

## Architecture and Light: Vincenzo Scamozzi's Statuary Installation in the Chiesetta of the Palazzo Ducale in Venice

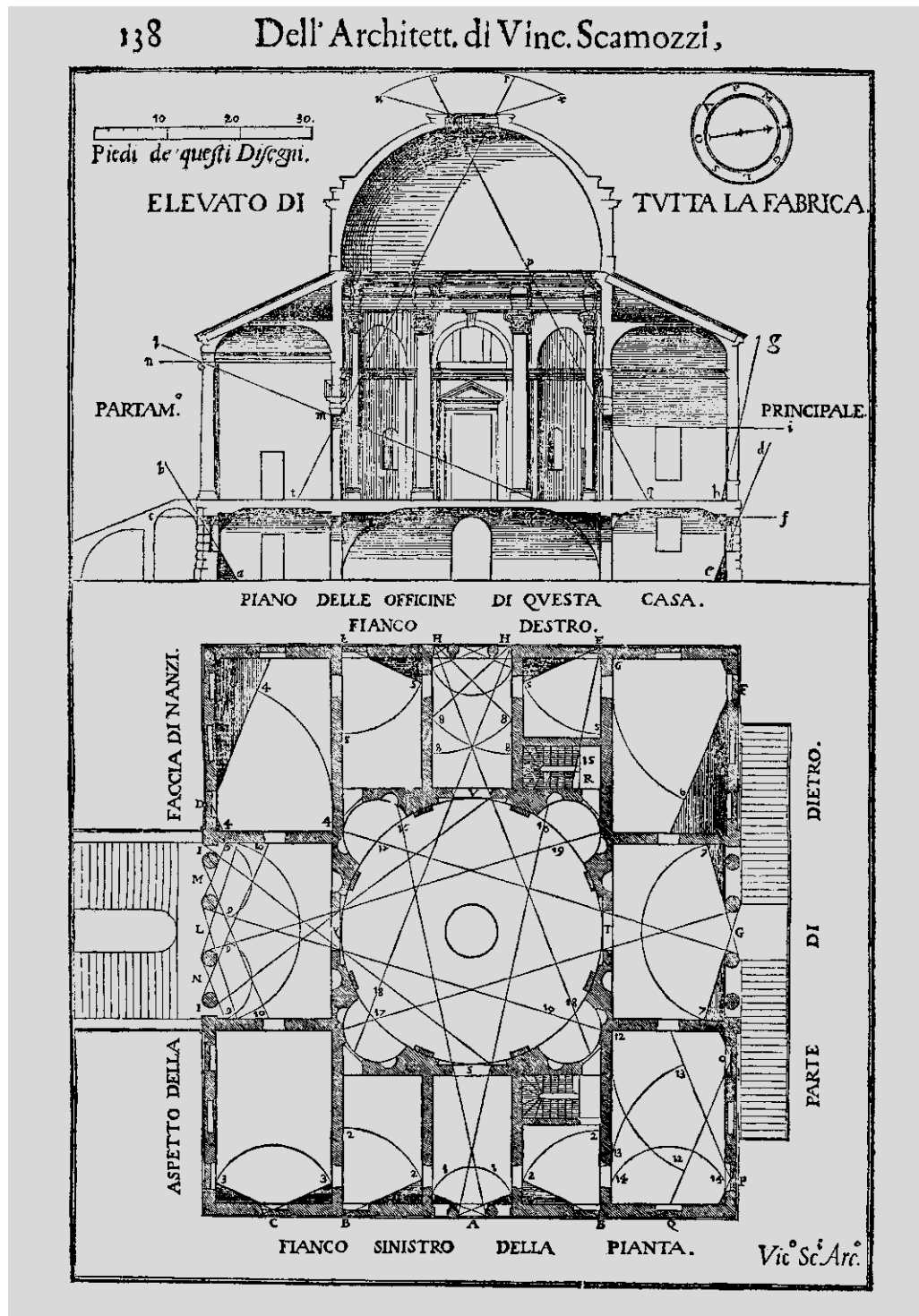


1. Venice, San Salvatore, cupolas with lanterns.

In Vincenzo Scamozzi's earliest recorded project in Venice, the young architect undertook to introduce new sources of light into the gloomy interior of the Venetian church of San Salvatore, located a short distance due south of the Ponte di Rialto. Thereby the theme 'architettura-luce' makes its appearance at the beginning of Scamozzi's architectural practice, around 1570, or slightly later, when the canons of San Salvatore called upon Scamozzi to remedy the darkness of their church ("chiesa [...] cieca ed oscu-

ra"), which he did, advising opening a lantern in each of the three domes of the nave. Temanza writes that "la Chiesa fu arricchita di quella luce che abbisognava". As is often the case with Scamozzi's lanterns the exterior architectural forms are exceedingly simple, with expansive window openings aimed at introducing a maximum of light into the architectural interior<sup>1</sup>. In the immense architectural treatise of Scamozzi's maturity, his *Idea dell'architettura universale*, first published in 1615, the architecture of light constitutes a new and not negligible component. Here Scamozzi's detailed theoretical attention to light appears unique, almost unprecedented in Renaissance architectural treatises. He proposes a systematic typology of architectural illumination ("lumi diversi negli edifici"), differentiated into six and more kinds of light within a construction. "Il lume naturale è uno solo", writes Scamozzi, "mà per vari accidenti egli può esser alterato non poco: e perciò noi lo divideremo in sei specie"<sup>2</sup>.

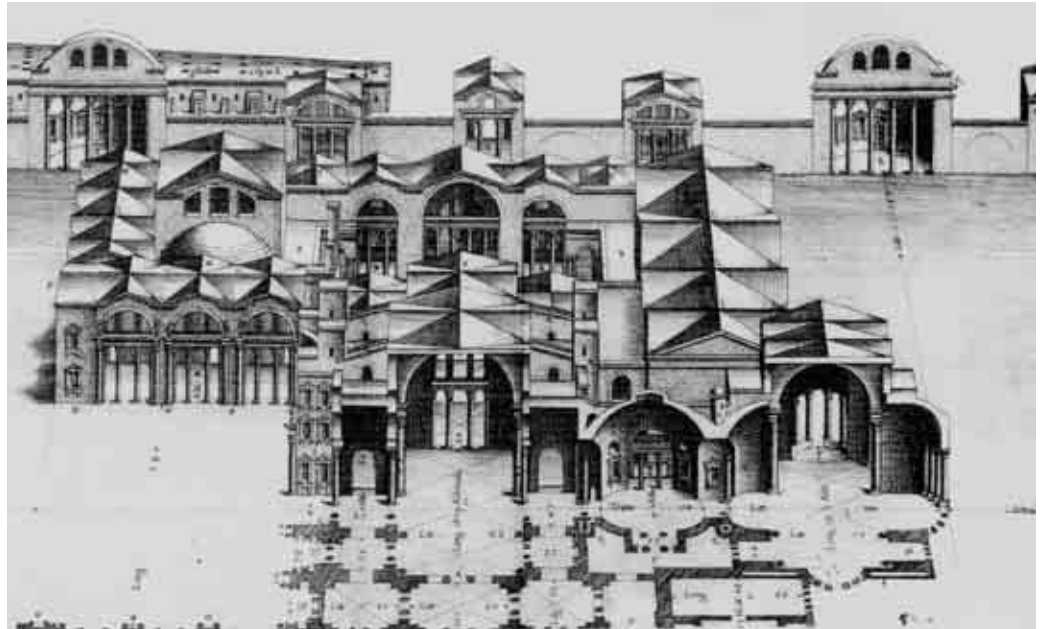
In order to explicate the declination of architectural light, Scamozzi indicates on a full-page plate of the *Idea* the various kinds of light, tracing them on the plan and the elevation of a paradigmatic central-plan edifice, which appears to be further development of the Rocca Pisana. The plate on page 138 of the "Prima parte" of the *Idea* illustrates, in fact, the lost Villa Bardellini at Monfumo (Treviso), designed by Scamozzi in 1594<sup>3</sup>. In this plate of the Villa Bardellini the six species of light are indicated on the elevation, and the passage of light through the rooms is shown on the plan. The building has at its centre, "una Sala rotonda [...], con quattro gran Nicchi negli angoli, la quale si eleva in molta l'altezza; dove appare la sua cupola sopra al tetto" (I, 39). The first instance of Scamozzi's light typology, "lume amplissimo, o celeste", is the light of the open, sun-lit sky, indicated in Scamozzi's elevation diagram by the arc "u-x" over the cupola. Second in Scamozzi's classification is "lume vivo e perpendicolare", open skylight received from the "aperture delle Cupole, come della Rotonda di Roma", and, with regard to the elevation, Scamozzi writes, the diagonal, crossed lines, "o-p" and "r-s", indicate the "lume vivo, perpendicolare, che dal cielo aperto viene dal-



l'apertura del sommo della Cupola, e si diffonde nel piano della Sala". In a similar manner Scamozzi describes and categorizes the diffusion of light throughout the edifice, distinguishing the several cases and trajectories of light, and differentiating among levels of illumination ("forte", "mediocre", "debole"), among the directions of light (vertical, horizon-

tal, diagonal), and between the diffusion of direct lighting ("diretto", "aperto", "vivo") and that of indirect lighting ("lume secondario, terziario, riflesso o rifratto").

In his *Discorsi sopra l'antichità di Roma*<sup>4</sup>, a commentary, prepared by Scamozzi following his return from Rome around 1580, to a series of vedute of the antichità di Roma engraved by

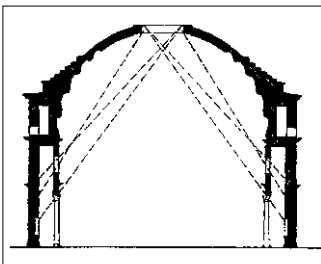
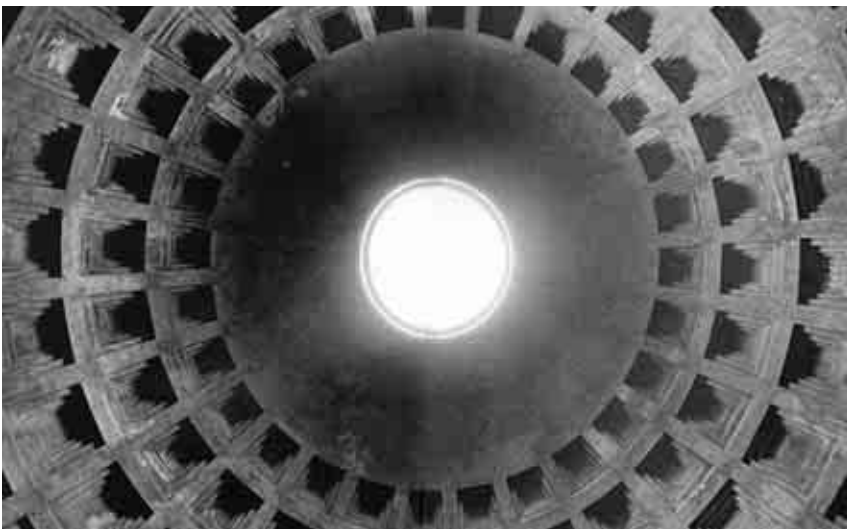
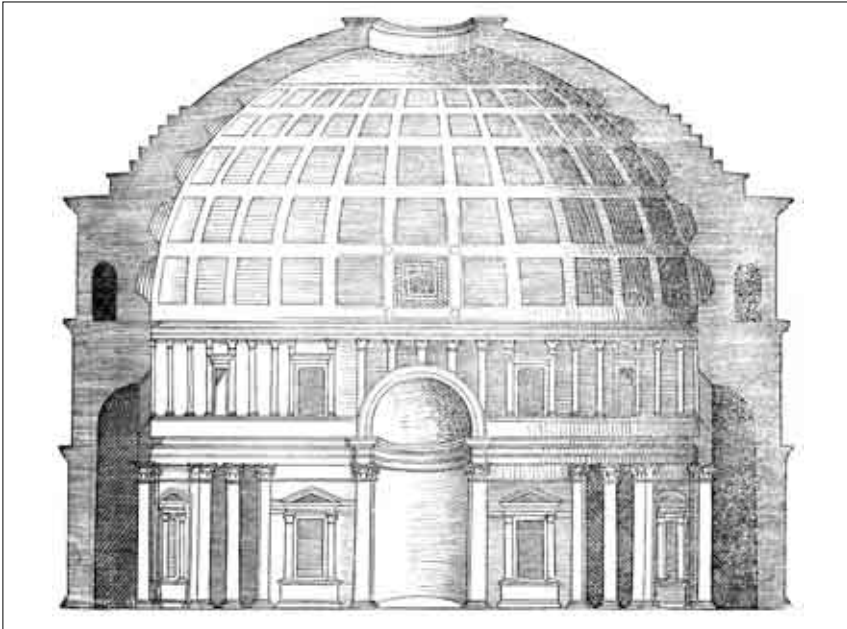


Battista Pittoni, it is noteworthy that the author, Scamozzi, dedicates careful and constant attention to the phenomena of architectural illumination (Tav. V: "Lumi delle Cappelle", "Lumi che venivano nella nave di mezzo"; IX: "Portici secondi, che ricevano lume dagli esteriori"; XIII: "Portici interiori, che ricevano lume da' primi"; XV: "Primi Portici, che ricevano lume dal defuori", "Secondi Portici, che ricevano lume da' primi, & delle parti di dentro"; XVIII: "Aperture, che davano lume vivo alla strada"; XXI: "Strada, che girava intorno con alcuni lumi alti"; XXII: "Apritura, che dalla strada di mezzo dava lume alle scale di due rami", "Strada di mezzo, che girava intorno, con lumi alti"; XXXI: "Lume alto, ch'entrava per sotto l'arco della volta granda"; XXXIII: "Aperture, che davano lumi"; XXXV: "Dove entrava lume alto à basso, nella nave di mezzo"; etc.). The impetus for these annotations concerning architectural light comes from Scamozzi, for his observations are superimposed, after the fact, on Pittoni's pre-existing vedute, which reflect no special interest in effects of light.

The same detailed attention to architectural lighting can be discerned in Scamozzi's large engraving of the Baths of Diocletian<sup>5</sup>. This graphic restitution of the Terme Diocleziane, of 1580, manifests a careful and accurate description of the illumination of the interior chambers, describing the play of light within the internal spaces. The graphic recording of light effects is so insistent that it must be considered premeditated and intentional, and not the chance result of casual observation, as testifies, for instance, a detail such as the exedra formed by a 'colonnata a giorno' that traces a curve, in

which the columns are all seen in *contro-luce*. Nearby, at the right, is another columnaded exedra, where the columns are illuminated by the light of the interior space. Also indicative is a near reversal of usual graphic conventions: more notable than the windows closer to the viewer, blacked-out following an established graphic convention of architectural drawing, are the open, white windows, in the background behind, more distant from the viewer. In Scamozzi's ideal restitution of the terme, light, that is illumination depicted by graphic means, enters from the left and from a source not identifiable with the position of the spectator, a source that is located distant from the observer, deep in profundity, so that it can filter from afar through the architectural spaces toward the vantage point of the spectator. Thus it is possible to discern a clear connection between Scamozzi's interest in architectural light, evident in his mature treatise, the *Idea dell'architettura universale*, and his interest in the diversity of light as reflected in his youthful studies of perspective and of the "scienze antiquarie", of which a first result was seen in his "Tavola delle Terme di Diocleziano". Nor would it perhaps be mistaken to seek the origins of this interest in a scientific matrix, on the one hand, an optic-perspectival matrix, and, on the other, an antiquarian-architectural one.

