Figure 1 House plan from the 1563 *libro delle case* of the confraternity of the Ssma Annunziata (Ssma Annunziata 920, c. 60r, Archivio di Stato di Roma. Reproduced with the permission of the Ministero per i beni e le attività culturali, ASR 2/2012. Further reproduction is expressly prohibited)
Visual Documents, Property Archives, and the Map of the City of Rome: 1563–1712

By 1563 the lay confraternity of the SSma Annunziata at the Domenican convent of Santa Maria Sopra Minerva in Rome had been keeping records of the property it owned in the city for centuries. But in the face of fundamental changes in the market for rental property and under the pressure of a more scrupulous oversight by the Church hierarchy, the officers of the Annunziata commissioned a new kind of inventory, one that differed from all previous documents by being based on a visual record. The inventory was a book, in folio format, called the libro delle case, or house book. Each page presented a single building in a plan that filled the sheet. The plans were extensively annotated, with inscriptions that recorded dimensions, identified the functions of rooms, and introduced data such as the name of renters drawn from the vast archive of textual documents on which the book was based (Figure 1). Together, plans and inscriptions made the house book of the Annunziata an archive in miniature. In doing so, this book and its many Roman successors set the archive in motion, and in the eighteenth century, when the books became digests of material from all parts of the archive, it was the visual document—the plan—that organized them. In the process, the plans themselves evolved.

The 150-year period of house book history coincides with a moment when Rome was under intense scrutiny by makers of topographic images. Almost every corner of the city was depicted in prints, and cartographers, developing the techniques of geometric survey, made ever more accurate and comprehensive maps of the city as a whole. The changing form of house book plans offers a record of the impact of these images. This article examines the nature of property description in this period of visual documentation together with the structure of the illustrated archive to explore the evolving consciousness about city space in early modern Rome.

The appearance of plans in the archives of the SSma Annunziata participates in the explosion of images that is one of the distinctive aspects of sixteenth-century culture. The skills for recording the phenomena of nature developed by Renaissance artists and the methods of mechanical reproduction that made it possible to share this research transformed scientific inquiry. But images had to face a long-established resistance. Pliny the Elder, Galen, and, following them, the seventh-century cleric and encyclopedist Isidore of Seville all rejected illustration. “Pictura autem dicta quasi fictura. Est enim imago ficta, non veritas” (Image! You might as well say fiction. For this is a fictitious...
image, and not the truth). Authority for these scholars resided with the written word. There is, however, another scientific tradition that held a very different opinion of visual representation. Euclid’s *Elements* and the writings of the Roman land surveyors, the *Corpus agrimensorum romanorum*, were both heavily illustrated. Even Ptolemy’s *Geography*, which the author provided only with lists of longitude and latitude to locate places, was supplemented with maps soon after its rediscovery at the end of the thirteenth century. The illustrations in these texts are based on geometry and take the form of diagrams.

It is geometry’s promise of objectivity and the abstraction of the diagram that seems to have broken the barrier to images in the archive. The earliest visual documents to find a place in the official record are the sketch plans that appear from the early fifteenth century in connection with court cases concerning the ownership of land. Not before the middle of the sixteenth century, however, were visual documents systematically archived as a regular part of administrative practice. The Venetian administration of its mainland territories provides some of the earliest examples. The Provveditori alle Fortezze, founded in 1542, required the city’s officers in the provinces to send drawings or models of any project of military architecture to the agency’s office in Venice. The Provveditori sopra Beni Inculti, founded in 1556, demanded similar documentation from private individuals. The Beni Inculti oversaw drainage and irrigation schemes on undeveloped or under-producing land in the mainland territories. In an effort to coordinate the exploitation of the waters and to ensure that a project to improve one estate did not prejudice another, the office had landowners submit a plan of their project along with the petition. A copy of the scheme, often made by surveyors connected to the state agency, remained with the landowner and another with the state agency. That archive survives today as one of the most extensive from the early period of visual documentation.

The objectivity of regular geometric forms made architecture an especially suitable subject for visual representation. Vitruvius himself included nine or ten illustrations in his treatise, all geometric “formae, sive uti Graeci dicunt schemata,” none of which survived to his post-antique readers. Alberti’s exclusion of images from his mid-fifteenth-century *de re aedificatoria* matches the Vitruvius he knew and his own refined literary practice. His successors, on other hand, men whose training was in the crafts, assign images a central role in the structure of their work. Francesco di Giorgio thought images essential to the representation of an architectural idea. Where authors provide no drawings, he writes, “few readers can understand them.” When Francesco gives an extended description of the plan of a hilltop town, for example, he concludes by deferring to the image: “as it is demonstrated in the image.” Serlio proves the value of the image in his presentation of the Ionic base, a task that had strained Alberti’s reliance on words. Proportions were not a problem for Alberti. He was satisfied to name the moldings in sequence and give their dimensions. To describe the molding profiles, however, he had to resort to more imaginative strategies. The first was his familiar use of simile (e.g., “The scotia is a circular recess, like that in the wheel of a pulley”). The second was unique. He refers to the form of letters to conjure the form of a profile. For example: “The ovolo I was almost tempted to call ivy, because it extends and clings; its lineament is like the letter C surmounted by the letter L, like so.” Here, for the only time, the treatises introduce a figure, the letter C with an L above, forms he could expect any scribe to reproduce. Serlio’s text is no less mathematical than Alberti’s—proportion is the essence of the problem—and is even more antiquarian in his manner of identifying the moldings that make up the composition. The difference is the image that makes the sequence of forms and dimensions clear. Though an abstract profile, the image depends entirely on visual strategies. The dimensions are recorded in the accompanying text (Figure 2). In Palladio the relationship between image and text is even more systematic. The page that presents the Villa Valmarana at Lisiera has a short text that does not attempt a comprehensive description. Its purpose is to call attention to certain features—a porch, towers, a hall—and to present qualities not visible, or adequately prominent, in the plan and elevation that dominate the page. The text informs the reader that the porches are ionic, the hall is barrel vaulted, and that there are courtyards in front and back of the building. The presentation of the design, in all its compositional and proportional complexity, is consigned to the image (Figure 3).

It is on this tradition of representation that the illustrations of the *libri* depend. This is architectural drawing based on measurement and proportionality, not geometry. It is orthogonal both in plan and elevation, abstract but not without body. Elevations can have pictorial details—flower pots on window sills or awnings over shop openings—but the surface of the wall itself is always parallel to the plane of projection. Plans register wall thicknesses—even when they cannot be known—and reinforce the distinction between wall fabric and clear space with colored wash. If the plans are not entirely consistent about the level at which they are cut, they are never joined to an elevation laid down on the sheet like medieval plans or even sixteenth-century
plans prepared by notaries. The plans of the libri are the work of architects.

