

1 Antonio del Tanghero, S. Silvestro in Capite, Rome: Plan. Florence, Casa Buonarroti, Archivio Buonarroti, Ricordi 1518 v.

# ANTONIO DEL TANGHERO IN ROME IN 1518 WITH PIETRO ROSSELLI, MICHELANGELO BUONARROTI, AND ANTONIO DA SANGALLO IL GIOVANE 

by Gustina Scaglia

A letter dated 26 November, 1518, addressed to Michelangelo Buonarroti (1475-1564), is signed "Atonio di Fillipo de Taghero in Roma" (fig. 16). ${ }^{1}$ He is Antonio di Filippo del Tanghero (dates of his lifetime unknown). ${ }^{2}$ This letter and others in 1518 and earlier ones by Pietro Rosselli (1474? - ca. 1550?) in Rome were written to Michelangelo in Florence requesting his opinion about the design of an altar in the church of San Silvestro in Capite, commissioned to Rosselli by Pietro Soderini, the former gonfalonier of Florence. ${ }^{3}$

Rosselli's letter of 10 May, 1506 when he was first in Rome tells Michelangelo that his words had been communicated to the pope, Julius II, about his refusal to paint the ceiling and to work only on the pope's tomb, adding that he and Bramante (1444-1514) had dined with the pope. ${ }^{4}$ Bramante was then building the Tempietto at San Pietro in Montorio (1502; 1506-). Two years later, Michelangelo wrote from Rome to Pietro Rosselli that he was beginning work that day on the ceiling. ${ }^{5}$ Rosselli's son, Domenico (active 1518-60) and a "companion" (Antonio del Tanghero) came to work in 1518 in San Silvestro in Capite, their ages being probably early twenties since Pietro Rosselli was age forty-four. Rosselli's calligraphy can be used to challenge the attributions of drawings mistakenly assigned to him rather than to Antonio del Tanghero. ${ }^{6}$

In San Silvestro in Capite, a tabernacle on the altar contains relics of the head of St. John the Baptist, patron saint of Florence. Commissioned to Rosselli, the altar was completed on 20 April, 1522 by him, his son Domenico, and Antonio del Tanghero. For reasons not explained, Anny E. Popp, who presented paleographic evidence for Antonio del Tanghero's work here, put his name in first place of three artists of the altar in the caption of the photograph. ${ }^{7}$ Antonio's letter (fig. 16) of 26 November, 1518, told Michelangelo how much he liked his drawings, but the dimensions are too tall and the sarcophagi should not be made narrower, the form can be extended at the back but its height cannot exceed five canne. Michelangelo's design of 70 palms must be only 50, that is, 5 canne. He requests a new drawing and return of the plan to ensure accuracy of his work. He enclosed a mea-suring-unit in palms, also known as palmo romano. ${ }^{8}$ Antonio's measured plan of the church with piede romano measurements is preserved in Archivio Buonarroti, Ricordi 1518 verso, Inv. 112 A and Inv. 114 A, Casa Buonarroti, Florence (fig. 1). Thus Antonio, despite his youth, qualified as draftsman-geometer for Rosselli's project. While nothing more is known about him after 1522, Domenico Rosselli was occupied (1556) with the Cappella del Re, and sculpture (1560) for the Casino of Pius IV.' Until now, Antonio del Tanghero's letter of 1518, and his measured plan of San Silvestro in Capite (fig. 1) are the only records of his artistic personality. ${ }^{10}$ Antonio's script (fig. 16) is distinctive for his writing $c h$ with a strong leftward curve in the downstroke of h and doubled consonants $l$ and $t$. His writing can be utilized effectively to identify his hand on drawings of antiquities in the Uffizi (figs. 2, 3, $5-10$ ), attributed to Pietro Rosselli by Nerino Ferri. ${ }^{11}$ Antonio's script with those characteristics proves he is the artist of two presentation groundplans of an octagonal shrine-martyry attached to a priest's residence (figs. 11 a. 12). Cornel von Fabriczy considered them Giuliano da Maiano's (1432-90) for Sta. Maria delle Carceri in Prato, which Giuliano da Sangallo (1445-1516) constructed (1485-91) in Greek-cross plan. ${ }^{12}$ However, the script on the plans is


2 Antonio del Tanghero, Theatrum Marcelli, Rome: Entablatures, capitals, base. Florence, GDSU, 932 Ar.
not that of architects of the church in Prato. ${ }^{13}$ After a catalogue of Antonio del Tanghero's drawings, I shall explain why the shrine-martyry's architectural elements and octagonal form are inconceivable before Bramante's work and Antonio da Sangallo il Giovane's drawings, surely not intended for Prato in 1485. As a monument over an ancient tabernacle on ground level viewed through grillwork in windows and a crypt underground, it can only have been projected for a site of martyrdom in Rome.

First a review of a second artist's script on many of Antonio del Tanghero's closely measured drawings of antiquities in Rome, executed in 1518 or until 1522. Antonio da Sangallo il Giovane (1485-1546) added notes and new measurement-calculations after Antonio del Tanghero had completed them. ${ }^{14}$ Both Florentines were colleagues in Rome where Sangallo arrived in 1503 at age eighteen, as he states in his preamble to a translation of Vitruvius not completed (BNCF, Cod. Magl. Cl. XVII, 20). ${ }^{15}$ Both pursued antiquarian studies independently, not that Antonio del Tanghero executed drawings under Sangallo's direction, as has been mistakenly assumed by Gustavo Giovannoni who said Pietro Rosselli made them for ("per") Antonio il Giovane. ${ }^{16}$ Nothing in Antonio del Tanghero’s notes alludes to Sangallo - his senior by perhaps ten years - as his master or that he assisted him; Sangallo's notes do not reveal any artistic relationship with Antonio. In Sangallo's preamble cited above, he said he had worked first with Bramante, then Raphael, and Baldassarre Peruzzi whom he calls his "coadiutore" (co-architect?).

3 Antonio del Tanghero, Theatrum Marcelli, Rome: arcades, Doric and Ionic in elevation. Florence, GDSU, 932 Av.


Antonio del Tanghero's copious dimensioning of the smallest parts of antiquities proves his qualifications as draftsman-geometer, comparable to those of Antonio dell'Abaco (1495?1567?) whose name reflects his expertise with the drafting-tool by abacus and training in mathematics. Labacco acknowledged in writing that Sangallo was his master (in architecture) and he had worked with Bramante. ${ }^{17}$ Contrarily, Sangallo's notes on Antonio del Tanghero's drawings comment merely on dimensions pre-existing thereon, or else he recalculated them with a system of his own choice. Some type of cooperation between the two artists, which can be interpreted as Sangallo's esteem for Antonio del Tanghero's drawings, is reflected by Sangallo's note on the reverse of one sheet (Uffizi 1150 Av): "cornice di piu sorte antiche" - various antique cornices - a classification for his own and collected drawings. ${ }^{18}$ Antonio del Tanghero made the drawing U 1150 Ar (fig. 4), but it is not an antiquity as Sangallo's note claims on the verso-side, rather for a new church in Siena, which he identified by his note added to the drawing.

Antonio del Tanghero's professional qualifications in drafting led him to compose presen-tation-drawings for a client, his wording on the shrine-martyry plans (figs. 11 a. 12) stating what will be done under the circumstances, the function of each area and object, including the altar, tabernacle, kneeler's bench, grillwork and shutters on window-openings. Antonio's advanced architectural elements such as the rendering of a section (figs. 4 a. 7), rotated rendering (figs. 2 a. 5), and the angled pilasters (fig. 12) are due to his training in geometry, architectural drawing, his work with followers of Bramante in Rome, and with Michelangelo for more than his project at San Silvestro in Capite.

Catalogue of Antonio del Tanghero's drawings
We may review his drawings, first one in the Archivio Buonarroti, then those in the Uffizi by inventory numbers: a group of antiquities (Theatrum Marcelli, Frontespizio di Nerone, Colonnacce in Forum Nervae, and Templum Neptuni); a cornice for San Sebastiano Martire in Vallepiatta ${ }^{19}$; two plans of a shrine-martyry in Rome.

This catalogue transcribes all notes about measurements and arithmetic calculations among Antonio il Giovane's addenda; it excludes dozens of Antonio del Tanghero's tiny measure-ment-numerals on the smallest and large parts of each element, as well as his simple additions by arithmetic, which are total amounts written alongside the measured parts. Also excluded are his two-column tabulation of palmi and minuti, and his three-column tabulation in palmi, once, and minuti, both of which may be resolved by historians of Renaissance surveyor's mathematics. Another measuring system is the braccio for two plans of the shrinemartyry (figs. 11 a. 12). Numerals and measurement-symbols are another form of script, being fundamental to a stylistic evaluation when neither Antonio del Tanghero nor Antonio il Giovane wrote a word on the drawing, only numerals.

Characteristically, Antonio del Tanghero wrote $p$ with a penstroke over it for palmi as a unit of measure directly on the writing-line, but his symbol for once (an o with a penstroke upward and over), and minuti ( $m$ ) are always written above the numeral. Just as consistently, Antonio il Giovane always wrote those same unit-letters, symbols and numerals in sequence beside each other strictly on the writing-line. In each case, the artists simply used the recording method they had been trained to do. My English translation, written between brackets after each writer's notes, calls attention to Sangallo's comments and recalculations, which recast by a different method what he studied on the drawing, doing so in margins or open space between parts of Antonio's drawing, Sangallo's script is easily distinguished from that of Antonio del Tanghero by a letter ( U 307 Ar ) he wrote and signed with his name. If there is any question that Antonio del Tanghero's symbol o means once, not dita, his written word "oncia" on U 932 Ar (fig. 2) makes the symbol clear as a measurement throughout each of his drawings. Sangallo's arithmetic calculations are always intelligible by modern standard, while Antonio del Tanghero's tabulation of numerals in palmi, once, minuti in two or three columns (figs. 7-9) remains a riddle to me.