In Scamozzi's treatise the treatment of the topic 'light' is not restricted to the brief chapter on architectural lighting. Scamozzi's commentaries to the plates illustrating his own architectural works are often careful to specify the diffusion of light within Scamozzi's buildings<sup>6</sup>. Observations concerning architectural light also



4. Section of Pantheon, Rome (Sebastiano Serlio, *Il terzo libro*, Venezia 1540, p. ix).

5. Rome, Pantheon, interior of dome (J.B. Ward-Perkins, *Architettura Romana*, Milano 1998).

6. Pantheon, section with light paths, Rome (after Kähler, in E. Steingraber, *Meilensteine der europäischen Kunst*, München 1965, p. 60).

recur in Scamozzi's treatment of the architectural typologies, "casa antica", "scale", "porte", "finestre", "sale", "salotti" and others<sup>7</sup>. Thus, just as in the *Discorsi*, in the *Architettura universale*, the phenomenon 'light' emerges as a recurrent motive in the thought of the architect and author. The extraordinary effects of illumination experienced in the Rocca Pisana are amply illustrated in Franco Barbieri's *La Rocca Pisana di Vicenza* of 1985.

Nor did the classic passage on the illumination of the Roman Pantheon, that of Sebastiano Serlio in his third book dedicated to "Antichità", escape the notice of Scamozzi<sup>8</sup>. To this passage Scamozzi appended, in his 1584 edition of Serlio, the following annotation, the cross indicating it as among the topics "più gravi, et importanti": "+ Lume nella parte superiore della

Ritonda si dilata con molta gratia, per tutte le parti, come non impedita di cosa alcuna"<sup>9</sup>. In his treatise Serlio also notes in the Pantheon the presence of a "lume secondo", which filters into the perimetral chapels through the interior windows in the attic wall. More fundamental to Serlio's consideration of the Pantheon is a further observation he makes concerning the rôle of light within the architectural space of the ancient Rotunda. Serlio writes that he who finds himself within the Pantheon, even if of "mediocre aspetto e presenza", "se gli accresce un non so che di grandezza, e di venustà" (an analysis to which a Longinian aesthetic is not extraneous, here in a precocious architectural application), and Serlio continues, affirming that "il tutto nasce dal lume celeste, che da cosa alcuna non è impedito". From these considerations Serlio draws a further and more practical lesson with regard to the presentation of sculptural works of art. Lighting from above ("il lume di sopra"), he writes, is best suited for the spaces where statues are housed, as testify the "diversi tabernacoli, nicchi, et finestrelle" of the Rotunda in Rome.

Serlio's statuary light, which explicitly serves to amplify and render more beautiful the illuminated sculptures, is a theme which reappears in Scamozzi's *Architettura universale*. Here Scamozzi distinguishes very explicitly between what he calls the "container" ("il continente") and the "contained", that is the object exhibited (the "cosa contenuta"), emphasizing the nobility and beauty of the exhibited work of art in terms essentially little different from those employed by present-day architects and exhibition designers<sup>10</sup>.

Both the Rotunda and the interior illumination of chambers intended for statuary display are themes that can be discovered in Scamozzi's architectural works. As evident both in Giovanni Battista Gleria's reconstruction of the lost church of Santa Maria della Celestia and in the Chatsworth drawing which has been associated with this project, Scamozzi proposes a sort of new Pantheon for Venice, a circular, centralized plan with a dome<sup>11</sup>. The theme of illumination alla romana reappears both in Scamozzi's project for the Venetian church of San Nicolò da Tolentino and in that for the church of San Gaetano in Padua, and again in the Chiesetta di San Giorgio at the villa Duodo in Monselice<sup>12</sup>. In his restitution of the ancient Roman house, Scamozzi proposes – situated on the median axis of the vast complex – a large salone under a domed vault, placing at the two sides of this large room, niches of colossal dimensions furnished with statues<sup>13</sup>, in a exhibition model clearly derived from the giant niches of the Pantheon portico, a design pattern which Scamozzi adapts to other contexts, for instance, in his the-

7. Plan of San Gaetano, Padua (Œuvres d'architecture de Vincent Scamozzi, ed. S. Du Ry, Leyden 1713).

8. Statuary Gallery, in "Aspetto di dentro della casa antica romana" (Scamozzi, L'Ida..., cit., I, p. 234, detail).

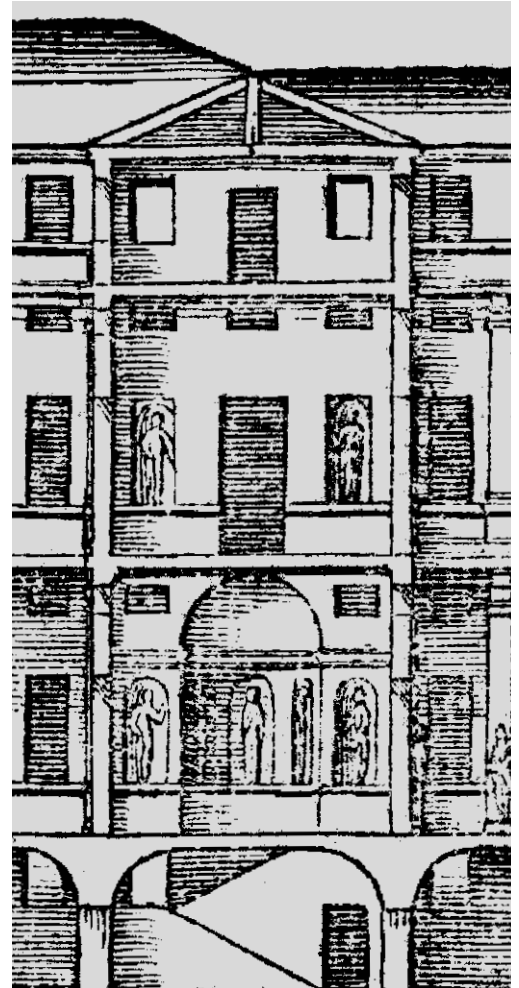
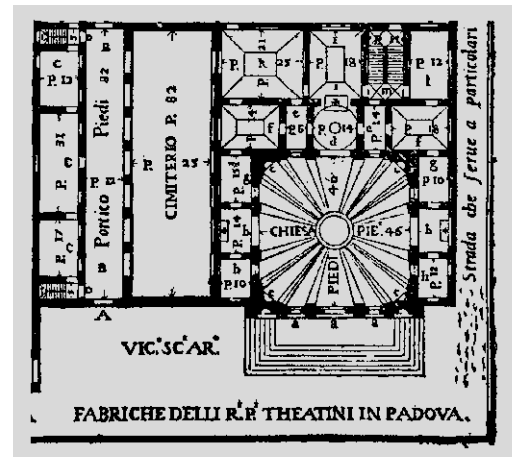
atre at Sabbioneta<sup>14</sup>. Moreover, distributed through Scamozzi's treatise are numerous other indications regarding the disposition of niches, foreseen as containers for statues, groups and statuary complexes<sup>15</sup>.

In the Chiesetta of the Palazzo Ducale in Venice the task with which Scamozzi was confronted, possibly around 1593, was the following: the exhibition of a large marble statuary group of the Madonna and Child with four Angels. This work was begun by Jacopo Sansovino in 1536, to be completed only very many years later, after the death of the sculptor-architect in 1570<sup>16</sup>. At the point in time when Scamozzi entered onto the scene, the group was destined to become the altar statue (simulacro di culto) of the high altar of the Chapel of the Venetian Doge, then Pasquale Cicogna, whose reign extended over the entire decade from 1585 to 1595<sup>17</sup>. While the statuary group was clearly intended, in its new systematisation, as an object of Christian veneration and devotion, the unusual magnificence of Scamozzi's framing architectural altar creates a dramatic, almost museum-like, even exhibition-like impression. The liturgical function of the altar is greatly understated: the mensa itself does not project forward, but it is withdrawn into the altar aedicule as a kind of table spread before the Virgin, a plane contained within the concavity of the altar and not a stereometrically projecting cubic mensa.

In the Palazzo Ducale the Chiesetta is located on the terzo piano, at the northern extremity of the wing on the Rio di Palazzo, far above the Scala dei Giganti in the northwest corner of the Cortile di Palazzo<sup>18</sup>. Opposite Scamozzi's altar, the Chiesetta opens onto the Antichiesetta, and, to the right, onto the Senate. As can be observed from the Cortile, the small chapel of the Chiesetta projects outward considerably from the body of the Doge's Palace, without, however, being a 'hanging' or cantilevered structure, since it rests on the stairwell that leads to the Ducal Apartments at the level immediately below the Chiesetta.

In the earlier history of Italian architecture there are few if any precedents for similar architectonic statuary displays which, in their richness, complexity and artifice, approach the level of the solutions realized by Scamozzi in the Chiesetta. Instead of a simple niche in the form of a classical aedicule, Scamozzi composes a much more elaborate spatial structure, accommodating three rows of columns and pilasters and excavating in the centre a niche proper, a niche which begins as a rounded concavity, and then is given a flattened curved profile in its deepest part.

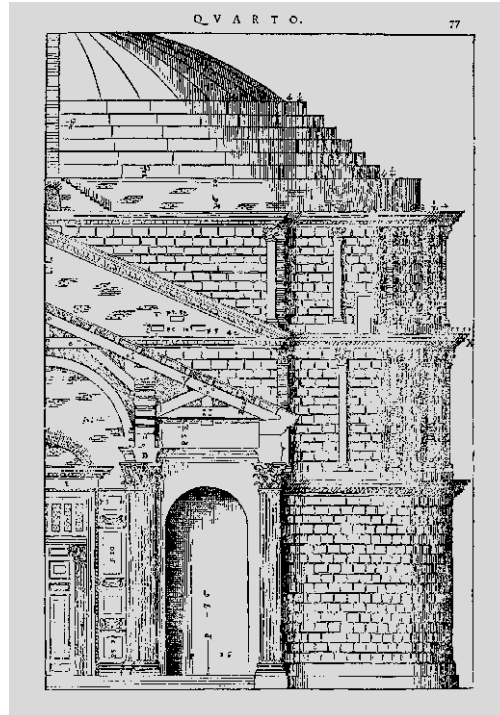
Within the columned portico of his altar the architect has also incorporated a scheme to



enhance the illumination of Sansovino's statuary group: two narrow windows, set high between paired lateral pilasters, are inserted in the two side walls of the shallow altar-chapel. While these two small windows do not escape the notice of the assiduous observer, their presence and their function has gone unremarked in the slight art historical literature treating Scamozzi's

9. Pantheon, elevation and section of the pronaos (Andrea Palladio, *I quattro libri dell'architettura*, Venezia 1570, p. 79).

10. Sabbioneta, Theatre, detail.



altar. Nevertheless, there enters through these two lateral windows into the cappelletta a secondary light, a "lume secondario", "laterale" and "orizzontale", which diffuses through the forest of columns to illuminate the marble altar group, a light which supplements and completes the illumination afforded by the two windows placed high above in the west wall of the Chiesetta at the sides of the altar tabernacle, a "luce viva e perpendicolare".

On the plan of the Chiesetta are indicated the several sources of light that illuminate the space of the Chiesetta following its transformation by Scamozzi. The lateral windows along the north wall, presumably predating Scamozzi, constitute the principal sources of light. But additional openings also afford illumination: the two large high square windows at the sides of Scamozzi's altar tabernacle, just beneath the level of the pediment, opened, it seems, as an integral part of Scamozzi's project, to judge by the profiles of the window frames. The openings of the two internal doors leading respectively to the Antichiesetta and to the Senate as well as those of the two low windows opened in the interior dividing wall between the Chiesetta and the Antichiesetta all afford lesser intensities of illumination. Taken together, all these light sources create a variable and complex illumination, emanating from several openings, not all created by Scamozzi himself. One may note that the level of illumination that they together create does not perhaps completely satisfy the expectations of the modern eye, blind to the

stars and conditioned by a lifetime experience of artificial light, ranging from incandescent, to neon, to halogen, and embracing the further determinative light experiences of cathode monitors, LCDs, flash and strobe.

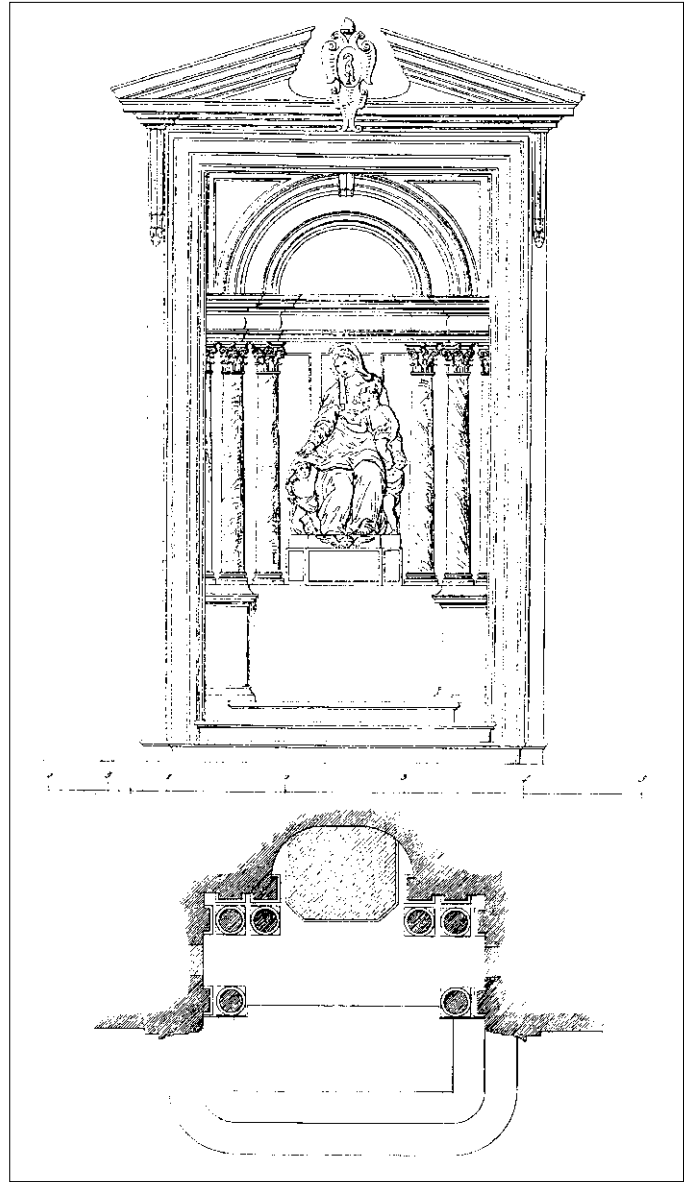
Scamozzi's world of light was, of course, very different, as were his ambitions. He could, however, situate his ideal of optimal statuary illumination somewhere along a scale ranging between gentle candle light and the blazing light of the summer sun, which bleaches the plasticity-defining shadows from sculptural forms<sup>19</sup>. In the Chiesetta, Scamozzi's intention appears to be that of introducing additional light from above, to create a statuary light, at once diffuse and temperate, but adequate to illuminate and reveal the plastic form of Sansovino's statuary group. Possibly Scamozzi's ideal of sculptural light was the equivalent of the diffuse, post-winter daylight, cast by an empty clear blue sky. With his two small lateral windows, placed high between the columns of his tabernacle, Scamozzi follows the same aim, illuminating the group from the sides with light that comes from above, and, simultaneously, brightening the shadowed cavity of the niche.