The appearance of the house books is tied to a dramatic transformation of the Roman real estate market. The city’s population was in rapid expansion. One estimate records growth from 40,000 in 1513 to 122,000 in 1655 and most of this population lived in rented accommodations. Inflation soared during this period: a 200 percent increase is the general estimate. Grain prices rose even more steeply, from 1¾ scudi per measure of grain at the beginning to 7 scudi by the end of the sixteenth century. Rents, of course, followed, and the pressure of inflation transformed the way property was leased.

Through the first half of the sixteenth century most Roman property was let on the basis of contracts that ran for twenty-nine years (called perpetual contracts), for the lifetime of the leaseholder, or, not unusually, through his life and that of two more generations. Obligations included maintenance, expressed in terms of a sum to be spent on repairs (meglioramenti) over a period that ranged from three to twenty years and an annual rent. Sums could be very modest, a rent of two scudi for a shop with rooms above was not unusual, meglioramenti might be set at 15 scudi. For institutions with limited capital this was a way of maintaining property, but it was not a method for exploiting it as a source of income. In the hot Roman rental market of the sixteenth century, the financial loss to the proprietor and value to the tenant could be substantial. An officer of one of the institutional landlords recorded this situation in a report of 1577. The property was a two-shop house in Banchi (the area near the Ponte Sant’Angelo) that was held by the son of the original leaseholder in a contract with a three-generation term. This man, a tailor, had sublet one of the shop units and most of the rooms of the other (including the upstairs room, the attic, the cellar, and even the space of a closed stairway), leaving himself only one of the ground-floor work spaces. He paid an annual rent of

Figure 2. Profile of a column base (Sebastiano Serlio, Regole generali d’architettura, 1537.4.7, 158v, from Sebastian Serlio on Architecture, trans. Vaughan Hart and Peter Hicks [New Haven: Yale University Press, 1996], 1: 320)
a year was rebuilt as three apartments and rented in 1596 for 46 scudi. Examples are numerous. Roberto Fregna, who wrote the pioneering study on the real estate of the pious institutions, claimed a tenfold increase in rents over the course of the century. This made real estate as profitable an investment as shares in the public debt, and it was from real estate that the institutions derived the income for their charitable activities. Always the recipient of legacies, the institutions became buyers. The confraternity of the Annunziata owned 65 houses in 1563 and 204 in 1636; the hospital of the SSma Trinità dei Pellegrini e Convalescenti had 50 houses in 1597 and 134 in 1680. It is in the context of the emphasis on property as capital investment, that the libri delle case appear.

The damage of long-term leases to the finances of landowners was obvious. In 1563 the Council of Trent declared long-term leases made by ecclesiastical institutions in the last thirty years to be void. While the decree was not universally enforced, the percentage of long-term leases began to decline. The rental contracts that replaced them were typically from one to nine years in length. Thanks to the turnover, income to the proprietors could rise with the market. For example: a property on the Via Papalis that earned 46 scudi in 1541 was rented for 120 scudi in 1585-87. With the shift to short-term leasing, maintenance—including remodeling—fell to the proprietors and this, too, could increase income. A house at the Trevi fountain that in 1538 was let on a life lease for 3 scudi 8½ scudi to the proprietor, in this case the company of the SSma Annunziata at Santa Maria sopra Minerva, and received 114 scudi from his tenants.

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litigation—both in the original and in chronologically ordered transcriptions, are preserved in the archives of the Roman institutions from at least the late Middle Ages. The catasto of the Hospital of San Salvatore of 1420 is a particularly systematic collection. It records possessions of many kinds, some of them properties inside the city and others in the immediately surrounding countryside. They are ordered by rione (the city’s administrative subdivisions) and, for the land outside the walls, by city gate. Entries are a paragraph in length. Legal matters dominate. The document of acquisition is cited by notary and date. Tenants and the terms of rental are recorded in a list to which names of subsequent leaseholders and the terms of their contract were added through the life of the document. Information on the property itself is brief and formulaic. Location is identified by a word or phrase. Boundaries are defined by the names of the owners of adjacent properties. Occasionally the use of the property is specified, sometimes spaces are named. This catasto gave the hospital as complete a picture of its holdings as was available to any institution of the later Middle Ages. It is a rare document.28

The information contained in the libri delle case is more specialized and also more extensive than the inventories that precede them. The libri record only buildings, but they are also the organizing core of a documentary system: one series of documents traces the histories of the properties, including documents of acquisition, rental history, and payment of rent. Other books contain the inspection reports by the officers of the institution. Finally, there is the visual record of the physical form of the building in the libri themselves. The greater detail of this record reflects the new importance of the houses in the finances of the institutions but it is also part of a general systematization of the administration of the institutions. In 1562 the Council of Trent placed charitable legacies under the protection of bishops and part of the administrative reform was the institution of episcopal reviews (visite) of pious institutions.29 The 1563 decree about long-term leases shows that property was part of the council’s concern and the production of the libro delle case of SSma Annunziata, the first of the house books, in the same year has every appearance of being a response to the new administrative structure.30

The relationship of the libri to archival reform is made explicit by the events that surround the production of the magnificent documentation project undertaken by the Venerable English College in 1630–31.31 The college was formed in response to the Anglican schism of 1534 to train Catholic priests at a site outside of England. In 1578 it took over the fourteenth-century Hospice of the Most Holy Trinity and St. Thomas of Canterbury, a hospice for pilgrims and a corporation of English nationals resident in Rome. Gregory XIII gave the direction of the institution to the Jesuit order in the following year but it was only in 1598 that internal conflicts were resolved and the order came into full control of the college. In 1630 the rector Thomas Fitzherbert commissioned a reorganization of the archive and two centuries of accumulated documents were divided into three groups, each assigned to a separate storage space. One of these armadii was set aside for the documents relating to property and a new review, or catasto, was commissioned to rationalize the material. The project produced a book of plans and three coordinated volumes containing verbal descriptions of each property. Although the properties of the hospice and college had been inspected regularly throughout the previous century (the inventory of the archives records visite of 1553, 1557, 1563, 1592, and 1602–16), the catasto of 1630 was singled out as unique because of its format, including the “Delineatio Ichnographica.” A similar project was undertaken at the same time at the Collegio Germanico Ungarico, also directed by the Jesuits.12

There was some urgency to finding a new, more comprehensive method for inventorying property. The first of the Roman house books, the 1563 libro of SSma Annunziata, describes the project: “[t]o create a permanent record (of the company’s property), to protect its rights, and to eliminate the possibility of fraud.”33 The “fraudi” were claims against the institution’s property. The instructions to the officers in charge of the visite of 1577 specifically charge them to investigate “usurpations” by neighbors.34 Disagreements also arose with renters. In 1561 the officers of the Hospital of San Giacomo degli Incurabili settled a claim by a leaseholder that asserted that only part of the house she occupied was built on land belonging to the hospital.35 In the absence of plans, it was only the history of the site preserved in the memory of witnesses and recorded piecemeal in documents of acquisition and lease that could decide the issue.36 The libri were a new source of evidence and, of course, one controlled by the institutions.17