4 Antonio del Tanghero, San Sebastiano in Vallepiatta,
Siena: Cornice. Florence, GDSU, 1150 Ar.


5 Antonio del Tanghero, Theatrum Marcelli, Rome: entablature, Ionic capital, arcades, Doric and Ionic.
, Florence, GDSU, 1296 Ar. (Photo: after Bartoli).

It is not true that Sangallo "converted" Antonio del Tanghero's measurements of palmi and dita into minuti, as stated by Christoph L. Frommel. ${ }^{20}$ Antonio wrote oncia, not dita. Everyone learned to write $d$ in that form, and $o$ in its own form. Where Sangallo himself made drawings of antiquities and annotated them, he consistently writes a majuscule $D, D$ (ita), Dita, and palma e Dita, piedi e Dita, and his phrase on U 1290 Ar is "misurato a dita di 12 per palmo e 16 per piedi". The piede romano equalled $1 \frac{1}{3}$ palmi romani or 16 once. The palmo romano was 12 once, the oncia as 5 minuti or 10 decimi, and the minuto as 2 decimi; the popes had preserved an ancient standard of mensuration by the palmo that corresponded with 5 once antiche. ${ }^{21}$ Several times Antonio del Tanghero cites his measuring scale as the palm divided into 12 once, each comprising 5 minuti (figs. 2, 8, 9); in one case (fig. 7), the palm is divided into 8 parts, each oncia into minuti. Sangallo adopted that measuring standard of the palm, oncia, and minuto (fig. 8) for recalculating measurements of the architrave, capital and column, and for the column's circumference and diameter (fig. 9), doing the arithmetic calculations separately near his note. Thus, we see Sangallo's growth as geometer; he names Antonio Labacco (fig. 9) with whom he carried on a debate, then confirmed Labacco's measurements by working out his own theoretical calculation.

Archivio Buonarroti, Ricordi 1518 verso (Inv. 112 A and Inv. 114 A), Casa Buonarroti, Firenze (fig. 1).
$25,3 \times 28,6 \mathrm{~cm}$. Groundplan, measured, of the church of San Silvestro in Capite, Rome, by Antonio del Tanghero: "E chapo de la chiesa ene chane 15"; "questo ene e parmo di Roma a pu(n)to". (It is 15 canne to the head of the church. This measurement is by the palm used in Rome.)

Antonio del Tanghero draughted the plan on the palmo romano/canna system, a measureunit like one stated on other drawings: U 932 Ar (fig. 2); U 1150 Ar (fig. 4); U 1335 Ar (fig. 7); U 1428 Ar (fig. 8); U 1578 Ar (fig. 9); braccia on U 1606 Ar (fig. 11), and U 1607 Ar (fig. 12). Popp first connected Antonio del Tanghero's writing on this plan with that in his letter of 1518 (fig. 16) when he asks Michelangelo's opinion about the altar for San Silvestro in Capite. On the sheet's recto, Michelangelo made schematic sketches of that altar; his drawings have not survived. Popp reviewed all letters about the project (1518-22), reproduced Antonio's plan and that of the church today. Antonio's plan measured in piedi shows a rectangular choir, preceded by an almost square and small unit with a column at each corner, a cross in its center, flanked by stairways. None of these elements appears in the church constructed without a choir. In its place there is a shallow, half-round apse for the altar with sacred relic in a ciborium or tabernacle reconstructed by Carlo Rainaldi after ca. 1629.

Uffizi 932 A recto (fig. 2).
$43 \times 56,5 \mathrm{~cm}$. (Left half of sheet.) Entablature, Ionic capital and volute in rotated rendering on the Ionic arcade of Theatrum Marcelli. ${ }^{22}$ Drawing and measurement-numerals by Antonio del Tanghero. Notes added by Antonio da Sangallo il Giovane: (on a detail of dentils) "In sul picolo sta cosi", (his note at mid-right side) "El palmo in once 12 loncia minuti 5 / ridotta tutta minuti 60 per palmo". (The small one looks like this. The palm is 12 once, each 5 minuti, altogether 60 minuti in the palm.)
(On right-half of sheet.) Doric entablature, Doric capital, and details of the Doric base of Theatrum Marcelli. Drawings, numerals and note by Antonio del Tanghero: (at left of triglyphs) "I fra una la(l)ttra palmi 3 once 3" (at right of triglyphs, a line between asterisks across the triglyphs) "nona fronta". (Between these parts the space is 3 palms, 3 once. Nine across the front.) Antonio il Giovane's note added at upper right and lengthwise: "Quanto el monto dove e segniato A / pende el disotto del gociolatoro." (The amount of ascent at A is the equivalent of the drop at the underside of the rain-ledge.) Antonio's $A$ is visible at the pendent tip.

This is the first of four sheets (figs. 3, 5, 6) where various parts and details of Theatrum Marcelli are represented with great precision and advanced professional quality, including rotated rendering of the Ionic volute, and a detail in profile-view of the entablature or the molding and cornice when the whole form is rendered schematically. Rotated rendering is characteristic of Antonio Labacco's drawing (U 1795 Ar), but no example dates before ca. 1500. Giovanbattista da Sangallo's drawing of Theatrum Marcelli (U 1966 Ar) appears to have been derived from Antonio del Tanghero's drawing, excepting different measurements. ${ }^{23}$
Uffizi 932 A verso (fig. 3).
(Left-half of sheet is blank.) Doric and Ionic arcades of Theatrum Marcelli. ${ }^{24}$ Drawings and measurement-numerals by Antonio del Tanghero. Notes are all by Antonio da Sangallo il Giovane's hand, added on the roof-eaves, within the arcades, and two calculations: "In sul gronde", (written vertically within an arch) "Secondo Vitruvio / aria a essere nove / teste e
uno tertio cioe $2006 \frac{1}{3}$ / e la 1920 che dia circha 9 teste / mancho 15 a teste 8 minuti 200". (On the roof eaves. According to Vitruvius, it [the arch] should be $9 \frac{1}{3}$ heads high, that is, $2006 \frac{1}{3}$; at 1920, it is about 9 heads high, subtracting 15 at 8 heads, it comes to minuti 200.) Three multiplication calculations " $215 \times 9 \frac{1}{3}=1935+66, \frac{1}{3}+5=2006$ $1 / 3 ", " 60 \times 13=180+60=780+45=825 ", " 60 \times 32=120+180=1920 "$.

Antonio il Giovane's comments are recalculations of Antonio del Tanghero's numerals for dimensions. He cites Vitruvius by name, but calculates height by the standard of the human head. Sangallo's citation of $9 \frac{1}{3}$ heads as the height of the arch disregards Vitruvius' system, which is a part or a module; Vitruvius did not describe the arch. In Florentine workshops, the human head was a measuring unit for statues and columns, so perhaps Sangallo's comments are intended for Ionic half-columns on Theatrum Marcelli. Sangallo's arithmetic calculation for a total of 1920 was taken from the amount that Antonio del Tanghero had written vertically on the left arcade; $2006 \frac{1}{3}$ as a total is Sangallo's calculation on the central archway; his 825 on the left archway remains unexplained.

Uffizi 1150 A recto (fig. 4).
$56,8 \times 43,5 \mathrm{~cm}$. U 1150 A verso was blank until Antonio il Giovane wrote a note: "cornice di piu sorte antiche" (various antique cornices). Sangallo's title classifies a part of his drawing collection. However, his classification does not apply to the present drawing, which is Antonio del Tanghero's drawing of a cornice for a new church: Cornice or entablature with modillion and convex frieze for San Sebastiano (Martire) in Vallepiatta in Siena. ${ }^{25}$ His drawing has no measurements, but he annotated his measuring-scale as a line between asterisks: "Da un moddello al attro cioe dove e rosone." (From one point [module] to the other, that is, between asterisks.) The modillion's front-view is placed on the cornice's profile-view, a method of representation by section that had recently come into use, as shown in several examples by Baldassarre Peruzzi. Sangallo’s note: "a San Bastiano della / Valle sopra le colonne / del portichale in la facia / dinanzi in propria forma / levata el Rossello". (On San Sebastiano della Valle over columns of the façade's portico. Rosselli draughted its actual shape.)

Although Sangallo states that Pietro Rosselli made this drawing, proof of Antonio del Tanghero's authorship is identical ink-color for his note on the measuring scale and the drawing. It may be dated after ca. 1518, possibly after 1522 when he had finished work on the altar in San Silvestro in Capite. One of several riddles is why Sangallo named Rosselli as artist of a structural element presumably in place; another is that the portico referred to was never built at the oratory's façade. In that case, where did Antonio del Tanghero see Rosselli's entablature to draw it, and how did Sangallo get Antonio's sheet to annotate it? There is no record that Rosselli or Sangallo travelled to Siena from Rome or Florence, had any interest in new building there, and a reason to leave Rome. The colonnaded portico mentioned in Sangallo's note and his designation of Rosselli as draughtsman leads to questions about the oratory's architect, and documents for its construction. ${ }^{26}$

San Sebastiano in Vallepiatta is an oratory in Greek-cross form ${ }^{27}$, its precursor being Giuliano da Sangallo's Sta. Maria delle Carceri, in Prato. San Sebastiano has no portico on its façade. Its flat doorframe of stone or marble is covered by a very short roof of terracotta tiles imbedded in the façade's brick masonry. At the right side of the church, the simple doorframe into the former-monastery of the Order of the Gesuate, also known as the Order of the Povere di Vallepiatta (now occupied by the Istituto di Semiotica Medica), has a small roof three meters wide of terracotta tiles imbedded in the masonry built forward to rest on two wooden beams ( 1.30 meters long), their front views taking the shape of a curved modillion. The modillions slightly resemble the cornice part of Antonio del Tanghero's en-
tablature drawing (fig. 4), but the beam itself is altogether different than the drawing, which does not compare with an entablature inside the oratory. ${ }^{28}$

According to Manfredo Tafuri's study, which is based on limited archival documentation, decisions to build the oratory began in ca. 1493-94, its "essential parts" finished in 1510 20. He speculates that the Greek-cross plan is Francesco di Giorgio's innovation, evolved from experience in Lombardy and elsewhere. Accordingly, the oratory is said to have been constructed by members of Francesco's workshop, one of whom might have been Baldassarre Peruzzi. ${ }^{29}$ Contrarily, I see the oratory's form stylistically related to a few church-plans in Francesco's treatises written in $1480 \mathrm{~s}-90 \mathrm{~s}$, but none of them is in true Greek-cross form. There is no evidence for a commission to Francesco (d. 1501) for the oratory in Siena, especially since he worked in Naples in $1492-95^{30}$ and is not known to have had a workshop. Peruzzi is first named vaguely (in 1515) in documents for work in progress on the oratory; he worked as a painter in 1501, and in Rome (1503-17) where he also worked as architect. ${ }^{31}$

An anonymous Sienese architect designed San Sebastiano in Vallepiatta, its constructed form partly reflected in three drawings, which are slight variants of each other by the shape or depth of apses: ${ }^{32}$ U 1310 Ar, attributed by Tafuri to B. Peruzzi (?); U 4821 Ar, by Giorgio Vasari il Giovane, which is almost identical to the first, and he copied it (ca. 1590?) from one (lost) made ca. 1530s (?) by his uncle, Giorgio Vasari; U 427 Ar and v, attributed to Sallustio Peruzzi, whose script does not appear thereon, while its main difference over the first two plans is the colonnaded portico at the entrance bay.

