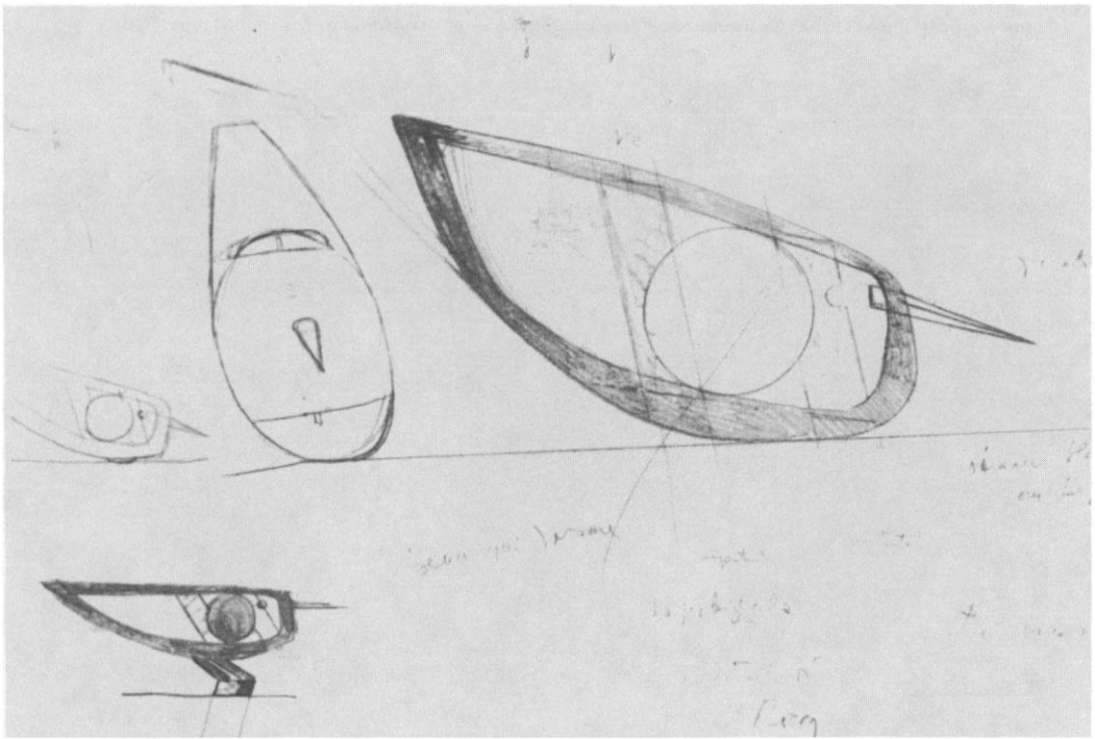

Figure 5. Carlo Scarpa, study drawing of zoomorphic counterweight called *L'oiseau qui dorme* (*sic*) or *L'oiseau bleu*, *Personale*.

interest in corporeality. *L'oiseau bleu* is taken from an anthropocentric story of a girl at a balcony discovered by Apollinaire's surrealist *poesis*.

In the central part of the cubicle are three upside-down L-shaped pieces of marble. These display the connotative potential of smooth and rough finishes side by side, *machine admirabilis* masterfully combining workmanship and craftsmanship. An abstract, metallic composite piece rests on the tallest of the three pieces of marble, an emblematic representation in steel, brass, and precious stones of the physical dimension of Scarpa's preferred geometry, the one implied in the construction of a non-Euclidean *vescicae piscis*—two interlocking circles in which traditional measurable proportioning is rejected for an unmeasurable relationship. The pole oscillates between two objects. The one on the left is a wonderful piece of silky green textile, Scarpa's interpretation of the Semperian construal of the origin of architecture in the textile; it is a *machina admirabilis,* a piece of decoration showing in itself its own principles of construction. The object on the right is a *machina heroica,* a three-dimensional, rotating Byzantine cross, a precursor of the crosses embedded in the cast concrete walls of the Brion family cemetery. The cubicle is a museum in itself. It is an interpretation of Lautréamont's "dissecting table of future encounters," a view beyond the past of Scarpa's own designs.

Scarpa also used technological figures based on the movements of the architectural machine in a study for the funerary tabernacle of the Galli family in the monumental cemetery in Genoa. This commission touched Scarpa, particularly because the young Galli was the first Italian child kept alive by a technological wonder, a pacemaker. The circle and square of the composition became the symbol of the reality of death. Scarpa defines the fundamental terms of this architectural machine, affirming that "the funerary tabernacle for the Galli family represents the essential structure corresponding to the idea of the absolute that comes with death (Shultz 1985: 178). In the elaborate images drawn by Scarpa for this design, the architectural absolute is restored to its original dimensions. In a drawing of the tabernacle, the analogical thought in the plan uses the human body as the "symmetrical" base from which the "proportions" are born. In these drawings Scarpa has regenerated and reinterpreted the proportional process of the so-called Vitruvian man. The outstretched body of the youth becomes the origin of the geometry of the square and the circle. The localization of the center is extremely significant. What is only a tension in the representation of the Vitruvian man by Cesare Cesariano (1981 [1521]: 45) is fully realized in Scarpa's drawings. In a summation of iconological references calling to mind the physiognomies of medieval and Renaissance saints, or modern notations of the neoprimitives, the figure of the young Galli interacts with the figures of

the mother and the father to determine the transformation of the plan to the elevation of this architectural machine. The bodies of the parents superimposed orthogonally over the body of their son lie parallel to one another and to the façade of the tabernacle. This disposition of bodies establishes a symbol for salvation used in antiquity in the simple but powerful block of stone, the opening of a TAU. This design idea is powerfully described by Scarpa himself:

> I designed a stone block; the son would be buried first; he would be put at the bottom opening, perpendicular to the facade; the father and the mother will lie side by side above, parallel to the frontispiece. The TAU is the result of the lower and upper openings which are necessary for these operations; a marble slab with a guillotine movement will be opened and closed three times until, once the supporting cables have been cut, family unity is restored in death. (Cited in Pietropoli 1983)

I wish to restate in conclusion that Scarpa's design processes are based on a Janus-like understanding of technology. In his architecture, technology actively participates in the process of producing meanings. The technological treatment of the denotation of facts, constructing, produces real connotations, or physical construing. At the basis of Scarpa's architectural technology is an adoration of reality, where the real is manipulated in the surreal using the powerful tool of fantasy to make *admirabilis* and *heroiche* machines. From this point of view, architecture is not the art of memory but the memory of the arts. Architecture is protean. If asked directly to reveal herself, she will offer instead some disguise, a personification by which to elude us. However, if we remember that the role of the architect is to make tangible what is intangible, we can solve the puzzle and rediscover the image embodied in it, the corporeality of theater and the theater of corporeality.

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