The structuring of the archives around images introduced a new figure into the editorial team that produced the real estate documents. When the record was limited to text, and the text to a few conventional terms for the description of property, and when the emphasis of the archives was on issues of ownership and rental, authorship could reasonably be left to the officers of the institution and to their notary. In the first of the libri, tradition prevails. The 1563 libro of SSma Annunziata, with its sixty-five plans, was surely prepared by a draftsman, but it is only the officers of the company who are named on the book’s frontispiece.38 That
changed quickly. The 1597 libro of the Hospital of the Trinità dei Pellegrini and the contemporary one of the SSma Salvatore were signed by Giovanni Paolo Maggi, "architetto." Maggi was only the first of a series of architects involved in the preparation of the libri. The book of notes from a survey of the houses of the Chapter of St. Peter's from 1600 was inscribed by Prospero de'Rocchi, "architetto di detto Capitolo," the 1630 libro of the Venerable English College was credited to Orazio Torriani "architetto del medesimo Collegio." When the officers of the Annunziata commissioned a second book in 1636, the frontispiece identified the man who made it: "Francesco Peperelli architetto della detta archiconfraternita." These "architects" are not the great names of Roman design. They worked as measurers, estimators, administrators, and advisors in the building trades, and occasionally as participants in design competitions. They looked after the buildings of the institutions that employed them and were regularly the ones called on to prepare the house books.

Their presence cannot have failed to make a difference in the character of the documents. Architects were not only at work at the drafting table, but also at the site, and there they observed both what the officers asked them to look at and all of those aspects of buildings that they alone would recognize. The 1630 books of the English College show the extent to which the architect could dominate the process. In this case, three volumes of verbal description report on the inspections that accompanied the plans. The visita was made by two officers of the company and Torriani, their architect. The substance of the entries makes it clear that the architect was the most active of the three (see below) but it is also the explicit testimony of the document that the texts were prepared by Torriani, "mano proprio."

Property description in the archives of the landowning institutions from the period before 1563, that is, in the documents that precede the libri, is extremely limited. Where texts say anything about the physical form of buildings, it is to catalog their parts. The texts are short and formulaic. An entry in the 1420 Catastum Bonorum of the SSma Salvatore is characteristic: "A house and land, partly two storied, with a garden at the rear." A later fifteenth-century catasto document from the same archive is a bit longer but not fundamentally different: "A house and land, with an upper story and a tile roof, containing a hall and a bed chamber and with a portico in front." Description is not the function of these documents. They are concerned with recording the evidence of ownership and the terms of the contracts between proprietor and tenant. Description is relevant only to the extent that it identified the property and for that purpose the list of abutters was more useful than a catalog of spaces. It is only in the period of short-term rental, institutional maintenance, and the maximization of profit, that the accommodations and condition of the building became as relevant to the proprietor as the land on which it sat.

The 1577 inspection report of houses of the SSma Annunziata claims much the same purpose as the earlier documents. Its extensive introduction specifies the information to be included and all of it concerns the conditions of the lease. Individual entries begin by identifying the property in the usual way: naming the leaseholder, the notary who wrote the contract, and recording the rent. This occupies a short paragraph at the top of each page and is written in the same hand as the introduction to the volume as a whole. But eleven of the thirty-three entries are supplemented with texts written by someone else. The subject of the added lines is the physical building and these are much more detailed descriptions than any that have preceded them in the archives of the institutions.

A house on the Corso, opposite Santa Maria in Via Lata, is described as follows: "At the ground level, a bedroom and a kitchen, with two cellars, a courtyard with a well, and a smaller court with a stable and a room for servants above. On the first upper level: a hall, two rooms and a small bedroom. On the mezzanine a small bedroom and, at the top of the stairs below the roof, a bedroom and a loggia."

The new attention to the building is part of the same set of interests that produced the libri delle case. In fact, the connection to the libri is very direct. The instructions to the inspectors included the order "If there is no image, have one made." In this case it would not have been necessary. The libro of 1563 already had one.

The page devoted to the house on the Corso in the libro of 1563 is filled with new information. It begins, however, with the traditional data. An inscription in the upper-right corner identifies its rione (Trevi), the building type (house), lease holder, and rent. The image reports on the shape of the structure; its size and internal division, plus the relative position of rooms, doors, and stairs—all the fundamental information of any plan. The plan in the Annunziata’s libro also records a well, a feeding trough for horses, a basin for water, a drain, three hearths and chimneys. The layout of this house may have been so simple that a plan was not needed when the inspector was in the building. But the plan made it knowable off site, whether at a meeting of the company’s officers, an encounter with a potential tenant, or in a courtroom. From the plan, interested parties could learn many things that even the expanded description of 1577 did not tell. It is only from the plan that someone not
in the house could know, for example, that a corridor gave direct access to the rear spaces and that multiple stairs allowed similarly independent access to separate apartments on the building’s upper levels (Figure 4).  

Compared to this degree of detail, the account of the upper levels of the house is spare. The single plan represents only the building’s ground floor. A text at the lower right lists the rooms above, level by level: “Under this house are two cellars and on the first story above ground there is a hall and two bedrooms. On the second story (there are) two bedrooms and a loggia.” Later books use the more visual system applied to secondary spaces at the rear of Figure 4, ordering the description vertically. Inscriptions placed within each room in the ground-floor plan name the spaces above and below: “A room, another one above, and above that one a third, open to the roof” (Figure 5).
offered textual descriptions that were more complete and capable than any written earlier. The book prepared for the Hospital of San Giacomo degli Incurabili in 1576 was illustrated only by the elevations of the houses, leaving the description of the internal organization of the properties to the text. The catalog entry for a property on the Strada del Popolo in the Campo Marzio describes the ground level from the front of the property to the back, names the cellars, and describes two upper levels. Dimensions give the size of each space and relationships are suggested by prepositional phrases. The cellar for the upper apartment is

absence of multiple plans—only one of the Roman books contains plans of all the levels of the properties—the ground-floor plan implies that upper levels follow its divisions, which is often not the case. This is an area where texts can be more subtle. The description of upper-level rooms in the 1577 inspection report includes information about mezzanines and half stories that the plan in the house book simply ignores.