That portico drawing recalls Sangallo's reference on Antonio del Tanghero's drawing to a colonnaded portico at the façade of San Sebastiano in Vallepiatta. Although we are no closer to the identity of the anonymous Sienese architect, Peruzzi's role about work in progress in 1515 is vague, and the entrance bay was still in construction in 1545 and 1550 , according to documents cited by Tafuri. Nevertheless, Peruzzi may have made a drawing that Vasari il Giovane copied, writing on his copy. U 4821 Ar: "S. Bastiano di Val Piatta a Siena di Baldassarri." This plan without portico bears some structural resemblance with U 427 Ar, which has elements like a colonnaded portico, and a two-column portico was sketched in sideelevation on U 427 Av. Here, sketches of cornice profiles differ from that on U 1150 Ar. It is the only graphic link to Sangallo's statement on the cornice-entablature drawing (fig. 4) where he stated Rosselli made the drawing for the portico in Siena. Authorship of non-annotated U 427 Ar and v is anonymous.


6 Antonio del Tanghero, Theatrum Marcelli, Rome: capital, base. Florence, GDSU, 1296 Av.

It remains an open question why Sangallo cited Rosselli as the draughtsman for U 1150 Ar and where he learned the information. Peruzzi's name in the document of 1514 and Vasari's reference to him on a plan like the church in Siena lead me to suggest that Peruzzi might have travelled from Rome to his city, Siena in ca. 1518 or ca. 1522 with Sangallo, Antonio del Tanghero and Pietro Rosselli. Sangallo, in his codex of a projected Vitruvius translation mentioned above, cited Peruzzi as his "coadiutore" in Rome after he worked with Bramante and Raphael. There is artistic evidence that Sangallo went to Monte Oliveto Maggiore at that time. For use in his own treatise, he copied numerous engine drawings and even quoted some texts Francesco di Giorgio and the Anonimo Ingegnere Senese prepared ca. 1480-1500. Scribes at Monte Oliveto Maggiore were transcribing and illustrating new manuscripts of Francesco's Trattato I and Trattato II as late as ca. $1535 .{ }^{33}$ It is not easy to understand why Sangallo utilized Francesco's work instead of composing his own text and illustrations. Only the existence of both artists' drawings prove the dependence of Sangallo's on the prototype, a side of Sangallo's artistic personality not otherwise revealed; another side is his urge to comment on and recast Antonio del Tanghero's dimensions on drawings of antiquities.
Uffizi 1296 A recto (fig. 5).
$41,5 \times 56 \mathrm{~cm}$. (Left half of sheet.) Cornice, Architrave, and Ionic Capital of Theatrum Marcelli, a measured drawing by Antonio del Tanghero. ${ }^{34}$ A note added by Antonio il Giovane: "Credo cuesto dica once 16." (I believe this indicates 16 once.) (On right-half of sheet.) Doric and Ionic arcades of Theatrum Marcelli, a measured drawing by Antonio del Tanghero. Neither he nor Sangallo annotated it; only Antonio's numerals indicate he wrote them on his drawing.

Uffizi 1296 A verso (fig. 6).
(Left-half of sheet is blank.) Base and capital of Theatrum Marcelli. ${ }^{35}$ Unmeasured drawing by Antonio del Tanghero; his numerals are on the measured drawing, U 1296 Ar.

Uffizi 1335 A recto (fig. 7).
$42,5 \times 29,5$ (U 1335 Av is blank). Entablature and base of Frontespizio di Nerone on the Quirinale. ${ }^{36}$ Measured drawing and notes by Antonio del Tanghero: "I pallmo ene ischoparttitto in otto pa(r)tte ogni o(n)cia ischopattitta 8 once in minutti. Logetto de ttutto palmi 6 oncia 1 minuti 5. Infino de pillastro / da pie palmi 8 once 7 minuti 3 ", (on lower frieze, written vertically) "rossello", (on architrave, written vertically) "I ttutto de larchittrave palmi 6 once 4 minuti 6" (The palm is divided into 8 parts, each oncia divided into 8 minuti. Projection of the whole, 6 palms, 1 oncia, 5 minuti. Upward from the column's foot, 8 palms, 7 once, 3 minuti. Rosette/rinceau [red color?]. The architrave as a whole, 6 palms, 4 once 6 minuti).
Sangallo's notes on the frieze: "Lo pilastro once sie ottavi 71 minuti 3 / larchitrave sie once 52 minuti $6 / \mathrm{li} 3 / 4$ e fra $1 \mathrm{li} 2 / 3$ e lli $3 / 4$ secondo queste." (On upper moulding of architrave) "a chasa che ape io proprio. Del tutto", (at side of architrave) "Questa architrave sie / le tre quarti del pilastro / perche $1^{\circ}$ pilastro sie circha piedi $6{ }^{3} / 4$." (The column is 71 eighths, 3 minuti. The architrave is 52 once, 6 minuti and $3 / 4$; between $2 / 3$ and $3 / 4$, according to this. At home I calculated it. Of the whole. This architrave is $3 / 4$ of the column, so one column is about $63 / 4$ piedi.)
Sangallo's note (at upper right corner, written lengthwise): "La gola sie lottava parte coronario / cioe lottava parte dell architrave / fregio cornicie circumcircha perche / sono insieme palmi $19 \frac{1}{4}$ sono once 154 e tutta / la chornicie sie 9 cioe once $173 \frac{1}{4}$." (The sima is one-eighth part of the crowning part, that is, the eighth part, approximately, of the architrave, frieze


7 Antonio del Tanghero, Frontespizio di Nerone, Rome: entablature, base. GDSU, 1335 Ar.
and cornice; altogether they are $19 \frac{1}{4}$ palms, 154 once. The whole entablature is 9 , that is, $173 \frac{1}{4}$ once.) Sangallo's two arithmetic calculations at right amount to $173 \frac{1}{4}$ and to 154 .

Immense marble fragments weighing several tons from the temple known as Frontespizio di Nerone on the Quirinal above Palazzo Colonna and church of SS. Apostoli were objects of many XVI-century drawings and reconstituted elevations. ${ }^{37}$ Antiquarians described it, for example, Flavio Biondo, Poggio Bracciolini, among others ${ }^{38}$; its form was represented on every map of Rome. ${ }^{39}$ Destroyed in 1630, large blocks of the entablature rest on the ground of Villa Colonna, a terraced slope high above Palazzo Colonna. ${ }^{40}$ Antonio del Tanghero's word "rossello" on the frieze identifies its rosette/rinceau ornament or its red stone. He would not write Rosselli's name there. Sangallo named him a draftsman of Uffizi 1150 Ar (fig. 4).

Uffizi 1428 A recto (fig. 8).
39 x $24,3 \mathrm{~cm}$ (U 1428 Av is blank). Architrave, capital and column of the Colonnacce or of Templum Minervae in Forum Nervae. ${ }^{41}$ Measured drawing and note by Antonio del Tanghero: "Larchittrave del difittio di sa(n)tto Basillio overo li Savelli. I pa(l)mo ischopattitto ine 12 once ogni oncia 5 minutti. I ttutto de chapittello palmi 9." (The architrave of the structure in San Basilio or of the Savelli [proprietors of Theatrum Marcelli]. The palm is divided into 12 once, each oncia being 5 minuti. The whole capital, 9 palms.)
Sangallo's notes (at mid-right): "Questa di Santo Basilio / larchitrave sie lo due terzi / della colona da pie", (on column) "Da pie once 94 minuti 4. Dieci da pie e 9 da capo / dodici

8 Antonio del Tanghero, Colonnacce or Templum Minervae, Rome: architrave, capital, column. Florence, GDSU, 1428 Ar.



9 Antonio del Tanghero, Templum Neptuni, Rome: frieze, architrave, base. Florence, GDSU, 1578 Ar.
da pie 11 da capo. Lo pilastro da ppie palmi 7 once 10 minuti 4 / quali sono once 94 minuti 4 / larchitrave sie palmi 5 (cancelled) once 62 minuti 3 lo dui terti." (This is at San Basilio. The architrave is two-thirds of the column from its foot. From the foot, 94 once 7 minuti. It is ten from the foot, 9 from the head, 11 from the head. The column, from the foot, 7 palms, 10 once, 4 minuti, amounting to 94 once, 4 minuti. The architrave is 5 palms, 62 once, 3 minuti, two-thirds.)

As usual, Antonio del Tanghero cites the palm as measurement, and Sangallo calculated new dimensions for various parts. Whereas Antonio's words are ambivalent about the location of antiquities at the monastery (in Forum Traiani, Forum Augusti, and Forum Nervae) or Theatrum Marcelli, at some distance from each other ${ }^{42}$, Sangallo correctly names the monastery.