At the same time the 'architect-designer' Scamozzi achieves a further luminous effect, just possibly one that did not lie within the realm of his immediate intentions: as sunlight enters from the two small lateral windows, its rays reverberate, constituting an almost tangible stratum of light, and creating a diffuse splendour before and around the Virgin in a



11. Venice, Palazzo Ducale, Chiesetta: altar.

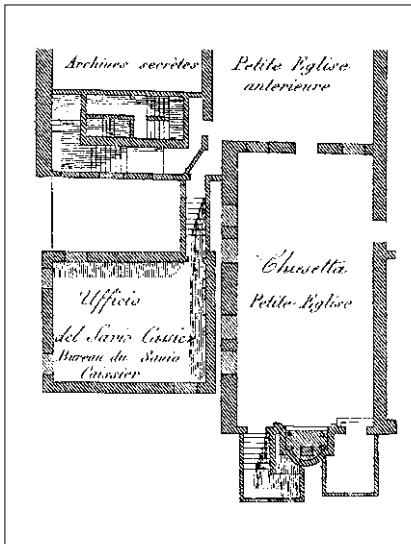
12. Plan and elevation of altar of the Chiesetta, Palazzo Ducale, Venice (F. Zanotto, *Il Palazzo Ducale di Venezia*, Venezia 1858, II, p. CI).



penumbra of light. In the frontal view of the altar the lateral windows tend to disappear, hidden behind the columns, thus eliciting the impression of a Vergine lucifera, housed in a sacellum resplendent with light – light, which is ultimately the most immediate expression of the numinous. This mysterious, fleeting quasi-corona of light may simply be a contingent phenomenon. And, while this luminous phenomenon is inconstant in time and determined by momentary conditions of external light, it is nevertheless an observable and recurrent attribute of Scamozzi's altar today.

If we look now to the more tangible architectural forms of Scamozzi's statuary altar, a comparison with the plate illustrating the "Porta Romana" (i.e., the Italic or Composite door) in Scamozzi's treatise shows that the external frame

of the altar corresponds completely to a very high doorway in which the frieze of the entablature has been omitted but which is crowned by a tympanum, broken to receive the arms of the Cicogna Doge<sup>20</sup>. This tall giant doorway gives the impression of opening like a window onto a vision of a chapel composed by a succession of columns and arches, with the white simulacrum set before a nocturnal background, and, above, crossing through a diaphragm of white cornices, half a blue hemisphere blanketed with a hundred and more stars of gold. The eight points of the stars repeat exactly the octacuspitate stars of the crown of Sansovino's *Madonna Regina coeli*, as an explicit indication that the altar is conceived as a celestial house, the stellate half-hemisphere as a Dome of Heaven, divine as the *volte celeste* of the nearby cupolas of the Basilica of San Marco with



13. Plan of the Chiesetta, Palazzo Ducale, Venice (A. Diedo, G.A. Selva, L. Cicognara, *Le fabbriche più cospicue di Venezia*, Venezia 1858, I, pl. 21, detail).

14. Jacopo Sansovino, Madonna di San Marco (Venice, Palazzo Ducale, Chiesetta).

15. Venice, Palazzo Ducale, Chiesetta: altar of the Madonna di San Marco.

their eight-point stars and Christ in the centre<sup>21</sup>.

The richness of the architectural forms is brought to completion by the conspicuous colouristic richness of the precious materials employed in the altar. White marble in the place of pietra d'Istria constitutes in Venice a note of increased magnificence, and, in addition, there are green serpentine, marbles red and grey, and mischi, black pietra di paragone<sup>22</sup>, and, for the capitals and bases of the columns, bronze, following an usage of classical antiquity known to Scamozzi from ancient literary sources and, just possibly, also suggested by the precious fantasy architecture of the *Hypnerotomachia Poliphili*, where we read of the Temple of Venus Physioza, its columns with capitals of bronze<sup>23</sup>. In Scamozzi's *Architettura universale* he specifically cites the "Portico di Gneo Ottavio", which had "le Colonne con i Capitelli di Rame; cioè di Bronzo"<sup>24</sup>. In the altar of the Chiesetta the elements of polychromy and of black-white chiaroscuro are intrinsically colouristic, and hence further components of the design determined by light, as, for instance, is also the soffit or intrados of the larger interior arch, apparently painted in imitation of inlaid pietra dura intarsia.

If, as in the analysis of Serlio, statuary lighting aims to enhance and amplify the subjective impression created by sculptures within their architectural enclosures, this same aim appears manifested in the rich architectural articulation of Scamozzi's altar. Within the context of the immense portal that surrounds the columned arch of the altar, the columns appear to be calculated on a smaller scale, in a relation '1 : 3' (i.e., 'column : portone'). But the scale and, indeed, the objective dimensions of the coloured marble columns, which flank the white marble Madonna, accord more essentially with the dimensions of the statuary group and its

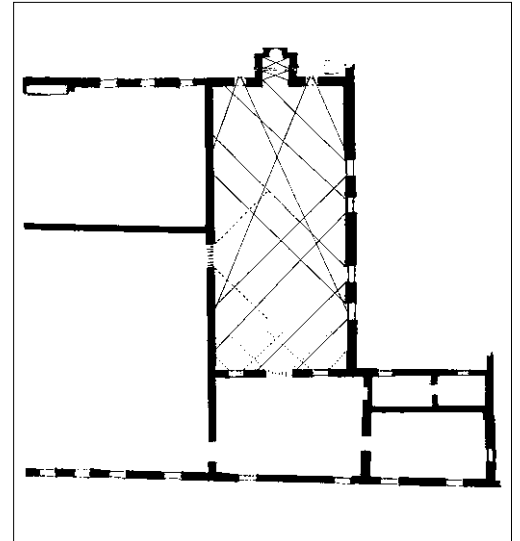
socle, which they nearly match. While the dimensions of the seated, enthroned Madonna are objectively large, they appear subjectively small, when measured against the vertical expanse of the giant doorway, which extends around the Madonna as a vertical frame, the height of which is nearly four times greater than that of the seated Madonna. "Perche rare volte i Scultori fanno le loro statue proportionate a' Nicchi", writes Scamozzi, it is the task of the architect to see that "le statue vi comparono molto meglio", better, that is, in the niches that the architect constructs: proportionate and commensurate in size<sup>25</sup>.

The resolution of such discrepancies of scale lies in establishing a dimensional bridge or link between a large-scale architectural design and the statue-simulacrum, whose dimensions are calculated on a smaller scale. In the Cicogna Altar, Scamozzi accomplishes this transition primarily through two design expedients. The second, more distant arch, that surmounting the niche proper, is effectively much smaller than the forward arch that springs from the foremost columns of the altar, thus accomplishing a reduction in scale as the circle around the statue draws smaller and closer. In turn, the small-scale



16. Venice, Palazzo Ducale, Chiesetta: lateral window of altar.

17. Plan of the light paths in the Chiesetta, Palazzo Ducale, Venice.



columns that surround the Madonna create the impression that she – if standing, nearly as tall as the length of a column shaft – is larger than she actually is, the eye deceived by a cognitive standard of comparison: the knowledge of the normal dimensional relationship between the (smaller) human body and the (larger) architectural orders. Similarly, an example selected from the stucco decoration of the Villa Madama in Rome, the statue of Venus, in reality small like a bronzetto, is, with artifice, and in a reversal of architectural scale, made to appear as large as a colossus, compared to the diminutive order and statue niches at her two sides. A further example of a similar design strategy is observable in Jacopo Sansovino's Monument to the Doge Francesco Venier in the Venetian church of San Salvatore, where in the two lateral tabernacles the very slender flanking columns, topped by elongated mensoles sustaining pediments, rise only to the shoulder level of the standing statues that they frame, and thus adding magnitude to these figural elements within the complex *macchina* of the tomb.

In the Doge's Palace, within the tabernacle the profiles of the two white repeating cornices that ring the niche above the Virgin amplify the

architectural framework, much as the two white concentric arches above concord in conferring a dynamic upward expansion to the altar. To fill his expansive structure, Scamozzi disposes a double file of columns, with their flanking coupled pilasters behind or at the side, and he raises Sansovino's statuary group, already replete with a basis, upon a further high red-stone socle, in which the bevelled, sunken-panelled faces reflect Jacopo Sansovino's design preferences.

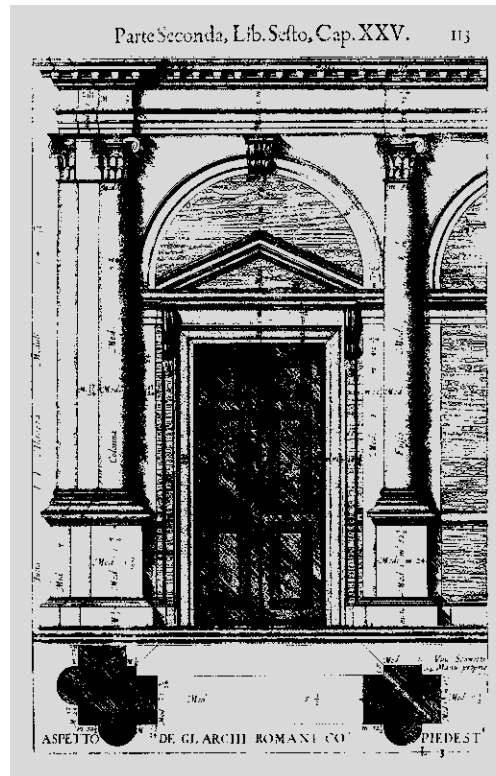
Despite the extraordinary richness of the ensemble, the architectural tenor of the whole, as well as that of the single forms, is of an unusual, almost classical restraint and purity. This restraint is all the more striking against the backdrop of the heavy, inflated Vittorian ornamentation still prevailing in Venice at the end of the century. In Scamozzi's design the limpid whiteness of the exterior marble framework also contains, isolates and intensifies the zone of polychromy at the centre.

In the entablature of the niche the contrasting deep green of the broken pulvinate frieze lends emphasis to the succession of planes and to the dynamic linear and spatial rhythm of the architrave and cornice, a movement rendered more intense, more charged with tension and more instable by the flattening of the concave profile of the niche itself. Other manifestations of a similar taste can be discovered in other works by Scamozzi, for instance, in the curving contours of the five steps of the *cavea* in his well-known project drawing for the Teatro Ducale at Sabbioneta, preserved in an autographed copy at the Uffizi (191 A)<sup>26</sup>. It is not far afield to discern in the multiple curved contours of Scamozzi's Palazzo Ducale Altar — rounded, but with a reined in trajectory charged with dynamic tension — an anticipation of the elegant architectural dynamism of the great mas-

18. "Porta romana" (Scamozzi, *L'Idea...*, cit., II, p. 113).

19. Venice, Palazzo Ducale, archivolt of the arch of the Chiesetta altar.

20. Rome, Villa Madama, stucco decoration.



ters of the Roman Baroque: the interior of Pietro da Cortona's Roman church of the Santi Luca e Martina seems only a step away<sup>27</sup>.

The legacy of Jacopo Sansovino remains, however, a not-to-be-underestimated factor in the art of Vincenzo Scamozzi, and, in his elaborate design for an altar to house Sansovino's marble group, his debts to the sculptor-architect extend far beyond those of the design of the inferior socle. The triadic partition of the black niche wall behind the Virgin is a further reminiscence of the Florentine Tatti, as is also the form given to the archivolt of the forward arch, with alternating octagons and lozenge-shaped ovals in an all'antica ceiling coffering pattern much favoured by Sansovino. Very similar patterns also recur in the intrados of the central arch of the Venier Monument, mentioned above, as well as in the archivolts of the Ionic windows of the piano nobile of the Libreria Sansoviniana<sup>28</sup>.

Further comparisons with Sansovino's Libreria di San Marco permit going beyond a reading of the altar-chapel of the Vergine di San Marco as a Portal (*Maria Porta coeli*) and suggest understanding it as a great window (*finestra*) that opens onto a celestial vision. The window analogy is also suggested by the genesis of Scamozzi's architectural design. In the arch that rises before the statuary niche, supported on four full-round columns and six contropilastri, it is possible to discern a further

tribute to the serliana contratta of the large Ionic windows of the upper storey of Sansovino's Library, a design also characterised by paired lateral columns, again disposed not side by side, but in depth, one behind the other. In both cases the Serlian window is inserted into a dimensional context conceived on a larger scale, framed, that is, by a major order. In both designs, the contraction of the triadic Serlian motive acquires a Sansovinesque character, with the smaller columns only slightly detached from the sides, in a sort of double pseudo-serliana, with, as mentioned, paired columns at the sides, arranged in depth.

The Sansovinesque invention of the serliana contratta, with the lateral apertures much reduced in width, is found in the very well-known drawing 'D.18' of the Museo Civico in Vicenza, recording a project for the façade of the Scuola della Misericordia in Venice, with the serliana contratta occurring in both storeys. But it is the large windows of the upper storey, with their spirally scannellated columns, which allowed Manfredo Tafuri to demonstrate unequivocally the descent of this Sansovino window invention from a single Florentine model: the tabernacle of the Mercanzia by



21. Venice, Palazzo Ducale, vault of the Chiesetta altar.



22. Rome, Santi Luca e Martina, apsis, detail.

23. Venice, San Salvatore, Venier Monument: soffit of central arch (photo Ch. Davis).

24. Venice, Libreria Marciana: soffit of Ionic window (photo Ch. Davis).

Donatello at Orsanmichele, with the same small spirally-fluted columns<sup>29</sup>.

In Scamozzi's project for the altar of the Ducal Chapel the paired columns of the Libreria's Ionic windows are separated and distanced from one another in depth, to create an interval to contain the mensa and in which to insert the light-bringing lateral windows, which are half-concealed within the lateral intercolumniations. Where Sansovino transformed Donatello's statue niche into a window, Scamozzi, in a typological reversal, refashions Sansovino's window into a statuary container: no longer a window, but now a niche enframing. Following this interpretation, the niche proper, with its arc and its two flanking columns, constitutes a second, more distant arch, a minor one inserted into the primary arched organism.