Once plans had entered the record of real estate, even house books that did not include them displayed a heightened interest in the physical aspects of the buildings and offered textual descriptions that were more complete and capable than any written earlier. The book prepared for the Hospital of San Giacomo degli Incurabili in 1576 was illustrated only by the elevations of the houses, leaving the description of the internal organization of the properties to the text. The catalog entry for a property on the Strada del Popolo in the Campo Marzio describes the ground level from the front of the property to the back, names the cellars, and describes two upper levels. Dimensions give the size of each space and relationships are suggested by prepositional phrases. The cellar for the upper apartment is
“below the shop.” “Next to (it)” is the second room of the ground level. The stair is “in the middle of the hallway.” Details of furnishing and use give a suggestive picture of the building as it was inhabited. A single-story structure behind the court is “where they slaughter the animals” (the house was let to a butcher); the well in the court “is for the use of both (the tenants who live) above and those below,” the room on the second floor that faces the court has a hearth and chimney, a toilet, and a wooden balcony. The elevation adds some detail to the descriptions—such as the placement of windows, doors, and hearths on one side of the building, and, of course, the number of stories. Its principal function, however, must be the one suggested by the last line of the text that complains that the building on the Strada del Popolo “doesn’t have a marker” (“segno del loco”). This must refer to a symbol identifying the hospital as proprietor. The same markers would later come to identify rooms named on the upper stories. Inscriptions in the plan help when they refer to the spaces of the upper levels that are identified in the text. The space facing the court consists of a “hallway below and an open loggia above.” The room at the back of the property is marked “stable and above it a hayloft under the roof.”

Both Torriani’s plan and his text are thick with details about physical things but what the proliferation of information does to the two documents is very different. In the text detail becomes minutia. Whatever continuity the description might have had is lost under the impact of the list. Excessive information on the structure of doors and the materials of windows makes it very difficult to construct a mental picture of the house. The experience of reading the plan, on the other hand, is only intensified by the concentration of information. Details such as the irregular course of a wall, the outline of a well or chimney, and the inscriptions that supplement visual representation suggest close observation without weakening the viewer’s perception of the larger forms of the house. The capacity of the image to synthesize information in a way that allows details to reinforce one another rather than compete for attention is perhaps its greatest contribution to the archive.

The detail and precision of Torriani’s plans mark an important moment of evolution in the house book form. The difference between these plans and those of the Annunziata house book of 1563 is striking and literally quantifiable. The surveyor of 1563 measured the length and width of rooms; Torriani presented the dimensions of each section of wall. The plans also include a scale at the bottom of the page and with it made a claim about the proportionality of the plan as a whole. The Annunziata plans have no scale and, indeed, are only roughly proportional (compare Figures 4, 6).
Figure 6 House plan from the _libro delle case_ of the Venerable English College, Rome, 1630 (Liber 249, c. 5r. Reproduced with the permission of the Rector of the Venerable English College)

Figure 7 House plan from the _libro delle case_ of the Venerable English College, Rome (Liber 246, cc. 17v, 18r. Reproduced with the permission of the Rector of the Venerable English College)
Torriani’s plan is more detailed in another way as well. The plans of Annunziata 920 are much more regular than his. Where possible they sit foursquare on the page, with perimeter walls parallel to the edges of the book. Deviations from the orthogonal, where they are recorded, are formed freely, bending from one orientation to another. The plans of the English College properties are less determined by their frame. The fronts of buildings do not often parallel the bottom of the sheet and the plans frequently sit obliquely on the page. The perimeter of buildings is rarely rectangular and walls change direction abruptly—at angles, not curves. These irregularities suggest not just more careful observation but also the use of geometric survey in the production of the plans.

At the scale of the building, geometric survey demanded the measurement of the orientation of walls as well as their length. Raphael described a method for observing orientation in his letter to Leo X of 1516–17 as part of the project to make a graphic reconstruction of the ruins of ancient Rome.55 Its practice is documented in a plan from his workshop of the site of the Palazzo Alberini in Rome of ca. 1519.56 The instrument he used was a circular angle-measuring device fitted with a magnetic compass that later sixteenth-century authors would call a busola. Readings from these early theodolites were recorded by the name of the wind—the segment of the compass—and the number of degrees within that segment. This notation is never found within the house book plans. Its value was related to the production of the plans, not to their use by the landowner. For the most part, it is only the representation of irregularity that speaks for survey. But in the one case where evidence about the process of making the house plans survives, so, too, does evidence for geometric survey. The document is the book of on-site sketch plans made by Prospero de’Rocchi in 1600 in connection with a house book for the Chapter of St. Peter’s.57 For some, but not all of the chapter’s properties, de’Rocchi measures the orientation of street fronts. In a plan of an inn and bakery on the Vatican Borgo Nuovo, the orientation of the angled front of the building was measured twice, with results of northwest 32 degrees for the first sitting and 39 degrees for the second (Figure 8).

The great achievement of geometric survey is the measured representation of irregularity. The busola allowed the surveyor to record non-orthogonal forms and also to reproduce them on a scaled plan.58 The plan could be reproduced by reconstructing it anew from the survey notations or traced onto another sheet at the same scale. Scaling up or down without starting from the beginning could be accomplished by a system of coordinates. The house book of the English College demonstrates this stage of the process. Underlying the pen and wash plans of the college’s house book is a thick network of pencil lines. Most of them define the position of the inked lines that represent the walls of the buildings but there are some that were never meant to be seen. One such line runs obliquely through the courts of the plan of the Via di Monserrato house. Its purpose is suggested by a plan of the block of houses belonging to the college adjacent to the church of San Crisogono in Trastevere. In this drawing the lines form a rectangle anchored at a corner of the building and completely surround the irregular site. At significant points in the plan, measurements were taken from the perimeter of the building to the bounding orthogonals. They control the deviation of the building’s perimeter from the regular bounding form and, along with the complexity and detail of forms registered in the plan, reveal a very different sense of what the images in the house books should record (Figures 9, 10). By comparison, the representations of the Annunziata book of 1563 are much simpler and more conventional.

In 1636 the confraternity of the Annunziata commissioned a second house book from Francesco Pepparelli, then the confraternity’s architect. A two-room, four-story house near the Minerva on the modern Via del Pie di Marno was one of the properties that appears both in this volume and in the 1563 book. Its irregular perimeter offered a particular challenge to the surveyors. The back and front walls of the house are not parallel and the side walls connect the two through a complex series of shifting planes. The draftsman of the 1563 plan represented this with a single bend; Pepparelli recorded all the differently oriented segments of every wall (Figure 11).

Pepparelli’s book gives the context of each property a new level of attention. In the 1563 plan the house near the Minerva is presented in isolation, surrounded by the white space of the paper. The spatial field of the seventeenth-century plan is much broader. Neighbors are named and the extension of their properties into the surrounding city suggested by the continuation of bounding walls well beyond their borders with the confraternity’s house. Wider, too, is the range of issues between neighbors recorded in the plan. Responsibility for shared structure is inscribed in the plans in the form of a code that determines the color of bounding walls. Where the adjacent property is owned by the confraternity, and the common wall is fully their responsibility, the wall is a single color, pink. Where the abutter is another owner, the color of the wall is evenly divided between pink and the purple that represents the abutter’s interest. The plan also asserts the company’s rights.
in relation to its neighbors. Windows within shared walls are marked by an inscription indicating that they are the source of light for the house, evoking a privilege written into Roman law that protects property owners against the loss of illumination to future construction.\textsuperscript{59} Drainage is another issue defined by law and the plans duly register the pitch of roofs and the customary arrangement of waters (Figure 12).