Uffizi 1578 A recto (fig. 9).
$28,9 \times 42,5 \mathrm{~cm}$. (On left-half of sheet.) Architrave and Frieze of Templum Neptuni on Piazza di Pietra, Rome. ${ }^{43}$ Measured drawing and notes by Antonio del Tanghero: "I pallmo ischoparttitto 12 once ogni oncia ini minutti mi. 5. Larchittrave dedifittio della piaza de Pretti. Latteza de chapittelle ene palmi $7 \frac{1}{2}$." (The palm is divided into 12 once, each oncia 5 minuti. Entablature on the building on Piazza di Pietra. Height of the capital is $7 \frac{1}{2}$ palms.) (On right-half of sheet.) Base and Column, fluted and measured of Templum Neptuni, and a note (on the plinth) by Antonio del Tanghero: "Palmi 3 once 7 minuti 4" ( 3 palms, 7 once, 4 minuti).

Sangallo's notes and hypothetical calculations: (upper corner) "Se llavesse in fratta due li ogetti once $1 / 4$ e $1 / 8$ / saria grossa la colonna palmi 7 once 5 minuti 4 / e secondo Labacho la sua alteza venira palmi 7 once 3 minuti 3 . Bisognia vedere / quanti canali sono. Canali 24 sodi 24. Queste de canali sie fallace / La colonna gira once 244 minuti 4 / viene avere di diamitro once $77^{7 / 11}$ le once / che sono palmi (cancelled numerals) 6 once $5^{7 / 11} / \mathrm{e}$ per rispetto delli 4 minuti si puo dire palmi 6 once 6 "; (at base, written vertically) "La cololonna aria a essere palmi 7 once 3 minuti 3" (If you had fractioned the projection in two [twice?], once $\frac{1}{4}$ and $1 / 8$, the width of the column would be 7 palms, 5 once, 4 minuti. According to Labacco, the column's height would be 7 palms, 3 once, 3 minuti. One must see how many flutings there are. Flutings 24, solids 24. About flutings, it is deceptive. The column's circumference, 244 once, 4 minuti, which amounts to a diameter of $777_{11}$ once. Considering 4 minuti, calculate 6 palms, 6 once. The columns should be 7 palms, 3 once, 3 minuti). Sangallo's arithmetic calculations at right are his totals: $244 \mathrm{~m} .4 ; 144 ; 777_{11}$.

Antonio del Tanghero identified the antiquity on Piazza di Pietra. Sangallo, as usual, recalculated dimensions, his mastery of mathematics being self-evident. His total for columns confirms what Labacco told him. This time he introduced Antonio dell'Abaco (Labacco), the geometer (1495-1567?) in Sangallo's circle. ${ }^{44}$ By contrast to Labacco's fame, Antonio del Tanghero remains unknown, never cited by Sangallo on drawings he collected.
Uffizi 1579 A recto (fig. 10).
$43 \times 57 \mathrm{~cm}$ (U 1579 Av is blank). (On left-half of sheet.) Doric entablature, capital and cornice of Theatrum Marcelli. ${ }^{45}$ Drawing, measurements and note by Antonio del Tanghero: "La chimasa dell archo de menbretto / de primo ordine de Savelli. I fra una e lattra. palmi 3 once 3" (Cornice of the arcade's membering on the first order of the Savelli [Theatrum Marcelli]. Space [?] between one and the other 3 palms 3 once). (On right half of sheet:) Base of Theatrum Marcelli; Cornice, incomplete and in upside-down position. Drawings and note by Antonio del Tanghero: "Basa de sechondo ordine" (Base of the second order). Sangallo's note on the base: "de Savelli" (of the Savelli).


10 Antonio del Tanghero, Theatrum Marcelli, Rome: entablature, capital, cornice, base. Florence, GDSU, 1579 Ar.


11 Antonio del Tanghero, Shrine-Martyry: plan. Florence, GDSU, 1606 Ar.

Uffizi 1606 A recto (fig. 11).
$20 \times 20 \mathrm{~cm}$ brown ink, light-brown wash for some walls and six columns (U 1606 Av is blank). Shrine-martyry in Groundplan. Presentation-drawing and notes by Antonio del Tanghero: "Mettendo a diritto alla via / viene un pocho ttortto / el ttabernacholo al alttare / ma si fara i(n) modo sanza / ttocharlo che non si para. Braccia 16. A", (on outer ambulatory) "Braccia 2. Feratte da vedere / cuando e sgratta / chome si vede in disegno." (Aligning the tabernacle to the road would put it slightly oblique with respect to the altar; leaving it [the tabernacle] in place, a way will be found so its angle [at the road] is not noticeable. 16 braccia A. 2 braccia [width between column and pilaster]. Grillwork so as to see inside when it is unshuttered, as shown in the drawing).

A discussion of this plan and the next one measured in braccia will follow after both drawings are described. ${ }^{46}$


12 Antonio del Tanghero, Shrine-Martyry and priest's residence: plan. Florence, GDSU, 1607 Ar.

Uffizi 1607 A recto (fig. 12).
$20 \times 20 \mathrm{~cm}$, brown ink, light-brown wash for all walls and columns (U 1607 Av is blank). Shrinemartyry and Priest's Residence in Groundplan: Presentation-drawing by Antonio del Tanghero: (Part of residence and adjoining areas) "Polaiuo. Chucina. Pozo. Aria braccia $121^{1 / 2}$, braccia 6 . Sala braccia $7 \frac{1}{2}, 5 \frac{1}{2}$. Chamino. [...] Chamera braccia 6, $5 \frac{1}{2}$. Sagrestia (2x). Di pietra. M N A. Vano braccia 16. El tutto braccia 24 / cho lo schalino. A. Braccia $2 \frac{1}{4}$ (2x). Schalino (3x). Da nginochiare".

Antonio del Tanghero's plans of a shrine-martyry.
His plans of a shrine-martyry (figs. 11 a. 12) are very similar to each other, both highly original, one developed over the other, none comparable to an existing structure. Antonio wrote a large majuscule A just beyond the entranceway, which I cannot explain, but it was meaningful to him, probably as reference to a larger set. His written explanation and the tilt of the U-shaped tabernacle on U 1606 Ar give that drawing priority. He states that a way will be found so the tabernacle's angle will not be noticeable when the altar is placed. Obviously, conservation of that sacred structure was uppermost in the patron's mind when he commissioned an architect, probably not Antonio del Tanghero who merely executed this presentation-drawing for someone. His portrayal of circumstance and deliberate comment about it are unique. His second plan (fig. 12) shows the tabernacle M N A set within masonry behind the altar on a stone platform like the first where it comes forward. Shape and direction of walls remain the same, but the tabernacle is in parallel with it. The road is no longer mentioned.

On the first plan, Antonio's notes refer to iron-bars that permit a view into the shrine when openings are unshuttered; iron-bars are illustrated on the second plan at both sides of the doorway, and kneelers' benches are before the openings. His second plan has angled pilasters inside at eight points of the octagon, and angled pilasters at angled piers to which six free-standing columns on square plinths are attached. On his first plan, columns are placed opposite wall pilasters at the platform's outer edge, indicating that an ambulatory four-foot wide encircled an (16 braccia) octagonal room. An elevation might be like Bramante's San Pietro in Montorio, a ceiling covering the ambulatory, but it is more probable that the elevation would comprise six archways carried from wall-pilaster to column like Brunelleschi's buttresses on his octagonal lantern of Sta. Maria del Fiore (1436). Antonio del Tanghero's second plan eliminated the ambulatory, arranged angled pilasters fitted to angled piers inside, added angled pilasters externally where they are attached to columns on pedestals. These occupy most of the platform's surface (by his own statement its outer edge reaching 24 braccia), articulated at six points by rectangular projections.

Bramante's influence is apparent here as we recall Pietro Rosselli's acquaintance with him (1506) and that of Sangallo (1503). Angled pilasters articulate the internal octagon of Sangallo's Sta. Maria di Loreto in Rome built later than 1507 when it was founded. ${ }^{47}$ Brunelleschi's Sta. Maria degli Angeli (1434-37) is an octagonal interior by a combination of piers and arcades. ${ }^{48}$ Bramante's San Pietro in Montorio (1502) is a circular martyry with an ambulatory. ${ }^{49}$ Previously, in ca. 1490, Bramante probably designed two octagonal chapels with spherical domes behind the transept for the wooden model of the Cathedral of Pavia: pilasters formed like square columns on high pedestals at each corner of the octagon resting on a broad platform. ${ }^{50}$

An octagonal plan is Sangallo's sketch of a free-standing temple with angled pilasters outside and three doorways built within an octagonal wall with six columns between each of eight angled piers. It is one of six centralized plans (ca. 1519) for "tempietti" on Isola Bisentina in Lago di Bolsena (U 962 Ar; fig. 13). ${ }^{51}$ Sangallo worked nearby on the Rocca di Montefiascone (1519), on Palazzo Farnese in Gradoli (1520), and built the octagonal church of Sta. Maria di Montemoro at Montefiascone (1523). ${ }^{52}$ Vasari's description of two small octagonal temples that Sangallo built for Cardinal Farnese refers also to their external niches. ${ }^{53}$ On the island called La Rocchina, the little temple is externally octagonal with one doorway, its Doric angled pilasters at corners outside like internal ones of Sta. Maria di Loreto. ${ }^{54}$ Sangallo's second temple for Isola Bisentina was never built. It is unknown why Cardinal Farnese wanted little temples on that volcanic rock without any legend of martyrdom.