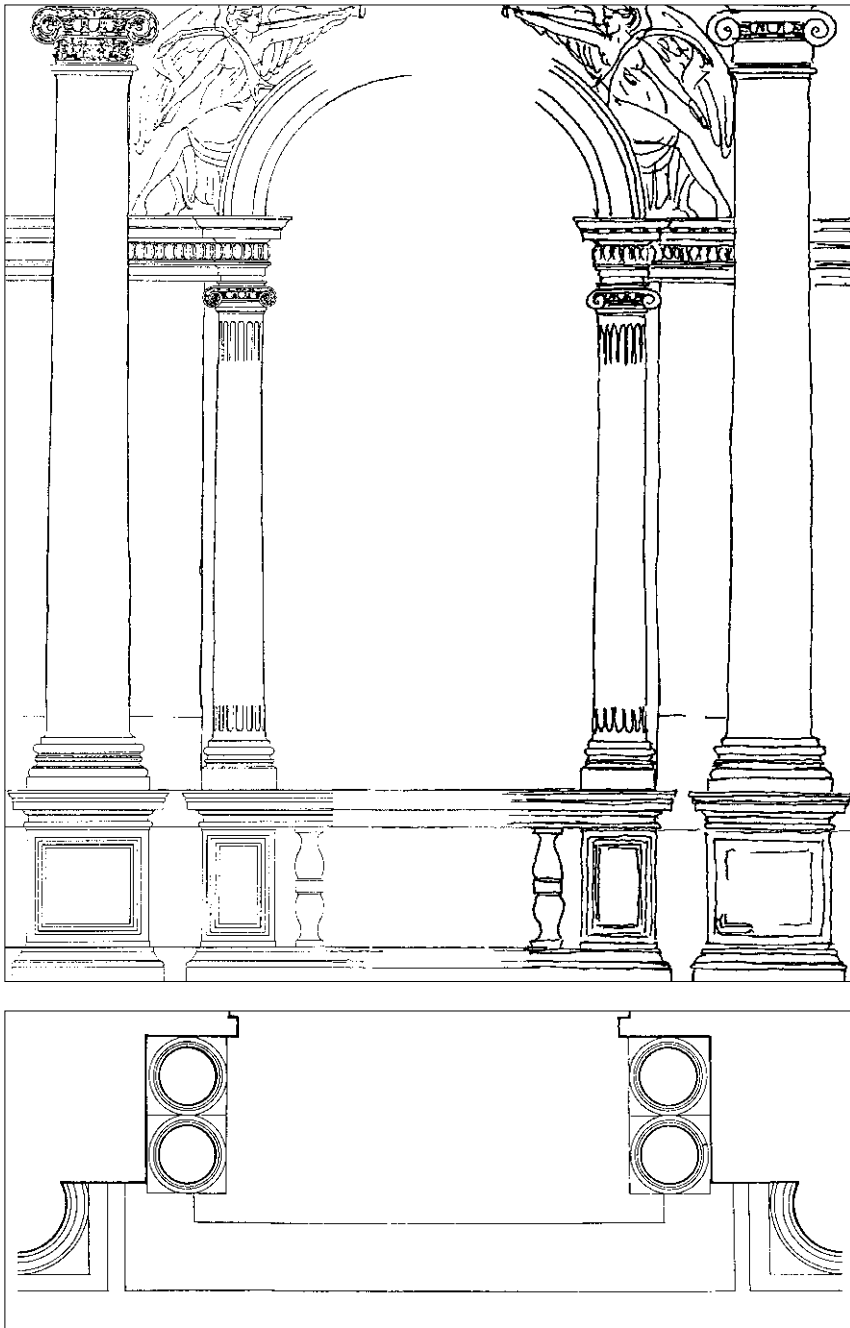
In the landings of the staircase that leads to the upper level of Sansovino's Libreria, there recur doorways and blind arches that take the form of the serliana contratta. All these designs echo the forms of the large Ionic windows of the Library's exterior. A walled in serliana contratta occupies the rear wall of the vestibule just behind the entrance to the Libreria between the two colossal caryatids<sup>30</sup>. Here, too, the order is Ionic, formulated in a summary form, and the columns are coupled with contropilastri, now replete with capitals and bases, in the place of the pseudo-pilasters of the exterior Ionic windows. Even the diagonally circling veins of the marble appear to mime the pattern of spiral fluting. And higher along the stairway, in the atrium leading to the Sala of the Libreria, the so-called serliana reappears in the form of two large open and paired window-portals, Ionic, and functioning as a diaphragm of light<sup>31</sup>. Again the columns are distanced only slightly from the contropilastri, and the archivolts are divided into squares and rectangles, filled with grotesque intaglios.

If not previously, certainly soon after 1582, all of these architectural designs of Jacopo Sansovino moved rapidly into Scamozzi's



purview, gaining enormously in relevance when he prevailed in the competition for the commission to complete and to continue Sansovino's Library, a commission which would require him to build numerous exact replicas of Sansovino's Ionic Serlian windows, which were also repeated in Scamozzi's continuation of the Libreria's architecture in the Procuratie Nuove<sup>32</sup>. In this context Scamozzi had occasion to document these windows in two drawings, now belonging to the collection of the Uffizi (192 A and 193 A)<sup>33</sup>. It is, in addition, interesting that on these





25. Elevation of Ionic window of Libreria Marciana, Venice (based on G. Samonà et al., *Piazza San Marco*, Padova 1970, p. 106).

26. Plan of Ionic window of Libreria Marciana, Venice (based on G. Samonà et al., *Piazza San Marco*, Padova 1970, p. 106).

two drawings Scamozzi inscribes no less than seven annotations relating to architectural lighting, for instance, “Calle dove ricevano lumi queste due Fabriche...”, “Calle per lumi...”, “Requia per dare lume à diverse cose”, etc. Despite Scamozzi’s well-known criticisms of the errors of the “fabbriche di Piazza”<sup>34</sup>, his project to complete and amplify Sansovino’s architecture on the Piazza San Marco implies a long and deep acquaintance with Sansovino’s Library, and thus an intimate knowledge of the Florentine’s Venetian architecture.

In any event, Scamozzi’s re-use of the Sanso-

vino giant Ionic windows as a statuary niche in the Doge’s Palace was determined, in part, by the function of the altar, which was destined to receive Sansovino’s statuary group as the “cosa contenuta”. Following a completely natural sense of decorum Scamozzi designs a fitting ‘container’ for the marble group in a Sansovinesque manner. The motive of the serliana contratta was, on the other hand, one that experienced a not negligible fortuna in Scamozzi’s own architecture. It reappears, in 1611, in his project for the Palazzo Comunale di Bergamo, now as a window<sup>35</sup>, and it can also be traced in the illustrations of Scamozzi’s *Architettura universale*, as, for instance, in the plate showing the Palazzo Cornaro, projected for the Canal Grande at San Maurizio<sup>36</sup>. The most instructive instance of Scamozzi’s re-use of this motive is, however, found in the palace of the “Magnifici Signori Strozzi” in Florence. This is the enormous Florentine palace, better known as the Palazzo Nonfinito, which Roberto Strozzi, then residing in Venice, “si risolse di edificare”, writes Scamozzi, “secondo i nostri Disegni e Modello”, a construction erected largely in the absence of the architect<sup>37</sup>. At the south side of the Borgo degli Albizi, above the lateral entranceway and high above street level, we discover an unexpected reappearance of the so-called serliana of the Palazzo Ducale Chiesetta Altar, now transformed to fulfil its original function as a window, and, once again, it is furnished with a balustraded balcony, as it appeared originally in Sansovino’s Library. Comparing Scamozzi’s Palazzo Strozzi window with his altar in Venice, we may discern a number of correspondences and variances: (1) the smaller-scale columns (and pilasters) of the minor order, all furnished with all the attributes of an architectural order, (2) the pulvinate frieze, (3) the Venetian *contropilastri* now transformed into angle pilasters at the two sides, their function remaining unchanged, (4) the Palazzo Strozzi arch, now somewhat retracted in its vertical extension to make way for the insertion of a large architectural inscription which takes the form of a cartouche, such large building inscriptions being much to Scamozzi’s taste. In the ground plans of the two Scamozzi designs we can, moreover, observe an identical separation of the binate orders: the columns and pilasters are distanced from one another in depth. In both cases the partition of the archivolt follows Sansovinesque formulas, derived from antique ceiling coffering. In a comparison of the elevations of the Ionic windows of Sansovino’s Libreria and the Ionic window of Scamozzi’s Palazzo Strozzi, Scamozzi’s debts become even more apparent, especially as regards the general architectural arrangement. Variations in the inflection of

27. Venice, Libreria Marciana, blind 'serliana contratta' on the landing of staircase (photo M. Morresi).

28. Venice, Libreria Marciana, blind 'serliana contratta' in vestibule of the 'scalone' (after M. Tafuri, Sansovino, Padova 1969).

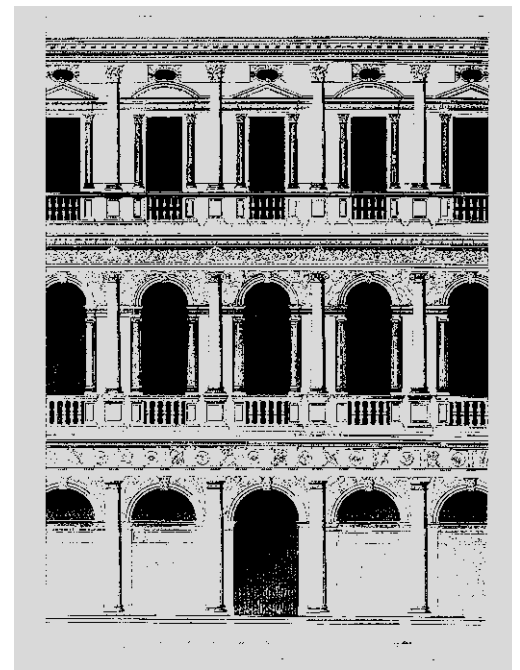
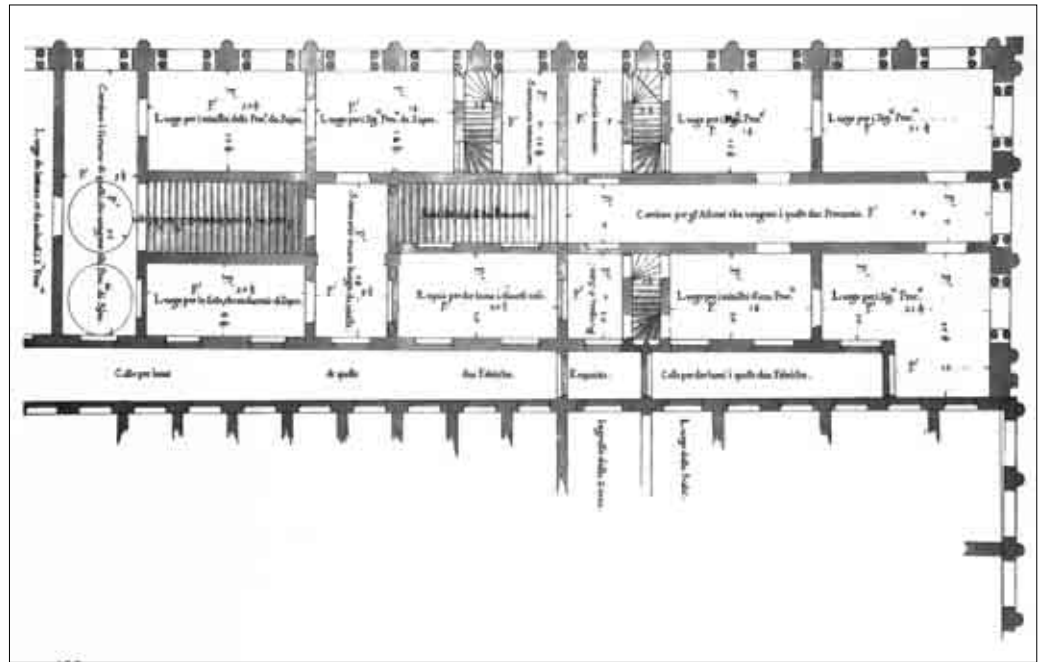
29. Venice, Libreria Marciana, double 'serliana contratta' in the 'Scalone' (after G. Samonà et al., Piazza San Marco, Padova 1970, p.163).



30. Vincenzo Scamozzi, Plan of the Libreria Marciana in Venice (Firenze, Uffizi, Gabinetto Disegni e Stampe, 192 A).

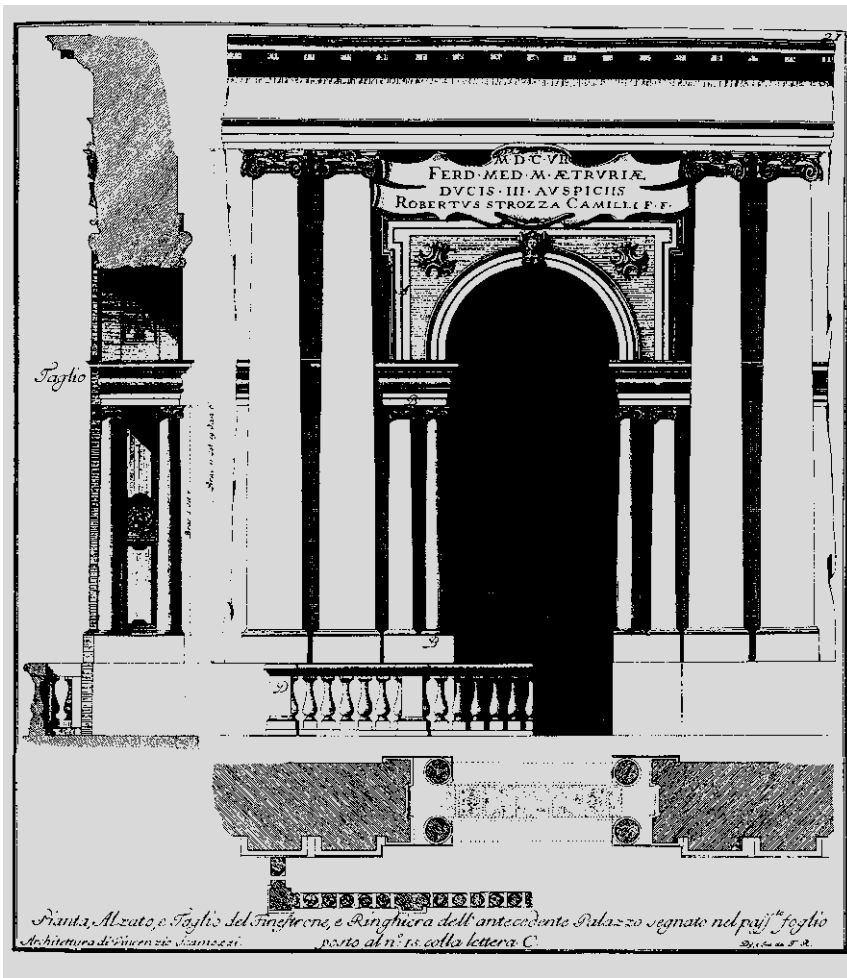
31. Vincenzo Scamozzi, Project for Libreria Marciana and the Procuratie Nuove in Venice (Firenze, Uffizi, Gabinetto Disegni e Stampe, 194 A).

32. Procuratie Nuove in Venice, engraving ("J. Bury et Jourdan del.", "J. Bury et Ribaut sc.", 19<sup>th</sup> century).



architectural vocabulary aside, it is evident that Scamozzi has derived the idea for the larger binate Ionic order, which frames the serliana contratta, from the corner resolution (cantonale) of Sansovino's Library, which is likewise distinguished by a binate order on both levels<sup>38</sup>. In addition are noteworthy the smaller columns of the arch, barely detached from the flanking pilasters, the keystone, which takes the form of a draped female head, the pulvinate frieze, the window balcony with balusters, and the Ionic order, present in two distinct dimensional scales.

A few critical modifications, introduced by Scamozzi, can be detected, such as the high bases of the orders (which, however, are, in part, heightened to compensate for the extraordinarily oblique and deforming viewpoint imposed by the very narrow street below, bordering on the south side of the palace). Finally the archivolts of the Strozzi arch reflect closely the archivolts of the ground-level arcade of the Marciana. The rhythmic partition is not identical, but it follows the same logic of squares and rectangles in a rhythmic sequence.



33. Plan and elevation of Palazzo Nonfinito window-loggia in Florence (F. Ruggieri, *Scelta di architetture antiche e moderne di Firenze*, Firenze 1755, III, pl. 21).

34. Venice, Libreria Marciana, vestibule ('Statuario pubblico') (photo Dida Biggi).

35. Statues in the 'Tempio nel Foro di Traiano' (Antonio Labacco, *Libro d'Antonio Labacco appartenente a l'architettura*, Roma 1552).