Perhaps the most significant innovation of the seventeenth-century plans is their method for identifying the location of houses. Real estate records of the period before the house books named streets—often using the generic \textit{via pubblica}, as bounding spaces, not as addresses. They located the property by \textit{rione}. Parishes, also named, were smaller, but still did not fix a precise position. The early texts pinpoint the location of properties only by placing them “opposite,” “adjacent,” or “at” a tower, a church, the river.\textsuperscript{60}

The sixteenth-century Annunziata book sites the Via Pie di Marmo house on the “Piazza de la Minerva.” Pep- parelli’s plan treats the address more dynamically. The public space on which the house sits is named in a way that is both more precise and more suggestive. Instead of the static and, in this case, misleading “piazza,” the site is identified as the “street that comes from the Collegio Romano and goes to the Piazza dell Minerva.”\textsuperscript{61} This form of description emphasizes the position of the property within the spatial context of the city as a whole.\textsuperscript{62} The way street names could be used to anchor a site to a place within the city is demonstrated by a presentation drawing for an architectural project of the period 1555–59.\textsuperscript{63} The project was for a convent of nuns of the order of St. Clare
sponsored by the Marchese Vittoria della Tolfà, niece of the Carafa pope, Paul IV. It occupied a site at the center of Rome, where the church of St. Ignazio was built in the seventeenth century. The project is not identified on the drawing but the site on the “piazza di S. Ma[c]uto” is indicated by inscription as is its relationship to a series of landmarks, not all of them in the immediate vicinity. The streets drawn around the edge of the plan are labeled with their destinations: “from Santa Maria sopra Minerva, the street to Santo Stefano del Cacco, the street to San Marco, to San Marcello, the road of Monte Cavallo [the Quirinal], toward Piazza Sciarra” (Figure 13).

The topographic qualities that became an increasingly prominent aspect of the house plans in the course of their development has, of course, a context in urban cartography. Rome was first mapped in 1551. Leonardo Bufalini’s Roma (1551) revealed the cartographer’s ambition to survey a field as large as the city, despite a street
system of immense irregularity (Figure 14). Bufalini’s plan was not very accurate, nor was it widely circulated, but other plans that synthesize survey information and a pictorial presentation (notably Mario Cartaro’s plan of 1576 and Matteus Greuter’s plan of 1618), had better commercial success. By the 1630s, when Pepparelli and Torriani prepared house books that specified location by reference to a street system that articulated the space of the city, their audiences might have been able to relate that information to a cartographic image, whether that was one that hung on the walls of their study or one learned from maps and held in their minds.

In the eighteenth century, the plans of the house books and the maps of the city even begin to look alike. The Catasto dei Canoni of the monastery of San Silvestro in Capite of 1712 includes the plans of eighteen blocks in its representation of the monastery’s holdings in the Campo Marzo at the northern edge of the city (Figure 15). The position of each block is fixed by the names of the bounding streets prominently labeled in a large, elaborately decorative calligraphy. The area covered by the book is so extensive that the project becomes a survey of one of the neighborhoods

Figure 10 Detail of figure 9 (Liber 246, c. 78, 12 May 1630, Reproduced with the permission of the Rector of the Venerable English College)

Figure 11 House plans from the libri delle case of the confraternity of the SSma Annunziata (left: SSma Annunziata 921, c. 5 (1563); right: and SSma Annunziata 920, c. 61 (1636). Reproduced with the permission of the Ministero per i beni e le attività culturali, ASR 2/2012. Further reproduction is expressly prohibited)
of the city. By revealing the internal structure of the blocks—the spaces within the houses and the relationships among the blocks’ many properties—it is a special map, but not a unique one. Its vision is shared by the most ambitious mapping project of the century, Nolli’s *Nuova Pianta di Roma* of 1748. The house book “map” covers a smaller area in much greater detail, but like Nolli’s diagrams, it overturns the conventional distinction between buildings and open ground. Between them they describe church halls, bedrooms, streets, and the city ditch as diverse parts of one continuous space. Collected into the larger units of the city block and linked by a matrix of streets, the houses are no longer the isolated units of the SSma Annunziata plans. Now they appear as parts of a larger whole, the building blocks of the city itself.

It is this expanded spatial consciousness that offers the best explanation for the increased precision of the later house book plans. The 1563 Annunziata plans seem more than adequate as inventories of property. Even more generalized plans than they would have sufficed to illustrate room sequences and the shape and size of spaces. If the inventory was the sole concern of the archivists and draftsmen, the effort required to produce the more accurate plans of the seventeenth century and later was wasteful, the notation of irregularity as measured by the time-consuming methods of survey far exceeded the record they required. It
may have been the simple capacity of later draftsmen to make better plans, that is, the professional skill of the architects who took over the production of the house books that drove the improvement. But the refinements of survey is what made it possible to imagine the house plans as part of a map. The measured representation of individual, irregular spaces was the prerequisite for the construction of the composite plan of the blocks of the San Silvestro Catasto and the houses at San Crisogono in Trastevere (Figure 16, see Figure 9).

In the course of their three-century history, the house book images focus with ever greater exclusivity on the physical aspects of property. The pages of the Annunziata book of 1563 included information about a wide variety of topics. The plan of the house adjacent to the church of Santa Maria sopra Minerva is an extreme example. The plan surveys the building’s ground level, leased in shops. Lines of different colors circumscribe the sets of rooms then leased as separate rental units, inscriptions identify the activity of each shop, and block letters refer to texts at the top of the page naming the renter. The ancient origin of the thick walls at the right side of the plan, “Massiccio Anticho,” is considered worthy of notation. This is the plan of the building at a very particular moment in time (see Figure 1). When the same structure was surveyed in 1636, none of this information found its way onto the plan. The traditional information of title, tenant, and rent are all absent (Figure 17). It remains, of course, part of the archive but now the plan’s role is only to connect that information to a physical object. At the bottom of the page, where the rione is named, the inscription identifies the house by number: “Rione della
Pigna numero I.” The numbering system transforms the plan books into a kind of index to the rest of the archives. The plan pictures the property and gives it an identification number. The rest of the archives—the books that copy the documents of title and litigation, the rental contracts and the accounts of payment of rent and of the inspections by the company’s officers—now refer to the house with a consistent title: Pigna numero I. Information could expand infinitely without cluttering Pepparelli’s plan.