13 Antonio da Sangallo il Giovane, Temple for Isola Bisentina, Lago di Bolsena: plans. Florence, GDSU, 962 Ar .

Letters $M N A$ on the tabernacle of Antonio del Tanghero's shrine-martyry, which I cannot complete as words, are a clue for identifying the probable location on ground level where the shrine would enclose it. It may well be found by excavation. Its shape is an ancient one, different than medieval and Renaissance structures on columns. It was located on a road ("via"). A stairway into a crypt would be taken by the priest-custodian who walked from the left sacristy or his residence, entered by a side-door at the left. That the two parts - shrine on a platform and residence behind it - were planned as an independent unit is clear from the straight line of masonry connecting the residence with the shrine's angled piers. Metal bars in two openings beside the doorway would permit members of the community to see the tabernacle when the door was closed while they knelt outside. Antonio's notes are addressed to a reader as patron-client, who would know whether the elements and circumstances fulfilled his needs. The absence of a circle in the plan's center suggests a solid dome, like San Giovanni in Oleo and Sangallo's little temple of La Rocchina. Where was Antonio's shrine-martyry with priest's residence to be built, and who administered the project?

In 1509, an octagonal oratory now called a chapel (interior diameter, 14 feet or 4,5 meters) of San Giovanni in Oleo at Porta Latina was built directly on Via Latina at the expense of the founder, the French priest and auditor of the papal Rota, Benoit Adam, to commemorate the legendary martyrdom of St. John the Evangelist. ${ }^{55}$ Everything known about


14 Michelangelo Buonarroti, Shrine (?): elevation and plan. London, British Museum, Inv. 1859-6-25-246.
him and the oratory he sponsored is stated in the inscription: DIVO IO. EVANGTE SACELLVM benedictvs / adam avditor gallicvs dicavit ivlio ii pont. max. an ${ }^{\circ}$ mCccccviiii. The year refers probably to its inception. The architect's name is problematic since there are no documents about a commission for the oratory, nor which friars cared for it. It seems to have been built over a mausoleum once furnished with a memoria: a chapel existed here in the time of Boniface VIII (1294-1303), though it is not represented. ${ }^{56}$ Tempesta's map of Rome (1593) shows San Giovanni in Oleo built right in the middle of Via Latina, not where it is now beside the narrow road. ${ }^{57}$ The oratory's left flank is now close to a high brick wall, its right flank beside Via Latina, and a brick-boundary wall surrounds the monastery of San Giovanni a Porta Latina (also called Collegio Missionario), entered at fifty meters beyond the oratory where the basilica was reconstructed in XII century. ${ }^{58}$ The monastery was decreed a cardinal's titular in 1517 , but his role, if any, as custodian of the oratory-chapel, is unknown.

San Giovanni in Oleo has been attributed to Bramante or else Antonio da Sangallo il Giovane. Its octagonal form closely resembles Sangallo's little temple on La Rocchina, and his design of Sta. Maria di Montemoro in Montefiascone. ${ }^{59}$ Remodelled by Francesco Borro-


15 Anonymous artist, ca. 1520, Shrine (?): elevation. Rome, Gabinetto Nazionale delle Stampe, Album vol. 2510.
mini (1658) and its interior restored (1951; 1992), San Giovanni in Oleo's original parts appear to be only the exterior walls with angled pilasters. ${ }^{60}$ It was built at the foot of a hillside known in the first medieval period as Monte Calverello / Mons Calverellus, then Monte d'Or / Monte dell'Oro. ${ }^{61}$ The site was not then as confining as it is today, judging from large fields surrounding it on Tempesta's map.

Although the year 1509 inscribed on San Giovanni in Oleo cannot be challenged, and Antonio del Tanghero's presentation-drawings are not likely to be his copies of plans drafted at that time, still we should not rule out the possibility that they might have been projected for San Giovanni in Oleo. Admittedly, the 14 -feet diameter of the oratory-chapel's interior is less than one-half of the shrine-martyry's 32 feet ( $=16$ braccia) interior diameter. As a guess, the ancient tabernacle marked M N A on this drawing may be the "mausoleum with memoria" over which San Giovanni in Oleo was built. The priest's residence attached to the shrine makes it an independent unit, unprecedented, perhaps no successor. That aspect sets it apart from a monastery-complex. It is worth noting that Antonio's plans for an octagonal martyry-shrine enclosing an ancient tabernacle located on a road like the site of San Giovanni in Oleo beside Via Latina is totally different from other monuments: two sites of martyrdom (San Pietro in Montorio; San Giovanni in Oleo), the burial site of St. Peter under Bramante's St. Peter's; the altar-tabernacle with relics in San Silvestro in Capite.

Further difficulties of interpretation occur because the same structural elements of the shrine-martyry are found on Michelangelo's sketches of a semi-octagonal plan and elevation with free-standing columns on pedestal at wall-pilasters, and angled pilasters on the interior (British Museum, Inv. 1859-6-25-246; fig. 14). Its function is not yet clarified, and the dating a matter of some discussion, perhaps in 1518-19. ${ }^{62}$ Another elevation of uncertain purpose and some elements like Michelangelo's is by an anonymous early-XVI century artist (Rome, Gabinetto Nazionale delle Stampe, Inv. FN 7709 [32746, 38], fig. 15) ${ }^{63}$, a high podium for an octagonal structure with dome, Corinthian columns carrying a classical pediment on each of three sides, the central one forming an arched entranceway without stairway. ${ }^{64}$

Michelangelo sketched (fig. 14) about five sides of an octagon in plan and elevation, three of which advance forward, and walls of annexes extend laterally at the octagon's fourth and fifth sides. Angled pilasters located inside and columns on pedestals at the wall are the same as those of Antonio's shrine-martyry (fig. 12), their resemblance so striking as to interconnect them as different solutions for the same monument. Karl Frey (1911), following a study by J.C. Robinson, associated this one of Michelangelo's drawings with a variant plan and elevation of an open octagonal structure with columns on each corner (Oxford, Ashmolean Museum, Inv. no. 48.2); he dated both sheets in $1524 .{ }^{65}$

If Michelangelo's two plans (Oxford; British Museum) are one project's variants, Frey and Thode (1913) did not discuss their functions or locations. Geymüller identified the project as one for St. Peter's choir (1505); Wilde called the British Museum plan (fig. 14) a choirscreen with ambo, its parapet on the attic, but he refrained from speculating on its destination in a church, only saying it is unknown who gave Michelangelo a commission. ${ }^{66}$ Adolfo Venturi (1938) considered the drawing a ciborium tabernacle for Sta. Maria degli Angeli, Rome, which would date it after ca. 1550. ${ }^{67}$ Wilde doubted the dating in 1524 that Frey and Thode suggested for both drawings, concluding that Michelangelo made both drawings in 1518-19, because in that year at the quarry in Seravezza he used the rope he mentions on the obverse of his Oxford letter.

While the drawings relate to the shrine-martyry stylistically, we cannot decide their relevance for the shrine-martyry whose site cannot be fixed exactly. The dilemma increases, because no document exists for San Giovanni in Oleo built in 1509. Significantly, Michelangelo's and Antonio del Tanghero's drawings, and Sangallo's temples on Isola Bisentina are noticeably influenced by Bramante's work in Rome and Pavia.

A final word about the braccia-scale for Antonio's shrine-martyry (figs. 11 a. 12). ${ }^{68}$ Coming as it does on a structure for an undetermined location and patron-client, it should be noted that Giuliano da Sangallo's Libro drawings of antiquities (Cod. Barb. Lat. 4424) are measured in braccia, including the Pantheon's entablature, cornices and bronze doors. Measurement in braccia for the Pantheon's vestibule and cornices are quoted by the artist of Album Chinnery (Sir John Soane's Museum, London). ${ }^{69}$ Therefore, artists chose whatever scale suited them, unless a building-contract or local tradition stipulated one, for example, the antico piede romano, the piede romano and the palmo romano. We are fortunate to have Labacco's statement ( U 1795 Ar) that his measure-unit was the piede antico divided into 16 dita. Most artists failed to specify whether their piede was romano or antico. An aspect of Sangallo's development as geometer has been clarified in Pagliara's study of a doorframe drawing finely measured with numerals for his own house (U 1005 Ar). ${ }^{70}$ Sangallo wrote out his method of calculation for two numerical scales illustrated on the doorway, one in piede antico, another its equivalent, the Vitruvian modulo on the decimal scale (1:10). Each part of the doorframe is measured by the modulo, thereby relinquishing the more complex sexagesimal scale (1:60).

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16 Antonio del Tanghero, Letter to Michelangelo Buonarroti, 26 November, 1518. Archivio Buonarroti, 7, 193 r. Florence, Biblioteca Medicea Laurenziana.