Returning to the linked themes of statuary exposition and the architecture of light, it can scarcely come as a surprise that these two topics play a significant rôle in the thought of the 'complete' architect, Vincenzo Scamozzi, whose pensiero appears based on an intellectual compilation reflecting a vast, classically inspired culture, nor can it surprise that these two topics found expression in Scamozzi's architectural practice. In this context, it is sufficient to recall, among Scamozzi's 'allestimenti statuari', his well-known sistematisation of the Museo Grimani collection of ancient sculptures in the Antisala of the Libreria Sansoviniana in order to constitute the new Statuario Pubblico, immediately prior to Scamozzi's transformation of the Chiesetta in the Doge's Palace (where in fact Grimani statues had been previously housed)<sup>39</sup>. In addition, mention must be made of two 'teatri' of statues: the Palladian Teatro Olimpico in Vicenza, where Scamozzi constructed the splendid proscenium, with its square-headed statuary niches patterned on the statuary tabernacles of the Roman Pantheon<sup>40</sup>, and, further, the Teatro Ducale at Sabbioneta, built to Scamozzi's order for Vespasiano

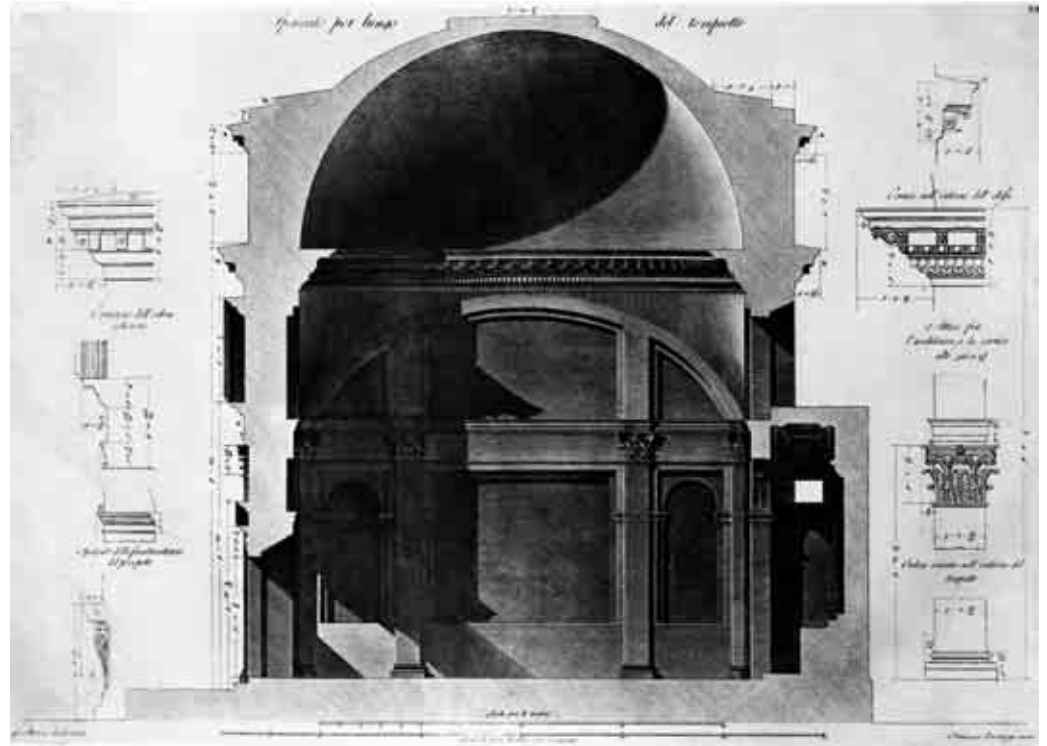


Gonzaga, where, inter alia, is noteworthy the dramatic motive of the colossal busts all'antica placed on high pedestals and collocated in giant niches set in the intercolumniations of the peristyle, a design motive, as has been mentioned, deriving from the Pantheon portico.

The typology of statuary spaces – Scamozzi's 'contenitori di statue' – includes a variety of types: the chapel-altar (as in the Doge's Palace), the mausoleum, the galleria<sup>41</sup>, the tribune<sup>42</sup>, the antiquarium (to display a collection of ancient sculpture)<sup>43</sup>, and also the abstract typology proposed in Scamozzi's "sala rotonda", an ideal model elaborated on the pattern of statuary displays in classical antiquity<sup>44</sup>. The theme of statuary display fascinated many Renaissance architects, as, for example, Antonio Labacco and Andrea Palladio, both of whose visions of ancient architecture imagined a universe of statue-inhabited edifices<sup>45</sup>.

Viewed in broad terms, it is clear that architectural spaces specifically destined to house statuary displays, as well as the exposition of paintings, represent a more than marginal aspect of Renaissance architecture; witness, to

36. Sant'Andrea in via Flaminia in Rome (G. Stern, *Piante [...] degli edifici della villa suburbana di Giulio III, Roma 1784*).



mention only the most important category, the architecture of churches, with their endless array of chapels and altars. And, despite this fact, within the context of statuary spaces, those illuminated by a true architecture of light are not highly numerous, even though, it must be admitted, the most signal examples comprise within their time a group of exceptionally significant architectural achievements.

Among them, the Medici Chapel at San Lorenzo in Florence takes the first place: the space is white, the architecture, 'bi-colore', black-white, and light enters from above, from the high windows and the lantern of the dome, creating the clear diffuse illumination most suitable to rendering the chapel's statues legible. In turn, the Del Monte Chapel in San Pietro in Montorio in Rome, built under the watchful eye of Michelangelo, is distinguished by its measured, coolly-lit marble whiteness, devoid of intricate decorative marble carvings, which, in the opinion of Buonarroti, would have only obfuscated our view of the marble statues, and thus the planned relief intaglios were omitted, following the precise instructions of the master<sup>46</sup>.

The Antiquarium of the Venetian Palazzo Grimani near Santa Maria Formosa is a highly individual re-edition of the scheme of the 'Statuario mediceo' in the Sagrestia Nuova of San Lorenzo. The Tribune of Palazzo Grimani, if not white, is in essence 'bi-colore' and of a uniform lightness and clarity, illuminated by the "lume vivo" which comes from above<sup>47</sup>. Similar,

too, is the Pellegrini Chapel at San Bernardino in Verona: here the architecture of Sanmicheli is equally white and equally heir to the Cappella Medicea. In Verona the missing statuary apparatus is implicit in the Leerstellen of the vacant niches, as, for example, also in the Ricetto of the Libreria Laurenziana. In the Libreria Sansoviniana, the Statuario Pubblico, destined to house a part of Giovanni Grimani's collection of ancient statuary, represents the apex of Scamozzi's ambitions realized in this genre.

If we turn now to reconsider more closely the innovative system of illumination devised by Scamozzi for the Altar of the Chiesetta in the Palazzo Ducale, it will be possible to indicate a likely Roman origin for this luministic innovation. Scamozzi's intimate knowledge of the city of Rome cannot be in doubt, even if it has not been completely studied<sup>48</sup>. In addition to his very long youthful sojourn there, undertaken explicitly to study the remains of antiquity, Scamozzi visited the city numerous times during the course of his later life<sup>49</sup>. An extensive network of personal contacts and patrons also linked him to the eternal city. The fruit of Scamozzi's study of Rome extended beyond his antiquarian learning to include a considerable knowledge of modern Roman architecture. To his interest in modern architecture testify the many references to modern building contained in the *Architettura universale*<sup>50</sup>.

In Rome, in the church of Sant'Andrea in Via Flaminia, in a diminutive Pantheon destined to





37. Rome, Santa Bibiana, altar of Santa Bibiana by Gian Lorenzo Bernini (photo Ch. Davis).

38. Pietro da Cortona, Project drawing for the high altar of San Giovanni dei Fiorentini in Rome, 1684 (Windsor Castle).

39. Plan and elevation, after Bernini, of Raimondi Chapel apse, San Pietro in Montorio, Rome (G.G. Rossi, *Disegni di vari altari e cappelle delle chiese di Roma*, Roma [169?], pl. 8).



contain paintings, Giacomo Barozzi il Vignola created an independent source of light specifically to illuminate the main altar: in the shallow apse, Vignola opens two small rectangular windows at the sides of the arch high above the altar with the intention of increasing the illumination of the pala<sup>51</sup>. He thereby anticipates not only Scamozzi's altar in the Palazzo Ducale, but also Roman baroque experiments with lighting<sup>52</sup>. Scamozzi's interest in Vignola's architectural works has been noted more than once, and Scamozzi's familiarity with Vignola's writings is documented in his own<sup>53</sup>. The two architects both pursued a conservative architectural direction, and both were employed by patrons of a Counter-Reform tendency<sup>54</sup>. Indeed, in the oval cupolas of the perimetral chapels of Scamozzi's church of San Gaetano in Padua one can recognize a specific debt on the part of Scamozzi to

Vignola's small temple of Sant'Andrea, with its innovative oval cupola<sup>55</sup>.

Natural light is a crucial component of architecture, and before the widespread introduction of artificial illumination it was indeed a *sine qua non* of the architecture of interior spaces. While light has not escaped the attention of scholars, and while the centrality of light in modern and contemporary architecture can scarcely be overestimated, the topic of light in architecture, in many ways as fugitive and fleeting as light itself, has seldom been treated comprehensively and systematically as an historical phenomenon<sup>56</sup>. Nevertheless, considering only the Veneto prior to Scamozzi, attention has often been drawn to the luminist sensibility of Mauro Codussi, of Jacopo Sansovino and of Andrea Palladio<sup>57</sup>.

In attempting to follow the principal line of development that leads to the Roman baroque,



it is not imperative to review every step that ultimately leads to Gian Lorenzo Bernini's *Ecstasy of St. Teresa* in the Cappella Cornaro of Santa Maria della Vittoria in Rome. Instead it is more informative to concentrate on three examples, all Roman and all later than Scamozzi's Palazzo Ducale Altar. Each embodies an innovative and experimental resolution of the need for illumination, with solutions very analogous to Scamozzi's precocious altar design. These three projects are: (1) Bernini's altar to Santa Bibiana in the church of the same name, (2) a project by Pietro da Cortona for the main altar of San Giovanni dei Fiorentini, and (3) the Cappella Raimondi in the church of San Pietro in Montorio, again by Bernini<sup>58</sup>.

In the instance of the Altar of Santa Bibiana, ca. 1625, in addition to the large lunette-shaped window in the vault, one of the compartments of the decoration of the arch above the altar is opened for light to enter, creating a secondary light source to supplement the primary one. This second lateral light source shines upon the upraised face of the saint, adding emphasis and concentration, in an effect not dissimilar to the action of light in Scamozzi's earlier Venetian altar. In both, light has an integrative, focusing function.

In Pietro da Cortona's project drawing of 1534 for the high altar of San Giovanni dei Fiorentini (Royal Library, Windsor Castle), here following the instructive analysis of Karl Noehles, we may see that the architect devises an ingenious method to introduce light onto the pala of the altar, a large marble bas-relief of the Baptism of Christ, by creating openings in the

zone behind and at the sides of the altar<sup>59</sup>. In the plan of the altar, at the bottom of the Windsor drawing, one observes that light shafts are opened in the walls behind the two columns flanking the pala, and that light enters from the back of the apse through two angled passages. Thus the wall behind the pala is recessed, creating a space resembling a shallow stage, on which appear the figures carved in relief, and it is illuminated by light sources hidden in the wings. In Cortona's plan, daylight, attenuated and diffused, filters through the concealed windows to illuminate the altarpiece, its source masked by the columns placed in the outlets of the light shafts. Not only the system of illumination but also the planimetric richness of Cortona's project present parallels to Scamozzi's altar in the Doge's Palace.

In the Cicogna Altar in Venice, the screen of columns lit from behind is also comparable, planimetrically and in its effect, to the design of the main altar of Bernini's church of Sant'Andrea al Quirinale, where the screen of columns, disposed 'a transenna' (i.e., the double flanking columns of the aedicule that frames the opening onto the semicircular main altar chapel), stands before an illuminated space, lit by natural light streaming down from the windows of the lantern above, conferring a strong luminosity to the main altar in contrast to the dimmer interior of the church and the darker chapels adjoining the altar chapel<sup>60</sup>.

In the Cappella Raimondi of San Pietro in Montorio (1640-47), Bernini realizes a solution similar to that embodied in Cortona's project drawing. The pala, a relief carved in marble, is in

41. Round temple, plan (Sebastiano Serlio, *Quinto libro di architettura*, Venezia 1559, fol. 2r).

42. Round temple, elevation and section (Serlio, *Quinto libro...*, cit., fol. 2v).

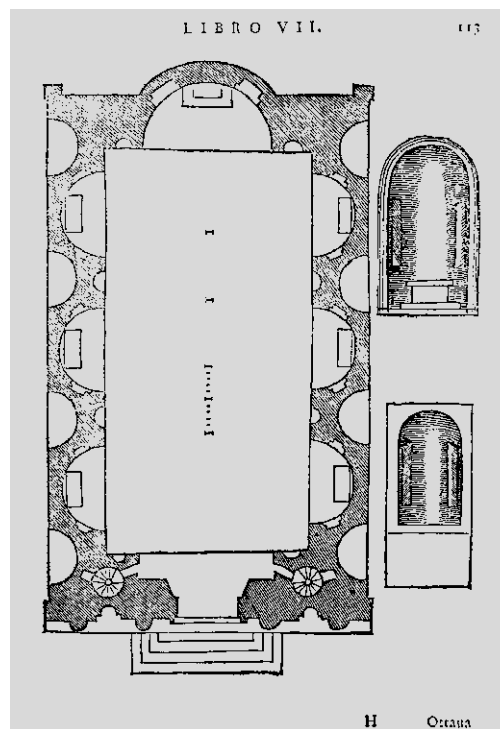
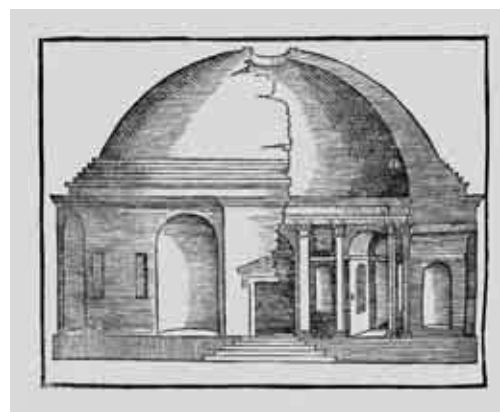
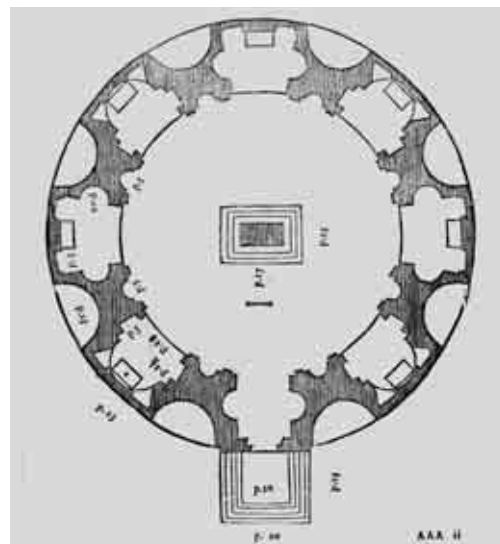
43. Temple (plan) and niches (elevations) (Sebastiano Serlio, *I sette libri dell'architettura*, Venezia 1584, VII, ch. xlviii, p. 113).