In the eighteenth-century libri, the strategy of reference between documents also simplifies description. The map and catasto delle case of San Giacomo matches the plans of houses...
with their description on the verso and recto of an open fold. Following a method that was a standard of architectural publication as early as the sixteenth century, the plan identifies each element of the house with a letter and the facing description uses this code in its account of the property. Liberated from the torturous and ambiguous descriptions of space, the texts read much more easily. Integrating text and image, the story told by the document as a whole is both richer and more precise (Figure 18).

Used at the head of bodies of text, the images introduce a clearer structure and an easier accessibility to the contents of the libri. This is most elaborately developed in the San Silvestro Catasto of 1712. Here a block plan stands at the head of each subsection of the book (Figure 19). The chapters that follow the block plan contain the information about the properties within the block and each of these entries, in turn, is introduced by another plan, this one of the boundaries of the lot (Figure 20).

The San Silvestro catasto contains hundreds of entries, all bound within a single volume. The Archivio di Stato catalogs it as “immovabile” and, indeed, it must always have had a permanent and, one imagines, prominent place within the convent’s archive. Sitting in isolation on a tall reading stand it would, itself, have been a monument, a celebration of the convent’s estate but also of the achievement of the archivist and the draftsman who gave the information order and powerful visual form.

The libri delle case are among the earliest illustrated inventories of architecture, preceded only by the drawings of fortifications in the cabinets of princes and of antiquities in the codices of artists and architects. Of these, only the house book plans preserved their connection to the rest of the archival record. The introduction of the plans coincides with a fundamental transformation of that record. Before the middle of the sixteenth century, when the value of property was not in the income that it produced but the stability and status that it conferred, it was the land rather than the building that mattered most. Late medieval property inventories had little to say about buildings and much information about title and the contracts that identified the generations who held the lease.

The transformation of the Roman housing market of the mid-sixteenth century focused attention on the building
because of its importance in determining profit. The images of the house books are the means for recording the physical qualities of the structures. They were created to protect institutional property against the claims of neighbors and to catalog the materials and facilities entrusted to the care of tenants. But they must also have served a more architectural purpose. The house books provided a means for studying property in the same way that collections of fortress plans allowed the examination of fortification. The lessons of the military plans could be specific: how to reinforce the weak points of your own defenses or where to attack the defenses of an enemy. They could also have a more generalized value.
in the development of new systems for future projects. In the case of rental property, landlords and their builders could see what could be improved at a specific site or learn more widely applicable lessons about efficient residential design. Plans allowed the examination of buildings off site and they were the only means by which many buildings could be looked at simultaneously, as architects developed solutions to the problem of adapting old properties to the requirements of an age of commercial rental, smaller living units, and greater population densities.

Finally, the comparison with military architecture calls attention to another aspect of the house book plans. Topography and site were essential to the planning of gunpowder defenses. The Renaissance introduced the means for the precise representation of these qualities with the invention of geometric survey and it was through military applications that this technology was developed. Popular acceptance of the products of survey, however, was slow. The most widely circulated map image was the city plan and here the pictorial mode of Cartaro and Greuter had much greater success than the abstract vision of Bufalini. It was not until the eighteenth century that ichnographic plans made by orthogonal projection found their audience. This does not mean that the idea of the city as a single spatial continuum rather than a collection of distinct places was unknown. The long history of property inventories, from the textual catastro of 1420 to the elephant folios of the eighteenth century, is a document of the growth of that cartographic consciousness in Rome.
Figure 18  Map and catasto delle case, hospital of San Giacomo, eighteenth century, showing letter symbols for reciprocal reference between plan and text (Archivio dello Stato, Roma, Ospedale di San Giacomo degli Incurabili, 1499, cc. 68v, 69r. Reproduced with the permission of the Ministero per i beni e le attività culturali, ASR 2/2012. Further reproduction is expressly prohibited).

Figure 19  Block plan from the San Silvestro catasto, 1712, showing index of properties (Archivio dello Stato, Roma, San Silvestro in Capite 5614, Catasto dei Canoni, pp. 424, 425. Reproduced with the permission of the Ministero per i beni e le attività culturali, ASR 2/2012. Further reproduction is expressly prohibited.)
Appendix

Archivio dello Stato, Roma, S. Giacomo degli Incurabili, Libro delle Piante delle case libere e delle Casali spettanti all’Hospitale è chiesa di S. Giacomo degli Incurabili.

The text is illustrated in Roberto Fregna, La pietrificazione del denaro. Studi sulla proprietà urbana tra xvi e xvii secolo (Bologna: Editrice CLEUB, 1990), figs. 21–22 without more precise citation.

Casa nella strada del popolo a mano destra passato di poco la piazza dell’oca, è in facciata palmi xxiiii. al piano della strada ha la bodega del macello larga palmi xv. et lunga palmi xxvi compreso lo spatio della scala che va in cantina. L’andito è largo palmi v et ½ et lunga palmi li et ½. a canto alla bottega è una camera lunga palmi xxi et larga palmi x. con la stufa per la salciccia, camino et necessario, et piglia lume dal cortile. sono a solaro, et si possono godere senza impedimento del resto della casa. sotto alla bottega è la cantina per l’habitatione della parte di sopra et sotta alla camera un altra per il macello. il cortile è largo palmi xxi et lungo palmi xxiii. con pozzo che serve soto et sopra, et vasche, et è coperto da un tettarello da due bande lungo palmi vii. segue poi un luogo dove s’amazzano le bestie largo et lungo palmi xxii. et coperto di tetto. piu oltre è la rimessa delle bestie lunga palmi xliii et largo palmi xxi. della quale tre lati sono coperti di tetto uno di palmi xv in fora e due di palmi x et il quarto scoperto.

In mezzo dell’andito è la scala di pietra che va al primo solaro dov’è la sala che guarda in strada con due finestre, camino, et sciacquatore lunga palma xxvi. compreso lo spatio della scala. et larga palmi xxi et ½. et dall’altra banda che guarda il cortile è una camera lunga palmi xxi et larga palmi xxi et ½. con camino, necessario, et mignano di legno sopra detto cortile. dalla sala detta si monta per
scalda di legno in un’altro appartamento a tetto simile a questo. La casa fu lasciata per testamento da Francesco di S.o Polo et è affittata a Horatio macellaro per scudi quaranta due l’anno, e con-finita da due bande dalli bene di M.o Hieronimo Ceuli et dall’ altra da M. Marco Antonio de Angeli Sanese… Non ha segno del loco.”