## NOTES

${ }^{1}$ Il Carteggio di Michelangelo, ed. Paola Barocchi/Renzo Ristori, Florence 1965-83, vol. I, p. 16 (Pietro Rosselli's letter to Michelangelo on 10 May, 1506); vol. II, pp. 2, 15-17, 29-30, 113-114, 309 (altar in S. Silvestro in Capite); vol. II, pp. 15-16 (Rosselli's letter of 20 May, 1518); vol. III, pp. 205-206 (Rosselli's letter to Michelangelo, in 1526, an expression of friendship); Karl Frey, Sammlung ausgewählter Briefe an Michelangiolo Buonarroti nach den Originalen des Archivio Buonarroti, Berlin 1899, p. 103 (Antonio del Tanghero's letter of 26 November, 1518, indexed as Codex VII, 193); pp. 30, 101 (Soderini's letters to Michelangelo); p. 102 (Rosselli's letter to Michelangelo); pp. 116, 125 (references to Pietro Rosselli by name). Antonio del Tanghero's letter of 26 November, 1518 is transcribed in my note 8, below. I wish to thank Dr. Pina Ragionieri, Director of Casa Buonarroti, for photographs of Antonio del Tanghero's letter (Arch. Buonarroti, 7, no. 193r, Bibl. Medicea Laürenziana; fig. 16) and of Pietro Rosselli's letter (Arch. Buonarroti, 10, no. 656, 1r and v, Casa Buonarroti). At that time I was preparing an Index of architectural sketchbooks and drawings of antiquities, now issued: Drawings of «Roma antica» in a Vitruvius edition of the Metropolitan Museum of Art, in: Röm. Jb., XXVII-XXVIII, 1991/92, pp. 61-136; XXIX, 1994, pp. 99-127.
${ }_{2}$ There is no listing for Antonio di Filippo del Tanghero in the following: Thieme-Becker, vol. II, 1908 and vol. XXXII, 1938 (but see vol. XXIX, 1935, p. 40 [cfr. n. 9]) and Allgemeines Künstler-Lexikon, vol. IV, 1992.
${ }^{3}$ See n. 1.
${ }^{4}$ See n. 1.
${ }^{5}$ See n. 1.
${ }^{6}$ Pasquale Nerino Ferri's attribution to Pietro Rosselli (Indice geografico-analitico dei disegni di architettura civile e militare esistenti nella R. Galleria degli Uffizi in Firenze, Rome 1885) were accepted by Bartoli, vol. II, figs. 331-339 (Pietro Rosselli), vol. VI, pp. 61-62 (Pietro Rosselli). My list includes drawings I have seen after finding them reproduced by Bartoli and in photos in the Bibliotheca Hertziana, Rome. Bartoli overlooked one that I may add here: U 1137 Ar (the verso is blank) shows the Colosseum's base, pilaster, and cornice drawn and measured by Antonio del Tanghero: "palmi 5 minuti 32 in ttutto". Antonio da Sangallo il Giovane identified it with a note and his new calculation: "Colonna prima / del Culiseo di Roma / sta cosi"; "a palmi 20 minuti VI". Concerning Ferri's imprecise attributions and how urgent it is to study calligraphies, see Gianni Baldini, Di Antonio Labacco Vercellese, architetto romano del secolo XVI, in: Flor. Mitt., XXXVII, 1993, pp. 337-380 and his p. 374, n. 87.
${ }^{7}$ Anny E. Popp, Unbeachtete Projekte Michelangelos, in: Münchner Jb., N. F., IV, 1927, pp. 389-477, esp. 452-458 (Der Altar von S. Silvestro in Capite), figs. 36-38 (Antonio del Tanghero's plan of S. Silvestro in Capite, and Michelangelo's sketches of the altar); figs. 43-44 (the altar made by "Antonio del Tanghero, Piero und Domenico Rosselli"). J.S. Gaynor/I. Toesca, S. Silvestro in Capite (Le chiese di Roma illustrate, 73), Rome 1963.
${ }^{8}$ Antonio del Tanghero's letter (his orthography revised for a modern standard, in Carteggio [n. 1], vol. II, p. 113): "Michelagnielo, noi abiàno auto dua vostre lletere, pe' le quale vi siamo senpre mai ubbligati. Messer Piero Soderini ci à mostro e' vostro disegnio e piacelli asai, e chosì a noi. E' sarebbe richo e bello, ma lla drigrastia mia volle che chosì achade ch'e' disegnio vost(r)o va a(l)to parmi setanta. Noi no posiano a(n)dare a(l)to se none ci(n)quanta i(n) tuto; e a me mi pare ch'e' disegnio vostro no si posa rist(r)ignire per $\operatorname{lla}(\mathrm{r}) \mathrm{g}(\mathrm{h})$ eza, per amore delle chase, ché ristrignie(n)dolo, le chase sarebano pichole. Avevo dato orddine di fare e' moddello e so'mi fermo. Dicemollo a messer Piero Soderini: llui ci ddise che noi vi schrivesimo e narasimo i' chaso bene. Noi v'abiàno iscrito e preg(h)ia(n)vi, tuti noi, che voi siate cho(n)tento di dare richapito a questa opera, e di questo vi pregamo quanto posiano. Voi potete andare $\mathrm{i}(\mathrm{n})$ drieto qua(n)to volete, ma $\mathrm{a}(\mathrm{l})$ to no potete $\mathrm{a}(\mathrm{n})$ dare più che ci(n)que chane. Priegovi, Michelagniello, qua(n)do ma(n)ddate e' disegnio, che siate cho(n)tento di ma(n)dare a(n)chora la pia(n)ta, e di questo ve ne priego asai, pe(r)ché, vede(n)do la pia(n)ta, no protrò fallire né fare chosa malle fata... Mandovi e' palmo segniato a pu(n)to. Pe' lo vostro A(n)tonio di Fillipo de' $\mathrm{Ta}(\mathrm{n}) \mathrm{g}(\mathrm{h})$ ero $\mathrm{i}(\mathrm{n})$ Roma". See Popp ([n. 7], p. 457) for her calculation of the palm standard and its equivalent in meters. For the latter, see n. 21, below. It should be noted that although Antonio cites palms and canna in his letter and on his drawing (fig. 1), he wrote measurements in piede romano and fractions thereof on his drawing, his symbol being $p$ with a line across the descending stem, then a numeral and fraction. The canna was $7 \frac{1}{2}$ piedi or 10 palmi. Both the piede romano and the palmo romano were used by builders in Rome.
${ }^{9}$ Thieme-Becker, vol. XXIX, 1935, p. 37: Domenico di Pietro Rosselli (Ulrich Middeldorf) and pp. 39-40: Pietro di Giacomo Rosselli (Werner Körte). Domenico Rosselli's death-year is unknown. His membership in the Congregazione dei Virtuosi al Pantheon is documented by Baldini (n. 6), p. 376, n. 106.
10 The complete plan with rectangular choir in $\operatorname{Popp}(\mathrm{n} .7$ ), fig. 37/38, differs greatly from the church plan (fig. 39) showing the altar in the apse.
${ }_{11}$ See n. 6.
12 Cornel von Fabriczy, Die Handzeichnungen Giuliano's da Sangallo, Stuttgart 1902, p. 103. He lists but does not illustrate two drawings, Uffizi 1606 A, U 1607 A, and assumed they are for Giuliano da Sangallo's church of the Madonna delle Carceri. Ferri's attribution (n. 6) was accepted by Fabriczy's source: Stegmann-Geymüller, vol. XI, pp. 13-14, and figs. 33, 34 ("Studien für die Madonna delle Carceri, vielleicht von Giuliano da Majano").
U 1606 Ar and U 1067 Ar are reproduced in a documented history of Giuliano da Sangallo's Sta. Maria delle Carceri: Piero Morselli/Gino Corti, La chiesa di Santa Maria delle Carceri in Prato, (Biblioteca dell'Archivio storico Pratese, 6) Florence 1982, pp. 10, 15, and figs 1, 2 (tentative attribution to Giuliano da Maiano). Morselli and Conti review events (1485) that cancelled Giuliano da Maiano's first project, of which no drawing can be identified; they believe that U 1606 A and U 1607 A "confirm" that these "modified" plans by Giuliano da Maiano satisfied requirements imposed by the Operai of Sta. Maria delle Carceri. Quoting only a part of notes on U 1606 A concerning the "via", Morselli and Conti cite it as the road where Giuliano da Sangallo built Sta. Maria delle Carceri. By paraphrasing Antonio del Tanghero's note, they have misinterpreted a part of it, saying (in my translation of their Italian) "the architect was not to intervene on the wall where there was a sacred image painted". Antonio del Tanghero's note names a tabernacle, not a painted image on a wall; he illustrated its form on his drawings as a U-shaped structure on the pavement-level, subsequently imbedded in the wall behind the altar in the martyrium-shrine.
${ }^{13}$ Giuliano da Maiano's script is no. 58, "portata al catasto del 1480 " in Carlo Pini/Gaetano Milanesi, La scrittura di artisti italiani. Secoli XIV-XVII, Florence 1876. A letter dated 13 September, 1489, signed by Giuliano da Maiano in Naples is reproduced by Doris Carl, Giuliano da Maiano und Lorenzo de' Medici. Ihre Beziehung im Lichte von zwei neuaufgefundenen Briefen, in: Flor. Mitt., XXXVII, 1993, pp. 235-256, and fig. 2. She cites it as the artist's only letter preserved, but calls it not authentic because its tone and literary style is that of a court-scribe in Naples. In that case, the scribe also wrote Giuliano's non-signature. The question may be resolved by comparing this letter of 1489 and Giuliano's document of 1480 , which I cannot do at this time for lack of a photograph of the first.
14 Antonio il Giovane's notes on the sheets have led scholars to identify him as artist of the drawings, disregarding Antonio del Tanghero's script altogether. See two drawings of Theatrum Marcelli (my figs. 2 a. 3) attributed to Pietro Rosselli and said to have been made for Antonio da Sangallo il Giovane: Gustavo Giovannoni, Antonio da Sangallo il Giovane, Rome 1959, vol. II, figs. 45 a. 46 (U 932 Ar and v). Giovannoni misnumbered the sheet as U 760 and U 761.
15 Ibidem (pp. 85, 394-397) for Sangallo's words about his travels to Rome and his relation with Baldassarre Peruzzi.
${ }^{16}$ Giovannoni's chronology of Sangallo in Rome (ibidem, p. 110) begins in 1507; Pietro Rosselli's drawings are said to have been made for Sangallo (p. 419).
${ }^{17}$ See n. 44.
18 Antonio da Sangallo il Giovane wrote ten or more classification-titles on the reverse of sheets with his drawings or by other artists, of which I will cite only one for machine drawings, "Ingegni di piu sorte" (U 1496 Av). All of them are recorded in my essay in: The architectural drawings of Antonio da Sangallo the Younger and his circle, vol. I: Fortifications, machines and festival architecture, ed. Christoph L. Frommel/Nicholas Adams, Cambridge, Mass./London 1994, pp. 81-97.
19 When Bartoli reproduced these drawings as Pietro Rosselli's (see n. 6), he identified them by monument, and noted that Antonio il Giovane had "added" some notes. Bartoli transcribed only one statement of the note that identifies the monument. He reproduced and described (vol. III, p. 62 and fig. 349) as the work of Rosselli, U 1634 Ar with five cornice drawings of various antiquities (Terme Alessandrine, Arco di Camigliano, Porta San Bastiano, and House of Cardinal della Valle). The script is not that of Rosselli or Antonio del Tanghero, but rather an anonymous artist, ca. 1500.
${ }^{20}$ Christoph L. Frommel, Introduction, in: Frommel/Adams (n. 18), p. 46.
${ }^{21}$ Each of these terminologies and corresponding quantities was used in Rome, the Papal State, and Florence until 1871: Angelo Martini, Manuale di metrologia, Turin 1883, pp. 588-596 (Rome); 866 (antico piede romano); 206-220 (braccia, in Florence). There is no citation here of dita, but there is digitus in the antico piede romano. The pes was 12 unciae, the uncia was $1 \frac{1}{3}$ digitus; palmus was 9 unciae or also 3 unciae. This equation does not compare with Sangallo's "misurato a dita di 12 per
palmo e 16 per piedi". He should have written " 16 once per piedi." However, Antonio Labacco measured his Ionic capital in "piede antico partito in 16 dita"; see n. 44 .
${ }^{22}$ Bartoli, vol. II, p. 61, and fig. 335. Giovannoni (n. 14) misnumbered this one of Bartoli's Uffizi numbers.
${ }^{23}$ Reproduced by Frommel (n. 20), p. 47, fig. 41.
${ }^{24}$ Bartoli, vol. II, p. 61, and fig. 336.
${ }_{25}$ Baldassarre Peruzzi architetto, 1481-1981, Sovicille 1981, Siena 1981, pp. 110, 111, with a review of most bibliography through 1966 when Fausto Secchi Tarugi suggested a 1499-1507 dating. Girolamo di Domenico de' Ponsi is not mentioned here as architect of San Sebastiano in Vallepiatta, but he is named in historical records published by Alberto Fiorini (Siena. Immagini, testimonianze e miti nei toponimi della città, Siena 1991, pp. 233-238), who follows the reference in Thieme-Becker, vol. XXVII, 1933, p. 244 (Girolamo di Domenico de' Ponsi called "di Monna Nera", son of the painter, Domenico di Cristofano di Nuccio de' Ponsi), the dates of his life-time unknown. Incidentally, when Bartoli (vol. II, fig. 339, p. 62) published this drawing of the cornice in San Sebastiano in Vallepiatta, he accepted the identification by Ferri ([n. 6], p. 154) as San Sebastiano on Via Appia, Rome, which qualified it as an antiquity; however, Giovannoni ([n. 14], pp. 102, 436) stated that Bartoli had identified Pietro Rosselli's drawing for "San Sebastiano di Siena".
Close analysis of the oratory and the documentary evidence by Günter P. Fehring, Studien über die Kirchenbauten des Francesco di Giorgio, Dissert. unpublished, Würzburg 1956, pp. 136-155. Brief reference to Rosselli's role, in: Gustavo Giovannoni, Saggi sulla architettura del Rinascimento, Milan 1931, p. 90 .
${ }^{26}$ By far the best visual record and report Fiorini (n. 25): history, documents, and illustrations of Via Vallepiatta, Vicolo di Vallepiatta, S. Bastiano de' Tessitori, Piazzetta della Selva, San Sebastiano in Vallepiatta as oratory of the Contrada della Selva, façades of the oratory and of Monasterio delle Gesuate o Povere di Vallepiatta. See now: Manfredo Tafuri, La Chiesa di San Sebastiano in Vallepiatta a Siena, 1493 circa e sgg., in: Francesco di Giorgio architetto, exhibition Siena 1993, cat. ed. Francesco Paolo Fiore/Manfredo Tafuri, Milan ${ }^{2} 1994$, pp. 322-337.
${ }^{27}$ Plan and view of oratory attributed to Peruzzi by Romagnoli and begun in 1507: William Winthrop Kent, The life and works of Baldassare Peruzzi of Siena, New York 1925, pp. 7, 70, and pl. 6; Tafuri (n. 26), p. 304; Fiorini (n. 25), pp. 233-238.