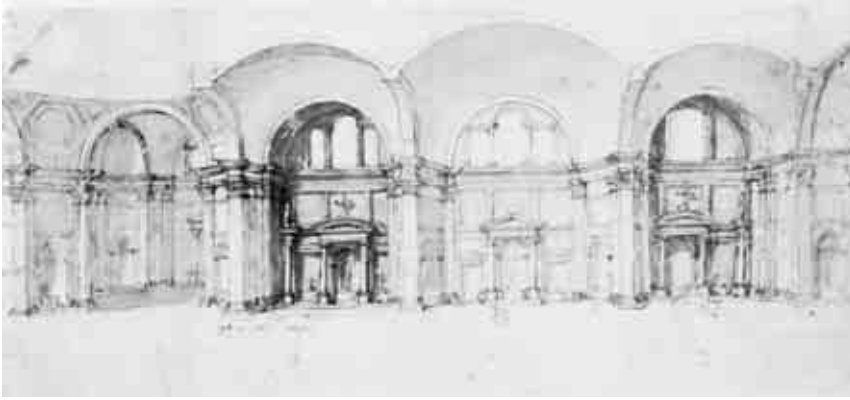
fact detached from its columnar architectural frame, and it is recessed some distance behind this cornice. In the ensuing interval, between the columns and the bas-relief altarpiece depicting the Ecstasy of St. Francis, Bernini opens in the lateral exterior wall, at the left, a single high narrow window. Thus from a nearly concealed lateral source abundant light unfolds over the marble altarpiece, a light which imparts a more ample illumination and a more focussed, accentuated lighting to the dramatic image of St. Francis in ecstasy. With this provision of a source of "luce vivo e naturale", introduced from the exterior, Bernini creates a system of illumination very similar to that of Scamozzi's Venetian altar, where, however, light is brought in from both sides of the altar in order to establish an equilibrium of light sources.

Scamozzi's Altar in the Ducal Chapel in the Doge's Palace, in fact, anticipates these solutions of the Roman baroque by more than three decades, but it would perhaps be mistaken to attribute too great a significance to this temporal discrepancy, and to conclude that the Venetian altar is simply a tentative provincial experiment, peripheral, isolated from the main line of development and without subsequent echo. In contrast to such an assessment stands not merely the extraordinary urbanity of the architectural language which Scamozzi speaks in the Chiesetta, but also his apparent reference to Vignola's Sant'Andrea in Via Flaminia, and possibly even the close parallels with later Roman experiments in altar lighting.

While Scamozzi appears almost completely extraneous to the decorative tendency of late-Cinquecento Venetian architecture, often of a Vittorian stamp, this does not imply that his architecture is provincial, or confined in its implications to the Venetian Lagoon. Indeed, it seems more correct to describe him as cosmopolitan, a formulation which finds justification in Scamozzi's privileged formation, in his personal contacts that extended far beyond Venice and his native Vicenza, in his many and far-flung journeys in Italy and beyond the Alps, all of which render him far more cosmopolitan than many of his contemporaries in the Veneto. The example of the Altar of the Doge's Chapel, beautiful, and rich in its invention, lends itself to underline the urbanity of the universal architecture of Vincenzo Scamozzi<sup>61</sup>.

At the same time the historical relationship that Scamozzi's own concern with light had with the luminist achievements of the Roman baroque remains, in part, to be clarified. One may suspect the existence of missing links. A future investigation including a more ample, more nearly exhaustive survey of the monuments of Italy outside the Urbs might reveal





46. Baldassarre Peruzzi, San Domenico, Siena, section (Oxford, Ashmolean Museum; after H. Wurm, *Peruzzi Architekturzeichnungen*, Tübingen 1984, p. 233).

further significant anticipations of baroque light, ones equally important for the history of architectural and sculptural illumination as Scamozzi's Altar in the Doge's Palace.

Glancing backward in time, it is possible, in conclusion to suggest one further concrete stimulus for Scamozzi's concern with architectural illumination. This is the "Quinto Libro d'Architettura di Sebastiano Serlio Bolognese, Nel quale si tratta di diverse forme di Tempj sacri, secondo il costume Christiano, & al modo antico". The interest of Vincenzo Scamozzi and of his father Gian Domenico in Serlio's books is well known, and it is manifest in their "copioso indice" to these books<sup>62</sup>.

While considerations concerning light appear in Renaissance architectural treatises as early as Alberti's, and while a similar interest can sometimes be traced in Renaissance architectural drawings<sup>63</sup>, and although every window testifies to the rôle of light in architecture, nevertheless both the text and the figures of Serlio's *Quinto libro* are remarkable for their explication of phenomena of architectural light. In Book V this is particularly evident in the first group of temples, which represent central-plan Christian temples. Serlio's first concern is to assure a sufficient illumination of the interior, but it is clear that he admires fully-lit, bright interiors even more ("ben chiaro"). Serlio is also concerned with the shapes, forms and positioning of apertures and windows to admit light; with their names, their number and their dimensions, particularly in relation to the interior dimensions; with light-admitting lanterns, with their glazing and with their height and diameter in proportion to those of the interior space; with the illumination of secondary spaces. For his second octagonal temple, Serlio proposes, in order to increase the level of illumination, opening an aperture at the top of the vault and covering it with a glass pyramid ("Quanto alla luce di questo Tempio, le finestre potrebbon servire: nondimeno chi vorrà maggior luce potrà fare un'aperatura nella sommità della volta, coperta così piramidalmente di

vetri, accioche le nevi, et li ghiacci non vi si ritenghino", p. 208r, fig. at p. 209t). Within some of Serlio's central-plan temples may be found altars with windows directly above them (figs. at pp. 204r, 204t, 205r, 207t, 208r, 209t, 211r, etc.). The theme of altar illumination is explicitly raised in the instance of a longitudinal church (p. 219r), where the "quadro", that is, the pala, of the altar will be a painting, and it will receive completely adequate light ("Il quadro sopra l'altare, sarà per una pittura, et haverà la luce molto accomodata...", p. 219; figs. at pp. 219r, 219t left): this full illumination is accomplished through double light shafts which are opened in the apse of the "cappella maggiore", on both sides of the altar. The opening of lateral apertures and windows to introduce lighting from the sides is a characteristic of a number of Serlio's temple designs (see the figures on pp. 203r, 203t, 204t, 205r, 205t, etc.), and such lateral windows, at least on occasion, even require, for the sake of symmetry, the introduction of a blind window ("finestra morta", p. 209r; fig. p. 210r). More observations about architectural illumination can be traced in Serlio's Book VII. Here Serlio returns to the theme of laterally lighted chapels, and, in Chapter XLVIII, he expounds a longitudinal temple plan with four large niches excavated in the lateral walls. The large concave perimetral niches permit opening light shafts through the exterior walls reaching into the six lateral chapels (fig. at p. 113). "Dalli lati di fuori di esso tempio saranno quattro nicchi per banda: per li quali le capelle prenderanno la luce". This system of lateral lighting represents in nuce the same system of illumination that Scamozzi instituted in his windows, half-concealed in a labyrinth of columns, at the two sides of the Cicogna Altar of the Madonna di San Marco in the Doge's Palace.

Serlio's particular interest in architectural light may have been inspired by Baldassarre Peruzzi, and it is foreshadowed in certain drawings of Francesco di Giorgio, for instance, Uffizi 331 A<sup>64</sup>, inscribed "luce" in the oculus of the cupola, and by other drawings, copies after original drawings by Francesco di Giorgio's, found in the *Codex Ashburnham 1828 App.* of the Biblioteca Laurenziana: architectural plans, mostly centralized, with the indication "lume superficiale" signifying light from above, toplighting, in the manner of the Pantheon<sup>65</sup>. Serlio's central plan churches in Book V recall drawings by Peruzzi, whose church elevation drawings often reflect a specific interest in the sources of illumination, for instance, Peruzzi's elevation view of the interior of San Domenico in Siena (Ashmolean, *Talman 40, 31 [468]*), with its brilliantly lit 'teoria di finestre', including in the centre, lunettes filled by giant, open serliane<sup>66</sup>.

1. The present text was presented at the XVI Seminario internazionale di storia dell'architettura "Vincenzo Scamozzi (1548-1616). Alla riscoperta di un protagonista: L'idea dell'architettura nella teoria e nella pratica", 15-20 June 1998, organized by the Centro Internazionale di Studi di Architettura 'Andrea Palladio' in Vicenza (hereafter: Seminario Scamozzi, 1998) and it was subsequently presented at a conference held at the Università di Udine, 27-28 October 2000, Alessandro Vittoria e l'arte veneta della Maniera, with the title, Un allestimento di Vincenzo Scamozzi in Palazzo Ducale. An initial study of the Scamozzi altar began, in 1981, during the preparations for a lecture, Scultura e luce, at the conference, Bernini e il barocco europeo, 12-17 January 1981 (a selection of contributions printed in: M. Fagiolo (ed.), Gian Lorenzo Bernini e le arti visive, Roma 1987). The present version is based on an original Italian text. A useful and detailed, if not always complete citation of the literature until around 1994 concerning the works of Scamozzi mentioned in the present text may be found in: D. Breiner, Vincenzo Scamozzi, 1548-1616: A catalogue raisonné. Ithaca 1994 (University Microfilms International, Dissertation Service), 1113 pp.; for specific buildings and projects, see: "Table of Contents". This dissertation retains a somewhat preliminary character, providing neither a synthetic analysis of Scamozzi's entire œuvre nor a comprehensive and completed catalogue raisonné. Reference must be made to earlier studies, including those of F. Barbieri (e.g., Vincenzo Scamozzi, Verona-Venezia 1952), G.B. Gleria (Vincenzo Scamozzi e Venezia, tesi di laurea, IUAV, Venezia, 1982), L. Puppi, M. Tafuri and others. For relevant illustrations, see also: F. Barbieri, La Rocca Pisana di Vincenzo Scamozzi, Vicenza 1985; F. Barbieri, Palazzo Trissino Baston, Vicenza 1996. References to later literature can be found in a recent treatment of most of the important architectural works of Scamozzi: R. Franz, Vincenzo Scamozzi (1548-1616), Nachfolger und Vollender Palladios, Petersberg 1999, based on the author's University of Vienna dissertation. See also: W. Lippmann, Der Salzburger Dom 1598-1630, Weimar 1999 (Diss. Bonn 1992). Thus the notes to the present text are addressed primarily to specific points, and I have not attempted to cite every work consulted, or every important or relevant contribution to the topics discussed. Relatively recent lexicæ (e.g., the Grove Dictionary of Art and the Macmillan Encyclopedia of Architects) contain entries for Scamozzi, and many library catalogues are available online (e.g., the Verbund-OPAC of the German art history institutes in Florence, Munich and Rome: <http://www.kubikat.org/>). If, on 28 May 2002, <http://www.google.com/> produced 1,070 results with the simple search entry "Vincenzo Scamozzi", the need for recapitulative citation requires reconsideration, as does indeed the entire academic paraphernalia of citation, and this, even in light of the often-remarked 'mushrooming' of literature on art and architecture that has marked the most recent decades. For the San Salvatore lanterns, see Breiner, Vincenzo Scamozzi..., cit. [cf. supra], VI, 1, pp. 660-663 (with bibl.); also M. Tafuri, Venezia e il Rinascimento, Torino 1985, figs. 17-18;

Franz, Vincenzo Scamozzi..., cit. supra, pp. 17f., doubts Scamozzi's rôle. See further: Antonio Visentini, Catalogue of the Drawings of the Royal Institute of British Architects, ed. J. McAndrew, Farnborough 1974, fig. 85. For comments, corrections, suggestions, information and assistance offered at various times, I am grateful to Margaret Daly Davis, Silvia Foschi, Giovanni Battista Gleria, Marco Collareta, Ulrich Middeldorf and Manuela Morresi.

2. Vincenzo Scamozzi, L'idea della architettura universale, pref. F. Barbieri, intro. W. Oechslin, reprint of ed. Venezia 1615, I-II, Vicenza 1997, I, ii, ch. xiii, pp. 137-139; hereafter cited as 'Idea'. This text is discussed in a recent dissertation: A.M. Borys, Vincenzo Scamozzi, Inventor: Architectural Demonstrations from the Last Renaissance Treatise, Philadelphia 1998, pp. 70-72. I have not seen M. Frascari, A Secret Semiotic Skiography, in "VIA", 2, 1990, pp. 32-51, who apparently sees Scamozzi's villa-light diagram as an "inhabited sundial", a shadow tracer that does not acknowledge an ideal position of the sun, but rather seems to indicate the power of architectural section drawing (of architectural shadows, skiography) to conjure a potential order for architecture, its "light", disclosing the relationship between the "soul" and the "body" of the villa (<http://www.health.library.mcgill.ca/pub/sh/Osn194.pfd> [p.3]).

3. Idea, iii, ch. xiv, pp. 278f. Marco Collareta has drawn my attention to Scamozzi's dependence for the terms of his typology of light on the writings of Gian Paolo Lomazzo (1548, 1590); see Giovan Paolo Lomazzo, Scritti sulle arti, ed. R.P. Ciardi, Pisa 1973, I, pp. 324-327, II, pp. 186-214 and ad Indicem 'lume' ("celestè", "diretto", "riflesso", "rifratto", "da alto", etc.).

4. Vincenzo Scamozzi, Discorsi sopra l'antichità di Roma, 1582, reprint of ed. Venezia 1582, intro. L. Olivato, Milano 1991.

5. Baths of Diocletian: repr. in *ibid.*, pp. xvi-xvii.

6. For instance, Idea, I, pp. 272, 276, 278, 280, 283, 285, 292, 314, 315, etc. The "Descrit[tione] di alcune fabbriche Mod[erne]" included at the end of Giovanni Stringa's edition of Francesco Sansovino's Venetia città nobilissima et singolare (Venezia 1604, cc. 426v-432v) is, Stringa writes, "come un breve compendio della vita dello Scamozzi", treating exclusively works by Scamozzi. This quasi-autobiographical text essentially repeats, with a few retouches, a text furnished to Stringa by Scamozzi, and written by him ("quella compita, & reale informazione, che desiderava così da colui, che di esse è stato l'Architetto, il qual'è Vincenzo Scamozzi [... ora ...] havute le informazioni necessari..."). In the Libreria, Scamozzi builds stairways, "con una requia per ricevere lumi fra essi" (c. 429v); in the Statuario pubblico, "nicchie", "dalle quali vengono lumi abbondanti" (c. 429v); at San Nicola da Tolentino, "Le Cappelle hanno lumi da alcune lunette sotto alle loro volte, et per altre lune [=lume] più ad alto (sopra alle cornici, et ad esse Capelle) vengono abbondati lumi disposti quà, e là per il corpo maggiore della Chiesa" (c. 430v).

7. See, e.g., Idea, I, pp. 231, 237, 312, 316, 319, 320, 321; II, pp. 161, 315f., etc.

8. Sebastiano Serlio, Tutte l'opere d'Architettura di Sebastiano Serlio [...] et un Indice Copiosissimo Raccolto per via di considerazioni da M. Gio. Domenico Scamozzi, Venezia, "presso Francesco de' Franceschi Senese", 1584, III, fol. 50. Cf. Vasari's parenthesis on the Pantheon early in the 'vita' of Andrea Sansovino, who observed the "tondo del mezzo di sopra cioè dove ha il lume quel tempio ['della Ritonda']..." (Giorgio Vasari, Vite, Milano 1963, IV, p. 193). Cf. C. Conforti (ed.), Lo specchio del cielo. Forme significati tecniche e funzioni della cupola dal Pantheon al Novecento, Milano 1997.