House in the strada del popolo, on the right side soon after the Piazza dell’Oca, with a façade 24 palmi wide [about 12 feet]. At street level it contains the shop of a butcher which is 15 palmi wide and 26 palmi long, including the space of stairs that give access to the cellar. The hallway is 5½ palmi wide and 52½ palmi long. Next to the shop is a chamber 21 palmi long and 15 wide with an oven for [cooking/drying?] sausages. It also has a fireplace and a toilet and gets its light from the court. These rooms have an upper story and independent access. There is a cellar below the shop for the use of the upstairs tenants and another below the chamber for the butcher shop. The courtyard is 21 palmi wide and 24 long. It has water basins and a well for the use of both ground and first-floor tenants and is covered by 7-palmi-wide pent roofs on two sides. Then there is a space where they slaughter the animals, which is 21 palmi wide and long. Beyond that is the corral for the animals, which is 43 palmi long and 21 palmi wide. Three of its sides are covered by roofs. One projects 15 palmi [from the wall], the other two project 10 palmi. The fourth [side] has no roof. In the middle of the hallway is a masonry stair that goes to the first level above the ground, where there is a hall that looks out onto the street. It has two windows, a fireplace, and a water basin. It is 26 palmi long, including the stairs, and 21½ wide. On the side [of the house] that looks into the courtyard there is a chamber 21 palmi long and 21½ wide. It has a fireplace, a toilet, and a balcony of wood on the court. From the hall there is a wooden stair that gives access to another apartment under the roof similar to the one just below. The house was donated to the hospital in the will of Francesco di Ser Polo and is rented to Horatio the butcher for 42 scudi a year. It abuts the property of Messer Hieronimo Ceuli on two sides and on the other the property of Messer Marco Antonio de Angeli, from Siena. It does not have a marker.

Notes
1. The research for this article was funded by a grant from the Graham Foundation for Advanced Studies in the Fine Arts and by the Department of Architecture, MIT.
6. The Geography was written about 150 BCE. It was translated into Arabic in the ninth century, but the illustrated manuscripts depend on a Greek text discovered by Maximus Planudes of the monastery of the Chora in Constantinople; Swerdlow, “The Recovery of the Exact Sciences of Antiquity,” 157–58, pl. 122.
7. Francois de Dainville, “Cartes et contestations au xv siècle,” Imago Mundi 24 (1970), 99–121. De Dainville presents a history of property disputes heard in French courts; he describes a practice current through the late Middle Ages in which local judges (or an assistant) would travel to the contested sites to observe the topographic situation. The report of what was seen is a verbal description. Maps appeared only after the development of royal and regional courts of appeal in the fifteenth century and become more systematic and elaborate, rendered in the form of topographic views that are produced by artists in the sixteenth century. The theoretical source of the practice, how- ever, goes back to the fourteenth century, the 1355 treatise by Bartolomeo da Sassoferrato, the Tiberiade (Tractatus de fluminibus, seu Tyberiada), which describes a map-based method for resolving land disputes caused by the flooding of the Tiber in the area near Perugia.
9. For a recent overview of the Venetian application of maps to the archival record, see Emanuela Casti, “State, Cartography, and Territory in Renaissance Veneto and Lombardy,” in The History of Cartography, ed. David Woodward (Chicago: University of Chicago Press, 2007), vol. 3, part 1 (“Cartography in the European Renaissance”), 874–908. Other early archives of plans include that of the Jesuit order. The order required its communities around Europe to send plans of their building projects to Rome from 1566. Duplicates were archived from 1613. (Jean Vallery-Radot, Le Recueil de Plans d’édifices de la Compagnie de Jésus Conservé à la Bibliothèque Nationale de Paris (Paris: Bibliothèque Nationale, 1960).) The plans in the Bibliothèque Nationale are from the Jesuit archive in Rome. They include plans of the sites to be rebuilt, of the neighborhoods in which the sites were located, as well as plans of the entire city that show the relationship of sites to other religious establishments and to the social and institutional structure of the city. Philipp II of Spain initiated perhaps the most ambitious of the sixteenth-century archival map collections when he asked for city and territorial plans as part of the reports he ordered from provincial governors in the New World, the Relaciones geográficas. The project was inaugurated in 1577 and the reports collected between 1579 and 1585. Barbara Mundy, The Mapping of New Spain: Indigenous Cartography and the Maps of the Relaciones Geográficas (Chicago: University of Chicago Press, 1996). An inventory of images from the archives of the Roman Capitoline notaries has been begun and partially published in In presentia mei notarius: pante e disegni nei protocolli dei notari capitolini (1605–1875), ed. Orietta Verdi (Rome: Ministero per I beni e le attività culturali, 2009). Over 700 images are discussed, 80 percent of them supplementing—and preserving their connections to—documents concerning buildings: sale and rental, the division of property among heirs, petitions for construction permits. See Orietta Verdi’s introduction, xx–xli. Verdi notes that the attachment of images begins tentatively at the end of the sixteenth century and becomes more regular only in the second half of the seventeenth century (xvii–xxviii). The earliest of the images that represents an architectural subject dates to 1664.


12. Francesco describes the spiral streets of the hilltop town: “E se alcuna terra in ritondo monte a far s’avesse, e che l’andata delle strade none strana fusse, debbansi fare a guisa e forma di lomaca incominciando dall’ultima circulazione e l’altra facino partimento . . . siccome nella figura si vede,” Ibid., L, 24. (If you wish to make a town [at the top of] a round mountain and if [you wish] the course of the streets to be regular ["not strange"], they must be made after the form of a snail. Begin with the outer [and lowest] ring and wind around up to the top. At the summit of the hill place the main square, centering it on the intersection of the streets that [climb the hill] from one ring to the next, as it is demonstrated in the image.) For Francesco irregular forms were beyond description, “strana,” and spirals were identified by analogy to biological forms rather than by a geometric definition. For Francesco’s drawing practice: Pari Riahi, "Ars et Ingenium: The Embodiment of Imagination in the Architectural Drawings of Francesco di Giorgio Martini" (PhD thesis, School of Architecture, McGill University, 2010).


18. Ibid., 154, from Delumeau, Vie économique, 2:589 ff. Prices are for the rubbia, about 25 pounds.

19. Ibid., 181. There was no fixed ratio between rents and improvement obligations. It may have been a negotiation based on the condition of the house.