Photographs of façades and doorframes described hereafter are ibidem, p. 238.
${ }^{28}$ Tafuri (n. 26), p. 330.
${ }^{29}$ Ibidem, pp. 322-332.
${ }^{30}$ Allen Stuart Weller, Francesco di Giorgio, 1439-1501, Chicago 1943, pp. 384-391.
${ }^{31}$ Baldassarre Peruzzi (n. 25), pp. 131-158, 159-167 (archival records of the oratory in Siena and biography of Peruzzi). Peruzzi's drawings of antique entablatures and cornices include the following, all reproduced by Heinrich Wurm, Baldassarre Peruzzi. Architekturzeichnungen, Tafelbd., Tübingen 1984: U 550 Ar (cornice located between Theatrum Marcelli and Pons Fabricius), U 631 Ar - 478 Av (on portico of the scaena of Theatrum Marcelli), U 1557 Ar (Sant'Anastasio). Curved-frieze entablatures are on Temple of Concord, Forum Nervae, and Thermae Caracallae.
${ }^{32}$ The following drawings (U $1310 \mathrm{Ar}, \mathrm{U} 4821 \mathrm{Ar}, \mathrm{U} 427 \mathrm{Ar}$ and v) are reproduced by Tafuri (n. 26) at nos. XVII.1.1, XVII.1.2, and XVII.1.5. Other plans have little or no relevance for the oratory: Vasari Sketchbook, fol. 213r, Sir John Soane's Museum, London and Codex Mellon, fol. 70r, Pierpont Morgan Library, New York; U 115 Ar (no. XVII.1.4); U 669 Ar (no. XVII.1.6).
${ }^{33}$ I have presented the evidence in: Checklist and history of manuscripts and drawings in autographs and copies from ca. 1470 to 1687, Bethlehem, Penn. 1992. Antonio da Sangallo il Giovane's copied machine drawings are analyzed and reproduced in: Frommel/Adams (n. 18).
${ }^{34}$ Bartoli, vol. II, p. 61, and fig. 337.
${ }^{35}$ Ibidem, p. 61, and fig. 338.
${ }^{36}$ Ibidem, p. 61, and fig. 333.
${ }^{37}$ Gustina Scaglia, Il Frontespizio di Nerone, la Casa Colonna e la scala di età romana antica in un disegno nel Metropolitan Museum of Art di New York, in: Boll. d'arte, LXXVII, 72, 1992, pp. 35-62. All known drawings of the Frontespizio di Nerone are listed.
${ }^{38}$ Roma ristaurata et Italia illustrata di Biondo da Forli, tradotta in buona lingua volgare per Lucio Fauno, Venice 1542, fol. $23 \mathrm{r}-23 \mathrm{v}$. His Latin, Roma instaurata, is dated in 1444-46. All Cinquecento guidebooks mention the Frontespizio di Nerone, and some illustrate its fragments.
${ }^{39}$ Amato Pietro Frutaz, Le piante di Roma, Rome 1962, vol. II, pl. 183 (by Antonio van den Wyngaerde, ca. 1550); pl. 202 (Leonardo Bufalini, ca. 1550); pl. 237 (Mario Cartaro, 1575); pl. 250 (Stefano Du Perac / Lafrery, 1577); pl. 265 (Antonio Tempesta, 1593).
${ }^{40}$ Ernest Nash, Pictorial dictionary of ancient Rome (London 1961, ${ }^{2} 1962$ ), vol. II, fig. 1167 (Templum Serapis). The site is called the garden of Palazzo Colonna rather than Villa Colonna. Also see this northern slope in figs. 1161-1166.
${ }^{41}$ Bartoli, vol. II, p. 61, and fig. 332. Scaglia (n. 1) for drawings of the Colonnacce and Templum Minervae in Forum Nervae. Also see: Gustina Scaglia, The «Colonnacce» of Forum Nervae as Cronaca's inspiration for the «Cornicione» of Palazzo Strozzi, in: Flor. Mitt., XXXV, 1991, pp. 153-170.
42 Filippo Coarelli, Guida archeologica di Roma, Verona 1974, pp. 102-103 (plan of Imperial Fora).
${ }^{43}$ Bartoli, vol. II, p. 61, and fig. 331.
${ }^{44}$ Baldini (n. 6). This is the first full biography of Antonio Labacco, including the following: a documented genealogy of the Da Morco-Labacco family since 1509; Labacco and colleagues in the Congregazione dei Virtuosi al Pantheon; Antonio's work as land - and construction - surveyor trained in drafting and geometry, which explains his signature "alias abacho" when he wishes to employ someone who knows how to use measuring-tools (squadra); Peruzzi's annotated drawing with comments about Antonio da Morco's use of a yardstick (canna) that exceeds the measurement-norm; Antonio da Sangallo il Giovane's note "dell'Abacho" on his drawing (U 1190 Ar); Labacco's model for St. Peter's; his measured drawing of the Ionic capital ( U 1795 Ar ), which I call a rotated rendering of the volute (p. 353, fig. 14). It is measured in piede antico divided into 16 dita ("Tutto questo chapitello e misurato / chon lo piede anticho partito in 16 dita"). Antonio explains his rotated rendering in three places: "Questo e lo profilo in mezo / la facia dinanzi," "Questo e lo profilo in mezo / a le volute", "Chosi sta per fiancho / in nel mezo". He illustrated with penline and dots his measuring unit: "chon questo e disegnato".
45 Bartoli, vol. II, p. 61, and fig. 334.
${ }^{46}$ Cfr. n. 12.
${ }^{47}$ Giovannoni (n. 14), vol. I, pp. 205-210; vol. II, figs. 154, 156, 162, 163 (Sta. Maria di Loreto, Rome). However, the year 1507 is its founding only, according to James Ackerman, Distance points. Essays in theory and Renaissance art and architecture, Cambridge, Mass./London 1993, p. 379, n. 12. The question is fully resolved now by Christoph Jobst, Die Planungen Antonios da Sangallo des Jüngeren für die Kirche S. Maria di Loreto in Rom (Römische Studien der Bibl. Hertziana, 6), Worms 1992.
48 Piero Sanpaolesi, Brunelleschi, Milan 1962, figs. 66, 67, 68.
${ }^{49}$ Costantino Baroni, Bramante, Bergamo 1944, on pp. 104-107.
${ }^{50}$ Ibidem, pls. on pp. 59-61. Henry Millon/Vittorio Magnago Lampugnani (eds.), Rinascimento. Da Brunelleschi a Michelangelo. La rappresentazione dell'architettura, exhibition Venice 1994, Milan 1994, pp. 463 f., no. 54: Modello ligneo del Duomo di Pavia (Monica Visioli/Donata Vicini) (exhibited also in Washington 1994-95 as no. 1). Bramante is included in the latest history of the model, its builders, collaborators, and modifiers, but the finished model is attributed to Cristoforo Rocchi and Giovan Pietro Fugazza (1487, 1497, 1505, 1526).
${ }^{51}$ Giovannoni (n. 14), vol. II, figs. 12, 13 (U 962 Ar), figs. 9-11 (U $526 \mathrm{Ar} ; \mathrm{U} 1368 \mathrm{Ar}$ and v).
${ }^{52}$ Ibidem, vol. I, pp. 110, 223-226; vol. II, figs. 15, 201-204.
${ }^{53}$ Vasari-CdL, vol. V, p. 240.
54 Giovannoni (n. 14), vol. II, fig. 158 (Isola Bisentina).
55 A documented history, legends and their origins, and description of the oratory-shrine founded in 1509; Walther Buchowiecki, Handbuch der Kirchen Roms, Vienna 1970, vol. II, pp. 110-113: S. Giovanni in Oleo; Guglielmo Matthiae, S. Giovanni a Porta Latina e l'Oratorio di S. Giovanni in Oleo, (Le chiese di Roma illustrate, 51) Rome 1970, p. 6, and fig. 27. The oratory is discussed as the martyrium; a list of predecessors, possibly a pagan mausoleum was here before the Aurelian wall transformed the site, and the area was adapted to new use; the commemorative building is due to the legend of martyrdom here of St. John the Evangelist. This is followed by a discussion of the basilica of S. Giovanni a Porta Latina, property of the Basilica Lateranensis who administered properties on the outer side of Porta Latina. Also see: Mariano Armellini, Le chiese di Roma dal secolo IV al XIX, Rome 1942, pp. 635-636 (S. Giovanni in Oleo on the site of S. Giovanni Evangelista's martyrdom "rebuilt" in 1509); Giuseppe Tomasetti, La campagna romana, antica, medievale e moderna, ed. Luisa Cbiumenti/ Fernando Bilancia, Rome 1976, vol. IV (Via latina), pp. 13-29 (Le porte Latine e Metroni), esp. pp. 1921, with bibliography not listed above, names of land-owners in vicinity, illustrations of walls, gate, oratory and basilica (S. Giovanni in Oleo; S. Giovanni a Porta Latina). Calling attention to topographic circumstances of S. Giovanni in Oleo, Armellini notes the slight rise of ground on which the oratory was built, known in the Middle Ages as Mons Calvarellus, later Monte d'Oro. Nash (n. 40), vol. II, fig. 953 (Porta Latina, its outerside, history, bibliography, closing of the city-gate many times in XVIXIX centuries, reopened in 1911). Catacombs of SS. Gordiano ed Epimaco and tombs in ruins above ground in the monastery of the Padri Marianisti at Via Latina no. 39 (S. Giovanni a Porta Latina)
are briefly described by Lorenzo Quilici, La Via Latina da Roma a Castel Savelli, Rome 1978, pp. 22 23 , and figs. 4 a. 5.
${ }^{56}$ Buchowiecki (n. 55), p. 110.
${ }^{57}$ Frutaz (n. 39), vol. II, pl. 267 (Bufalini's plan, 1551).
${ }^{58}$ Matthiae (n. 55) stated that the Padri Clareni in the XIV ${ }^{\text {th }}$ century got permission to constitute themselves as autonomous congregation, found place in the monastery and basilica until 1473; the titulus of a cardinal for the basilica occured in 1517 (pp. 21-22; 24-25); the Franciscans were here in 1905 and are in residence now (pp. 24-29). No document for any administrator of the Oratory. The Clarèni were Franciscan followers of Angelo Clarèno (1247-1337), founder of the Franciscan Spirituali in the Marches and Umbria.
59 Giovannoni (n. 14), vol. II, fig. 158 (Tempietto, Isola Bisentina); fig. 159 (Cappella di S. Giovanni in Oleo a Porta Latina); figs. 15, 202-204 (plans of the octagonal church of Montemoro also called Madonna di Monte d'Oro at Montefiascone).
${ }^{60}$ Buchowiecki (n. 55), p. 110 (Borromini's rebuilding the interior). In June, 1992, the Oratory interior is again being restored.
${ }^{61}$ Armellini (n. 55), p. 635; Tomasetti (n. 55), p. 19.
${ }^{62}$ J.C. Robinson, A critical account of the drawings by Michel Angelo and Raffaello in the University Galleries, Oxford, Oxford 1870, pp. 59-61: drawing no. 48 described as three separate sheets of studies in the same mount, a study of architecture (not reproduced), transcription of some part of a letter of $18^{\text {th }}$ Oct. 1524. The Oxford sketches of an octagonal structure with a freestanding column at each point of the octagon, no. 48, 2, illustrated in: Karl Frey, Die Handzeichnungen Michelagnolos Buonarroti, Berlin 1909-11, vol. I, pl. 138-c; vol. III, pp. 65-66. Robinson first noted that the Oxford drawing is related to one in the British Museum (Inv. 1859-6-25-246), and dated both ca. 1524. Frey wondered whether Michelangelo made his drawing for the Libreria di San Lorenzo or the tomb-monument of Barbazza. He dated the letter written on the reverse in 1525. Henry Thode, Michelangelo. Kritische Untersuchungen über seine Werke, Berlin 1908-13, vol. III, p. 117, no. 288: British Museum, Inv. 1859-6-25-246, drawing, pp. 197-198, no. 430: Oxford, no. 48. Wolf Maurenbrecher, Die Aufzeichnungen des Michelangelo Buonarroti im Britischen Museum in London und im Vermächtnis Ernst Steinmann in Rom, Leipzig 1938, p. 280. Maurenbrecher dated the Oxford drawing sometime between August and October, 1524.
${ }^{63}$ The drawing (in Album vol. 2510) is thought to represent a wooden tabernacle for an undesignated monument: Hubertus Günther, Das Studium der antiken Architektur in den Zeichnungen der Hochrenaissance, Tübingen 1988, p. 352, and pl. 74-a.
${ }^{64}$ A silver reliquary probably made ca. 1510 for the girdle of St. Mary Magdalen is an octagonal structure with niches and a dome, considered the earliest example of an antiquity reproduced in silver. It is in the treasury of S. Giovanni in Laterano: Giacomo De Nicola, Il tesoro di San Giovanni in Laterano fino al secolo XV, in: Boll. d'arte, III, 1909, pp. 19-53, and fig. 16.
${ }^{65}$ Frey (n. 62).
${ }^{66}$ Johannes Wilde, Italian drawings in the Department of Prints and Drawings in the British Museum, Michelangelo and his studies, London 1953, pp. 45-47, and pl. XXXVIII, no. 24.
${ }^{67}$ Venturi, vol. XI, 2, p. 177, and fig. 173.
${ }^{68}$ Concerning graphic developments for architectural drawings in plan, elevation, and section in the Quattrocento: Wolfgang Lotz, Studies in Italian Renaissance architecture, Cambridge, Mass./London 1977, pp. 1-41; Pier Nicola Pagliara, Osservazioni sulle tecniche grafiche di alcuni disegni di Antonio da Sangallo il Giovane, in: Il Disegno di architettura, congress Milan 1988, acts ed. Paolo Carpeggiani/ Luciano Patetta, Milan 1989, pp. 169-174.
${ }^{69}$ Gustina Scaglia, Eleven facsimile drawings of the Pantheon's vestibule, in: Architettura (in press).
${ }^{70}$ Pagliara (n. 68).