9. Serlio, Tutte l'opere..., cit. [cf. note 8], I, "Tavola", fol. d2r. The "indice copiosissimo" is presented as compiled "per via di considerazioni da M. Gio. Domenico Scamozzi", but it was largely compiled and revised by his son, Vincenzo, whose personal additions are marked as such, in this as well as in the subsequent revisions of 1600 and 1619.

10. 'Cosa contenuta'; 'continente': see Idea, II, vi, ch. xxxv, p. 169: "mà in questo caso noi lodiamo più tosto qualche mediocrità, che dar nell'estremo di tante delicatezze: e perciò bastera, che siano foderate di pietre, come le altre parti: perche quanto meno la Nicchie sono ornate di dentro tanto più fanno comparere belle, e riguardevoli le statue; si perche il continente (come atrove dicemmo) non sia più nobile, e bello della cosa contenuta; e si anco per levare il pericolo dell'esser offesse, e spogliate, e guaste, & anco per fuggir la molta spesa".

11. Celestia: G.B. Gleria, Il progetto scamozziano per la chiesa della Celestia a Venezia, in "Ricerche di storia dell'arte", 21, 1983, pp. 97-109; cf. Chatsworth drawing: fig. 73, in Lippmann, Der Salzburger Dom, cit. [cf. note 1] (cf. the multiple light sources in Scamozzi's designs for Salzburg). Also: G.B. Gleria, La chiesa della Celestia, at the Seminario Scamozzi, 1998.

12. San Nicola dei Tolentini: G.B. Gleria, Vincenzo Scamozzi e il progetto per la chiesa di San Nicolò da Tolentino, in "Quaderni di Palazzo Te.", 5, July-Dec. 1985, pp. 44-58; N. De Battisti, Vincenzo Scamozzi e la chiesa di S. Nicola da Tolentino, diss., IUAV, Venezia, 1985. S. Gaetano: G. Bresciani Alvarez, Architettura a Padova, ed. G. Lorenzoni, G. Mazzi, G. Vivianetti, intro. L. Puppi, Padova 1999, pp. 333-348, figs. 141-149; R. Conte, La chiesa e il monastero di San Gaetano a Padova, at Seminario Scamozzi. Monselice: L. Puppi and L. Olivato Puppi, Scamozziana, in "Antichità viva", 13, 4, 1974, pp. 54-80; R. Ghidotti, Le sette chiese: Santuario giubilare in Monselice, Monselice 1998.

13. Casa antica romana: Idea, I, iii, ch. iv, pp. 232-221 [=235].

14. Sabbioneta: P. Carpeggiani, Sabbioneta, Mantova 1972, pp. 34-38, 88-94; A. Paolucci, A. Ciminelli et al., Il Teatro all'antico di Sabbioneta, Modena 1991, with excellent ill. Pantheon portico giant niches: Idea, II, p. 168.19-21: "Ancora i Nicchi sono di due sorti cioè, ò principali, e grandi, e queste le adimandamo Nic-

chie: perche possono haver dentro di esse de' Nicchi minori: altri ne sono poi di mediocri. Delle prime sono, come le due sotto il Portico della Rotonda..."

15. 'Nicchi': Idea, II, p. 168.46-47; cf. 'nicchi', ad Indicem (61.26, 76.24, 108.12, 123.9, 168.27, 50.41, 168.3, 88.11, 168.31, 78.48, 168.34, 13.43).

16. F. Ongania and B. Cecchetti (eds.), Documenti per la storia dell'augusta ducale basilica di San Marco in Venezia, Venezia 1886, pp. 34-41, nos. 199-214; B. Boucher, The Sculpture of Jacopo Sansovino, New Haven-London 1991, pp. 102-104, 327-329 (selected literature), document nos. 87, 91, 252, 295ff., 302, 304. Sansovino's statuary group was very possibly 'finished' in Scamozzi's day. The 'signature' OPVS JACOBI SANSOVINI FLORENTINI is not contemporary with the statue; cf. the Palazzo Ducale Mars and Neptune, inscribed OPVS IACOBI SANSOVINI F., also not contemporary.

17. Prior to the Scamozzi 'Seminario' in June 1998 (see note 1), Scamozzi's project for the altar of the Doge's Chapel had been only mentioned briefly in passing; cf. the entry in Breiner, Vincenzo Scamozzi..., cit. [cf. note 1], V.12, pp. 624-628, with literature which scarcely enlarges what Temanza wrote in 1770-78: "Ordinò pure l'altare della Cappella Ducale del Palazzo vicina al Collegio, sul quale fu collocata la statua di marmo di nostra Donna, con vari puttini dintorno, scolpita dal Sansovino" (T. Temanza, Vite dei più celebri architetti e scultori veneziani, Venezia 1778, p. 425). Not mentioned in Breiner or Boucher is: F. Zanotto, Il Palazzo Ducale di Venezia, Venezia 1858, II, pl. CI and pp. 1-4, with plan and elevation. Subsequent to the Scamozzi 'Seminario' the altar has been treated in a Technische Universität Berlin dissertation: S. Martin, Venezianische Bildhauerkunst und ihre Auftraggeber 1530-1620, Mikrofiche Ausgabe, Marburg 1998 (based on professional photographs made following my instructions and preliminary photographs in 1982, in part published in Boucher, The sculpture..., cit. [cf. note 16], pls. 121-123. Valuable illustrative material in: A. Zorzi, E. Bassi, T. Pignatti and C. Semenzato (eds.), Il Palazzo Ducale, Torino 1971; colour pl. also in: E.R. Trincanato and G. Mariacher (eds.), Il Palazzo Ducale di Venezia, Firenze 1966. On the statuary group in the Doge's Palace: Francesco Sansovino, Venetia città nobilissima et singolare... In Venetia: Appresso Iacomo Sansovino, 1581, cc. 123v, 124v, 132v-133r; Girolamo Bardi, in Francesco Sansovino, Delle cose notabili della città di Venetia [...] con l'aggiunta della dichiarazione delle istorie [...] del palagio Ducale [...] Fatta da Girolamo Bardi fiorentino, Venezia 1587 (ed. pr. 1584); Sansovino, Venetia città nobilissima..., cit. [cf. note 6], cc. 231v-232r, 430r; Francesco Sansovino, Venetia città nobilissima et singolare [...] Con aggiunta di tutte le cose notabili [...] da d. Giustiniano Martinioni, Venezia 1663, pp. 336-337, 362; G.A. Moschini, Guida per la città di Venezia, Venezia 1815, I, pp. 427-428; F. Scolari, Della vita e delle opere dell'architetto Vincenzo Scamozzi, Treviso 1837, p. 42; G. Lorenzetti, Venezia e il suo estuario: guida storico-artistica, Venezia 1926, p. 248 (1593); J. Schulz, Cristoforo Sorte and

the Ducal Palace of Venice, in "Mitteilungen des Kunsthistorischen Institutes in Florenz," 10, 1964, pp. 207f., doc. 3 (before 24 April 1582); W. Wolters, Der Programmwurf zur Dekoration des Dogenpalastes nach 1577, in "Mitteilungen des Kunsthistorischen Institutes in Florenz," 12, 1966, p. 300; S. Sinding-Larsen, Christ in the Council Hall, in "Acta ad archaeologiam et artium historiam pertinentia," 5, 1974 (3). The date, 1593, that Lorenzetti gives for the risistematisation of the Chiesetta appears generally confirmed by Scamozzi's account of his 'Statuario pubblico' in Stringa's edition of Sansovino's Venetia (1604): "...e parimente vi sono anco le statue, che erano nella sala già detta dalle teste, dove hora è la Chiesiola nel palazzo di sua Serenità regolata dal medesimo Architetto [i.e., Scamozzi]" (c. 430r). Scamozzi dates the "Museo" to "1591", suggesting an only slightly later date for the Chiesetta. Cf. G.B. Lorenzi, Monumenti per servire alla storia del Palazzo Ducale di Venezia, Venezia 1868, doc. nos. 956ff. et passim;

18. L. Cicognara, A. Diedo and G. Selva, Le fabbriche e i monumenti cospicui di Venezia, ed. F. Zanotto, Venezia 1858, I, text at pp. 67ff.; pls 18ff, esp. pl. 21. Cf. Idea, I, p. 320: "Nella Germania [...] e bei vederi, che essi chiamano Luoch, e più propriamente erker, i quali escono alquanto infuori delle facciate...", etc.

19. Cf. Idea, I, p. 306: "I luoghi da tenir Statue, e Rilievi, e Pitture, e quelli da stare a ricamare, e per ogn'altro essercitio, che ricerca lume fermo, & ordinato, e non molto alterabile, deono esser verso Tramontana: perche (come dicessimo) à tutte le altre parti il Sole, ò percuote, ò riflette à qualche hora del giorno; di modo, che i lumi divengono molto variabili, e fanno diverse apparenze, & effetti ne' rilievi, e nel distinguer bene i colori". (Cf. II, ch. xiii = I, pp. 136-139).

20. Idea, II, p. 113. The planimetric complexity of Scamozzi's altar is comparable to such other nearly contemporary altar designs as the 'Altare Dolfin' (Venice, San Salvatore), which houses Campagna's Madonna and Child with two angels (W. Timofiewitsch, Girolamo Campagna, München 1972, cat. no. 9, between 1584-1595 ca.); cf. the project drawing for an Altar in the Sala of the Scuola di San Rocco (ibid., fig. 181). Altar-tabernacle: cf. Idea, II, p. 168 (31-37): "Nel Genere de' Nicchi sono anco i Tabernacoli, e trà gl'uni, e gl'altri, vi è questa differenza: perche i Tabernacoli sono, ò cavi in cerchio, ovvero quadrangolari; e che siano ornati da ambe le parti con Colonne, ò Pilastri, e loro ornamenti sopra, i quali escono alquanto in fuori dal diritto delle mura. Di tutte queste forme ne habbiamo degni essempli nella Rotonda; nelle Terme Antoniane, e Dioclitiane dove furono molte statue: oltre a molti in altri edifici; come habbiamo ordinato noi nel Statuario Pubblico di San Marco; e di tutte queste specie ne disegniamo in varie forme ne' Colonnati, & Archi ne gli Ordini passati".

21. O. Demus, The Mosaics of San Marco in Venice, Chicago-London, 1984, I, ii, pl. 1 (East dome), pl. 5 (Central dome). Cf. K. Lehman, The Dome of Heaven, in

"The Art Bulletin," 27, 1945, pp. 1-27. Cf. also the Cappella Arcivescovile (Sant'Andrea Apostolo) in Ravenna, with the inscription: "AVT LVX HIC NATA EST, AVT CAPTA HIC LIBERA REGNAT..." (G. Bovini, Storia e architettura degli edifici paleocristiani di culto di Ravenna, Bologna 1964, pp. 180-181).

22. The Chiesetta is not presently open to the public and access is limited. Time did not permit inspecting the altar with a trained mineralogist; the identification of the stones is only approximate. I am grateful to Dr. Pastro for consenting to renewed visits.

23. Francesco Colonna, Hypnerotomachia Poliphili, ed. G. Pozzi and L. Ciapponi, Padova 1980, p. 192 (= fol. m 7r).

24. Portico di Gneo Ottavio: Idea; II, vii, ch. xxx, p. 279 (24).

25. 'Nicchi': Idea, II, vi, ch. xxxv, p. 168 (47).

26. Cf. note 14.

27. See esp. the ills. in: Accademia Etrusca di Cortona, Pietro da Cortona architetto, Conference Proceedings (Cortona, 1969), Calosci-Cortona 1978, pl. VI ("interno") and pl. VII ("veduta sottinsù delle volte"); K. Noehles, La Chiesa dei SS. Luca e Martina nell'opera di Pietro da Cortona, Roma 1969, pl. at p. 241, pl. 185 at p. 244 et passim.

28. The entire architectural catalogue of Jacopo Sansovino has been recently considered in M. Morresi's Jacopo Sansovino, Milano 2000, with extensive citations of the relevant literature, to which the reader is referred (cf. my review in: "Apollo", 154, 477, Nov. 2001, pp. 55-56). Similar aspects of Sansovino's ornament and decoration are treated in my: Jacopo Sansovino and the Engraved Memorials of the Cappella Badoer-Giustiniani in San Francesco della Vigna, in "Münchner Jahrbuch der bildenden Kunst", 45, 1994, pp. 133-164, and Camini del Sansovino, in "Annali di architettura", 8, 1996, pp. 93-114.

29. See Morresi, Jacopo Sansovino, cit. [cf. note 28], pp. 114-117 (cf. 95-114).

30. Staircase entrance 'serliana': M. Tafuri, Jacopo Sansovino e l'architettura del '500 a Venezia, Padova 1969, p. 84 (ill.); cf. Morresi, Jacopo Sansovino, cit. [cf. note 28], p. 200, 13 (blind 'serliana' on first landing of staircase; also in F. Saporì, Jacopo Tatti detto il Sansovino, Roma 1928, pl. 95).

31. 'Serliana contratta' as window-portal: see G. Samonà, U. Franzoi, et al., Piazza San Marco, Padova 1970, p. 163: ill.; also: Saporì, Jacopo Tatti..., cit. [cf. note 30], pl. 95. Cf. Idea, II, vii, ch. iv, p. 187 (ancient columns of coloured marbles re-used): "...le otto colonne della Loggetta in Piazza di San Marco, et alcune altre, le quali adornano le scale, che ascendono alla Libreria pubblica, e Museo, e procuratie fatte di nostra Architettura et ordine". Also notable is the large number of Serlian windows included in Scamozzi's project drawings for the Salzburg Cathedral, 1607 (collection of the Canadian Center for Architecture, Montreal, DR 1970: 0002: 001).

32. Breiner, Vincenzo Scamozzi..., cit. [cf. note 1], II.3, pp. 117-132; G. Morolli, Vincenzo Scamozzi e la fabbrica della Procuratie Nuove, in G. Morolli et al., Le Procuratie nuove in Piazza San Marco, Roma 1994, pp. 11-116; Franz, Vincenzo Scamozzi..., cit. [cf. note 1], pp. 41-49; M. Morresi, Piazza San Marco, Milano 1999, pp. 103f. et passim; Morresi, Jacopo Sansovino, cit. [cf. note 28], pp. 206-213. Cf. Idea, passim.

33. See, most recently, Morresi, Piazza San Marco, cit. [cf. note 32], p. 103, figs. 104-105, where the inscriptions are legible; cf. Uffizi 194 A (Tafari, Venezia..., cit. [cf. note 1], fig. 128), and Louvre, Cabinet des Dessins, no. 5448 (ill. in Franz, Vincenzo Scamozzi..., cit. [cf. note 1], p. 46).

34. Scamozzi's 'public' criticism of Sansovino's "fabbriche di piazza" is the other face of his attentive and knowledgeable use of Sansovino's architectural inventions, a clear testimony that Scamozzi recognizes the value of Sansovino's art. Scamozzi's ambivalent, 'public-private', relation with Sansovino parallels his even more determinative relationship with Palladio, as G.B. Gleria calls to my attention.