## RIASSUNTO

Antonio del Tanghero venne riscoperto da Anny E. Popp con la pubblicazione (1927) della pianta con misure di San Silvestro in Capite, a Roma. La studiosa trovò la sua firma in una lettera diretta a Michelangelo, a Firenze, in cui egli chiedeva di ridimensionare la pianta dell'altare con tabernacolo-reliquiario per l'abside di San Giovanni Battista. Pietro Soderini aveva commissionato questo progetto a Pietro Rosselli, il cui figlio, Domenico, accompagnò Antonio da Firenze a Roma (1518). La grafia di Antonio compare anche su sei fogli di disegni con note e misure di parti architettoniche di antichità romane, sul disegno di una cornice per un nuovo oratorio a Siena, e su due piante per una nuova arca ottagonale di martire, di cui la seconda aggiunge, dietro l'arca stessa, l'abitazione di un sacerdote. Conservati agli Uffizi, questi disegni, ad eccezione degli ultimi due, sono stati attribuiti a Pietro Rosselli. Dopo che Antonio ebbe completato i suoi disegni di antichità e della cornice, Antonio da Sangallo il Giovane aggiunse annotazioni in cui vengono calcolate di nuovo le dimensioni originali. Perché egli l'abbia fatto e quando abbia acquistato i sette fogli rimane questione aperta. Si è pensato che Giuliano da Sangallo o Giuliano da Maiano abbiano fatto queste piante per l'arca di un martire con un antico tabernacolo collocato su una strada per Santa Maria delle Carceri a Prato, costruita su di una pianta a croce greca. I pilastri angolati e le colonne libere su di un podio annesse loro che caratterizzano l'arca compaiono su disegni architettonici a Roma dopo l'arrivo del Bramante. La chiesa pratese fu completata una decina d'anni prima. Secondo la mia ipotesi la pianta si riferisce all'oratorio di San Giovanni in Oleo costruito sulla Via Latina; l'antico tabernacolo, sotto il livello del terreno, vi si trova incorporato nel muro dietro all'altare.

## Photo credits:

Casa Buonarroti, Florence: fig. 1. - From Bartoli: figs. 2-10. - Soprintendenza, Florence: figs. 11-13. - British Museum, London: fig. 14. - Gabinetto Nazionale delle Stampe, Rome: fig. 15. - Biblioteca Medicea Laurenziana, Florence: fig. 16.