35. Bergamo: see, e.g., M.A. Mascolo, Vincenzo Scamozzi a Bergamo (1611), in "Bergomum", 91, 2, 1996, pp. 61-98.

36. Palazzo Cornaro: Idea, I, iii, ch. vii, p. 246.

37. Palazzo Nonfinito: Idea, I, iii, ch. vii, pp. 247-249 ("1602"); A. Parronchi, Nota sul Palazzo Nonfinito, in Id., Opere giovanili di Michelangelo, III, Firenze 1981, pp. 249-261, pls. 146-161, esp. 155.; I. Bigazzi, Il Palazzo Nonfinito, Bologna 1971; M. Bucci, Palazzi di Firenze, Quartiere di Santa Croce, Firenze 1971, pp. 81-84, pls. 54-59; F. Gurrieri and P. Fabbri, Palazzi di Firenze, Venezia 1995, pp. 188-193; L. Ginori Lisci, I palazzi di Firenze nella storia e nell'arte, Firenze 1972, ad Indicem; A. Morrogh, Disegni di architetti fiorentini, 1540-1640, Firenze 1985, nos. 79-83.

38. Cantonale a pian terreno: Morresi, Jacopo Sansovino, cit. [cf. note 28], p. 194, fig. 7; al piano nobile: Id., Piazza San Marco, cit. [cf. note 32], p. 71, pl. 64. Scamozzi's re-cycling of the Sansovino's great Ionic windows of the Libreria did not remain without further echo in the architectural repertory of Venice; to mention only two examples: Baldassare Longhena in the principal façade of Santa Maria della Salute, and the centre 'nicchione' of the façade of the Chiesa degli Scalzi, near the railway station of Santa Lucia. Scamozzi's imitation at the Palazzo Nonfinito of the Ionic windows of Sansovino's Libreria inspired a further Florentine off-spring: see the large Serlian window of the Palazzo Pucci piano nobile in via de' Pucci, no. 4, designed by Paolo Falconieri (?), ca. 1698.

39. Statuario pubblico: I. Favaretto and G. L. Ravagan (eds.), Lo statuario pubblico della Serenissima, Citadella (Padova) 1997; Morresi, Jacopo Sansovino, cit. [cf. note 28], pp. 204-206. Cf. Idea, passim.

40. Teatro Olimpico: S. Mazzoni, L'Olim-

pico di Vicenza, Firenze 1998; more recently, Franz, Vincenzo Scamozzi..., cit. [cf. note 1], pp. 60-64.

41. 'Galleria': W. Prinz, Galleria: storia e tipologia di uno spazio architettonico, ed. C. Cieri Via, Modena 1988.

42. 'Tribuna': D. Heikamp, Zur Geschichte des Uffizien - Tribuna und der Kunstschränke in Florenz und Deutschland, in "Zeitschrift für Kunstgeschichte", 26, 1963, 193-268 (cf. "Antichità viva", 3, 3, 1964, pp. 11-30).

43. 'Antiquarium': Idea, I, p. 306 (22, 26-30). See also, e.g., M. Daly Davis, La galleria di sculture antiche di Cosimo I a Palazzo Pitti, in Le arti del principato mediceo, Firenze 1980, pp. 31-54; S. Eiche, On the layout of the Cesi palace and gardens in the Vatican Borg, in "Mitteilungen des Kunsthistorischen Institutes in Florenz", 39, 1995 (1996), pp. 258-281; E. Weski and H. Frosien-Leinz, Das Antiquarium der Münchner Residenz, München 1987; W. Liebenwein, Un "antiquarium" per la Biblioteca Laurenziana?, in "Rara volvmina", 3, 2, 1996 (1997), pp. 17-33.

44. See M. Daly Davis, L'Ercole della Mula": da Palazzo Maggiore a Palazzo Pitti, in Boboli 90, Atti del Convegno di Studi per la salvaguardia e la valorizzazione del Giardino (Firenze 1989), Firenze 1991, pp. 623-632 and figs. 206-207. See also: J. Muller, Rubens, Princeton 1989 (cf. "The Art Bulletin", 59, 1977, pp. 576ff.).

45. Antonio Labacco, Libro d'Antonio Labacco appartenente a l'architettura, 1559, ed. A. Bruschi, Milan 1992, pp. 6, 9-10, 11, 14, 17, 20, 23f., 27f.; Andrea Palladio, I quattro libri dell'architettura, ed. L. Magagnato, Milano 1980, II, e.g., pp. 101, 105, 111, 113, 119, 135f., 138; III, e.g., pp. 220f., 230, 237; IV, e.g., 265, 270f., 272, 278f., 280f., 286f., 288f., 292f., 299, 300ff., 307, 318, 345f., 362, 366f., 381, 389f., 396.

46. See Ch. Davis, in Giorgio Vasari: principi, letterati e artisti nelle carte di Giorgio Vasari, exhbn. cat. (Arezzo, 26 September-29 November 1981), Arezzo 1981, pp. 91-94, no. IV, 30-34; cf. Lotz, in W. Lotz and L.H. Heydenreich, Architecture in Italy, 1400 to 1600, Harmondsworth 1974, pp. 259, 261f.

47. A. Bristot and M. Piana, Il Palazzo dei Grimani a Santa Maria Formosa, in Favaretto and Ravagan (eds.), Lo statuario pubblico..., cit. [cf. note 39], pp. 45-52; further: the recent entry in Morresi, Jacopo Sansovino, cit. [cf. note 28], cat. no. 37, pp. 235-240 (bibl.); colour photos in W. Wolters, Architektur und Ornament, München 2000, p. 141, fig. 132.

48. Scamozzi and antiquity: D. Gioseffi, Palladio e Scamozzi: il recupero dell'illusionismo integrale del teatro vitruviano, in "Bollettino del Centro Internazionale di Studi di Architettura Andrea Palladio", 16, 1974, pp. 271-286; C. Jannaco, I "Discorsi sopra l'antichità di Roma" di Vincenzo Scamozzi, in "Studi secenteschi", 17, 1976, pp. 97-101; A. Fabbri, Vincenzo Scamozzi e gli scrittori antichi, in "Studi secenteschi", 17, 1976, pp. 101-152; C. Vannini, Scamozzi postilla Vitruvio, in "Quaderni di

- storia dell'architettura e restauro", 4-5, 1990-1991, pp. 79-81; M. Daly Davis, Vincenzo Scamozzi e gli studi antiquari, at Seminario Scamozzi, 1998 (forthcoming); G. Pigafetta and A. Mastrovilli, *Il declino della firmatas*, Firenze 1999.
49. 'Soggiorni romani': Barbieri, Vincenzo Scamozzi, cit. [cf. note 1], "Regesto," pp. 123-125, 130, 136f., 157.
50. See Idea, I, pp. 47, 67 ("le migliori e più lodate de' moderni"), 321, 322, 326, 337; etc.; cf. Barbieri, Vincenzo Scamozzi, cit. [cf. note 1], "Regesto", passim.
51. Sant'Andrea in via Flaminia: M. Walcher Casotti, *Il Vignola*, I, Trieste 1960, pp. 64-66, 150-151, et passim, figs. 97-105; I. Lavin, Bernini and the Unity of the Visual Arts, New York-London, 1980, pp. 33-34, pls. 51-52; Franz, Vincenzo Scamozzi..., cit. [cf. note 1], pp. 36f.; Jacopo Barozzi da Vignola: la vita e le opere, exhbn. cat. (Vignola, 2002), Milano 2002, ad Indicem.
52. Cf. also Vignola's Cappella della Madonna della Strada (1588), church of the Gesù: Lavin, Bernini..., cit. [cf. note 51], p. 33 and n. 42.
53. Franz, Vincenzo Scamozzi..., cit. [cf. note 1], p. 12; cf. Idea, I, i, ch. vi (48f.): "Et anco Giacomo Barozzi, e Giacomo Sansovino (benche l'Opera sua non sia ancora venuta in luce) e finalmente Andrea Palladio...", etc. Scamozzi's report of an architectural treatise composed by Jacopo Sansovino has been universally doubted, but it appears to find confirmation in an unnoted mention of such a treatise in Francesco Alunno (= Francesco Del Balio), *Della Fabrica del Mondo* [ed. pr. 1548, with 11 subsequent eds.], Venezia: "Appresso Iacopo Sansovino il giovane", 1570, p. 113v (= 844), ad vocem 'Mensola': "...DAN[te]. come per sostener solaio, o tetto Per mensola tal volta una figura Si vede giunger le ginocchia al petto. & vedrai parimente l'architettura di M. Iacopo Sansovino che tosto verrà fuori. Vedi Vitruvio". The addition to Alunno's text, clearly made by the Sansovino family, also appears in earlier editions from Francesco Sansovino's press.
54. Cf. Franz, Vincenzo Scamozzi..., cit. [cf. note 1], p. 36 et passim; also: L. Puppi, *Sulle relazioni culturali di Vincenzo Scamozzi*, in "Ateneo veneto," 7, 1969, pp. 49-66.
55. Cf. Franz, Vincenzo Scamozzi..., cit. [cf. note 1], p. 36; ill. in Walcher Casotti, *Il Vignola*, cit. [cf. note 51], fig. 105.
56. Light in architecture: I do not know a general work treating light in architecture comparable to Wolfgang Schöne's *Über das Licht in der Malerei*, Berlin 1954 (bibl., pp. 269-280). For architectural lighting and its history, with many citations of further literature, see the following works: *Lichtarchitektur/The Architecture of Light*, intro. by W. Oechslin, in "Daidalos: Berlin Architectural Journal", 27, 15 Mars 1988, 136 pp.; L. Cremonini, *LUCE, luce naturale, luce artificiale*, Firenze 1992 (bibl., pp. 217-218); A. Blühm and L. Lippincott, *Light!*, London 2000 (bibl., pp. 255-267); J. Brogan, *Light in Architecture*, London 1997. Also:
- Enciclopedia Universale dell'Arte, ad Indicem; *Dizionario Enciclopedico di Architettura e Urbanistica*, 3, ad vocem 'Luca'; *Grove Dictionary of Art*, ad vocem, 'Lighting' (also 'Light'), bibl.: 19, pp. 358, 368; *Enciclopedia dello Spettacolo*, 6, cols. 493-510. The history of light in architecture is inseparable from the two keywords, 'window' and 'lantern', which can be used as search terms. J.S. Ackerman's *The Architecture of Michelangelo*, London 1961, etc., devotes systematic attention to Michelangelo's use of light; cf. A. Prater, *MAs Medici-Kapelle*, 1979, pp. 123-125 ("Das Licht"). For the symbolism of architectural light, see, e.g., P. Reuterswärd, *Windows of Divine Light*, in D. Rosand (ed.), *Interpretazioni veneziane: studi di storia dell'arte in onore di Michelangelo Muraro*, Venezia 1984, pp. 77-84. See further: G. Satzinger, *Michelangelos Grabmal Julius' II. in S. Pietro in Vincoli*, in "Zeitschrift für Kunstgeschichte", 64, 2001, pp. 206-209 et passim.
57. *Light in Codussi*: see L. Puppi and L. Olivato Puppi, *Mauro Codussi*, Venezia 1977. Sansovino: general observations in D. Howard, *Architecture and Patronage in Renaissance Venice*, New Haven-London 1975.
58. Santa Bibiana, San Giovanni dei Fiorentini, and the Cappella Raimondi: the three projects are each treated in Lavin, Bernini..., cit. [cf. note 51] (see: 'Contents' and 'General Index'), a work in part anticipated by Rudolf Wittkower's studies of Bernini as sculptor and as architect. See also: C. Del Bravo, *Sul significato della luce nel Caravaggio e nel Bernini*, in Id., *Le risposte dell'arte*, Firenze 1985, pp. 184ff.
59. K. Noehles, *Architekturprojekte Cortonas*, in "Münchener Jahrbuch der bildenden Kunst", 20, 1969, pp. 171-206, esp. pp. 183ff.
60. Sant'Andrea al Quirinale: M. Morresi, *Assimilazione e interpretazione barocca del Pantheon: la chiesa e il pronao di S. Andrea al Quirinale*, in "Rivista storica del Lazio", 4, 1996; Marcello and Maurizio Fagiolo Dell'Arco, *Bernini: una introduzione al gran teatro barocco*, Roma 1967, pp. 61-64, pl. 87; F. Borsi, *Bernini architetto*, Milano 1980, pp. 101ff.; Id., *La chiesa di S. Andrea al Quirinale*, Roma 1967, fig. 10 (plan, Archivio di Stato, Roma), fig. 16 (plan, Uffizi 3655A), p. 66 (Muñoz), p. 71 (Brauer-Wittkower), pp. 100f. (Wittkower); R. Wittkower, *Art and Architecture in Italy, 1600 to 1750*, 3rd ed., Harmondsworth 1973, p. 120. For the relevance of the columnar choir screen of Palladio's Redentore, see Lavin, Bernini..., cit. [cf. note 51], p. 64 and pl. 111; pl. 201 shows the Cornaro tomb in San Salvatore, Venice, with a bright window in the centre of the tomb (cf. Davis, Jacopo Sansovino..., cit. [cf. note 28]); an additional Venetian 'window tomb' is found on the western retrofaçade of Santa Maria Formosa in Venice (Cappello). Cf. also the monument to Baldassarre Turini, Duomo, Pescia, by Pierino da Vinci and others.
61. Cf. Idea, II, p. 273: "L'Architetto dee esser eccellente per dottrina, e molto ricco di nobili, e belle inventioni, e per lungo tempo sperimentato nel maneggio d'ogni genere d'edificio..."
62. See note 8 supra; cf. Franz, Vincenzo Scamozzi..., cit. [cf. note 1], p. 10.
63. Alberti: Alberti counsels bright lighting in temples, with highly placed windows (Leon Battista Alberti, *On the Art of Building*, tr. J. Rykwert, R. Tavernor and N. Leach, Cambridge-London, 1987-88, pp. 223, 228, 229-230, etc.; cf. also 'openings' and 'windows' ad Indicem). Light in drawings: cf., e.g., Giuliano da Sangallo: Chr. Huelsen (ed.), *Il libro di Giuliano da Sangallo, Codice Vaticano Barberiniano Latino 4424*, Leipzig 1910, fol. 8v: "Tempio di Sibila Chumana. VIII lumi", fol. 9r: ".VII. lumi"; fol. 15r: "B. 14 e lochio"; fol. 43v: "lume".
64. Uffizi 331 A: Baia, cupola with "lume" inscribed at its centre, cf. F.P. Fiore and M. Tafuri (eds.), *Francesco di Giorgio architetto*, Milano 1994, p. 366, no. XX.24.
65. Cod. Ashb. 1828 App.: M. Morresi, *Francesco di Giorgio e Bramante*, in *Il disegno di architettura. Conference Proceedings (Milano, 15-18 February 1988)*, eds. P. Carpeggiani and L. Patetta, Milano 1989, p. 119, fig. 6 ("lume superficiale"). I am grateful to Manuela Morresi for drawing to my attention the Francesco di Giorgio/Peruzzi nexus.
66. H. Wurm, *Baldassarre Peruzzi. Architekturzeichnungen, Tafelband*, Tübingen 1984, no. 233 and colour pl. 22; cf. also nos. 7, 9, 10, 11, 213, 214, 224, 232, 233, 344, 345, 357, 377, 363, 381 ("apertura"), 385, 399, 405, etc. For the indebtedness of the Quinto libro temples to Peruzzi, see: A. Bruschi, *Le chiese del Serlio*, in *Sebastiano Serlio, 6th International Colloquium on History of Architecture (Vicenza, 31 August-4 September 1987)*, Milano 1989, pp. 169-186 (seem to have "...non casuali precedenti già in parte nel Trattato di Francesco di Giorgio" and even more in the "trattati abbozzati" on temples of Leonardo and Peruzzi).