20. Archivio dello Stato, Roma (hereafter ASR), SSma Annunziata, 233, c. 81r, 7 Nov. 1577. Visite in Ponte e Borgo. “In Banchi sono due botteghe in compagnia de Frati delle Minerva et della compagnia del Corpo di Cristo in S. Lorenzo in Damaso[,] La tiene a terza generazione masculine Vincenzo Luparelli et lui e la seconda et ha piu figli[oi] et n’ha acomodato alla casa vicina bonaparte di stanze[.]cioè dove il sangalletto fa il fondachetto una stanza sopra la bottega del sarto[,] et muturo la scala [.] et [sopra] un’altra stanza a tetto [.] et del sarto a canto ne tiene per tuti il sangalletto le stanze del primo solaro[,] al sarto non resta altro senon la bottega et un poco di scalaletta quale apigiona a uno che fa boctoni[,] et canta in ile del sarto[,] la bottega con un terazzetto et sotto la canta[na] et[...Paghe?] sino al secondo piano dove sono du[i]sic[] stanze et dui altra a tetto [.] ne paga detto luparelli alla compagnia scudi otto et baiocchi sessanta due et mezzo per parte sua et ne puo cavare lui de tutta circa scudi 114 l’ano.” (Two shops in Banchi shared with the friars of the Minerva and the Company of the Corpo di Gesu di S. Lorenzo in Damaso. The rental contract has a term of three generations. The present tenant, the tailor Vincenzo Luparelli, is the second generation and he has many children. Vincenzo has joined most of the rooms to the house next door. The cloth maker [pizzo di Sangallo is a kind of embroidered cotton, he seems to be the next-door tenant] uses the room above the Vincenzo’s shop as a storage space. Vincenzo has also walled up the stairs. The cloth maker also has the room under the roof. Only the shop remains to Vincenzo along with a little hit of stair hall, which he rents to a man who makes buttons. The cellar is occupied by the silk maker. Vincenzo’s shop has a mezzanine and a cellar. He rents the third story, where there are two rooms and two more below the roof. Vincenzo Luparelli pays 8 scudi and 62 and 1/2 baiocchi in rent to the company and he can charge for everything about 114 scudi annually.) My thanks to Carla Keyvanian for solving the mystery of the term Sangalleto.

21. Il Sacramento Concilio di Trento (Venice, 1790), 317 (sessione xxv [3 and 14 Dec. 1653], capo xii (“Si vietano alcuni affitti de’Beni ecclesiastici: e alcuni già fatti vengono annullati”)) “Gli affitti delle cose Ecclesiastiche anche confermati anche con autorità apostolica fatti da trent anni in qua, ovvero per più lungo tempo, e come sogliosi chiamare in alcuni luoghi, di anni veni-no, o guaranotto, î l. Concilio decreta essere nulli.” (The rental contracts for ecclesiastical property made in the last thirty years, including those confirmed by the apostolic chamber, that is, those that in some places are called “leases” of twenty-nine or forty-eight years, or even longer, are declared void by the Council.) Cited in Fregna, Petrificazione, 75.

22. Fregna, Petrificazione, 76. Fregna counted twenty long-term leases among the sixty-five houses cataloged by the SSma Annunziata in 1563. But where long-term contracts survive, he observes, rents were significantly more substantial. The new contracts could include a payment at the initiation of the lease equal to more than twenty times the annual rent.

23. Wilde, Housing and Urban Development, 202. Shops on Via Papalis, today’s Via dei Banchi Nuovi (Ponte VII in ASR 920, Wilde’s house no. 13 and her figure 63 on page 1072). In 1541 the rent was 46 scudi for the entire structure, in 1563 it rented as two separate units for 68 scudi, in 1574 for 74 scudi, and in 1585–87 for 120 scudi.

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12. The notarial archive was only one of many new archives formed by papal Italian cities in this period (e.g., Florence, 1569) begun in the papacy of Pius IV, were codified under Paul V in 1612. The ing clearer links between the many documents of single cases. The reforms, movement of archival reform. Laurie Nussdorfer describes changes to Roman


14. 34. ASR, SSma Annunziata, 233, fols. 103r–104r, cited by Weill, Housing and Urban Development, 915.

25. Fregna, Pietrificazione, 77–78.

26. Ibid., 69.

27. ASR, San Salvatore, 181. An example, c. 4r: Item una domus seu tabern a sita in platea lateranensi inter hos fines / cui ab uno latere tenet et est domus dicte ecclesie lateranensi/ ante est dicta platea cum iuribus et pertinentiis / quam domum donavit dicte soetiati petrus de Genezano de dicta platea ut de dicta donatione paret manum Jacobelli Petri Petriciolo notarius. Istam domus fuit [et] est quasi diruta et discoperta / et post renuntiationem factam di e per Johannem Cole Arlocti de Regione Columnae que ea habuit in locationem / locata fuit per Jacobellum Stephani et Rentium Stagle Guardia- nos dicte societatis sub anno domini mcecviii mensis Januarii. Item. A house or shop situated on the Lateran square within these borders: on one side is a house belonging to the church of the Lateran, in front is the square with its privileges and ancillary spaces. The house was donated to the society by Petrus de Genezano who lived on the same square and the act of donation was written by Jobelli Petri Petriciolo, notary. This house was and is derelict and without a roof. After the property was abandoned by Johannem Cole Arlocti of the district of Colonna [in Rome] who had rented it, it was leased in the year 1408, in the month of January, by Jacobellum Stephani and Rentium Stagle, officers of our society.

28. Textual description of urban property in the Muslim world in this period, located in the endowment documents of pious institutions (Waqif), was significantly more developed. Authors situated the property within its urban context and presented a sequential account of its rooms, beginning at the entrance and climbing systematically into the building. They note windows and functions and particularly expensive building materials. They were never illustrated. Writing on the descriptions, Nasir Rabbi, explains the purely textual character of the documents as the product of the culture of the men (“men of the pen”) who produced them. In other disciplines, he notes, illustration was used to enhance description. “Document- ing Building is the Waqif System” Thresholds 28 (Essays in Honor of Henry Millon) (2005), 30–32. Michael Rogers, “Waqfiyyas and Building is the Waqf System”

29. Fregna, Pietrificazione, 69, citing Il Sacro Santo Concilio di Trento (Venice, 1790), 203 (sessione xii [17 Sept. 1562], capo viii), “I Vescovi eseguiscono le pie disposizioni di tutti: visitino qualunque pio luogo, purché non siano sotto l’immediata protezione de Re.” (Bishops oversee all pious legacies and may inspect any charitable foundation except those under the direct protection of kings.)

30. The second half of the sixteenth century is also the period of a wider movement of archival reform. Laurie Nussdorfer describes changes to Roman notarial practice that aimed to make court archives more accessible by provid ing clearer links between the many documents of single cases. The reforms, begun in the papacy of Pius IV, were codified under Paul V in 1612. The archivalization of notarial books in state repositories was initiated in northern Italian cities in this period (e.g., Florence, 1569) and instituted in Rome under Urban VIII in 1625. Laurie Nussdorfer, Brokers of Public Trust. Notaries in Early Modern Rome (Baltimore: Johns Hopkins University Press, 2009), 105–12. The notarial archive was only one of many new archives formed by papal administration after the Council of Trent. In April 1587 Sixtus V called for a general archive at Rome for all religious institutions and in June 1588 created individual archives for each of the religious orders (ibid., 125–26).

31. Cristallini and Noccioli, Il catasto del Collegio Inglese, 7–11.

32. Ibid., 15 and 17, note 23, citing Archivio del Collegio Germanico-Ungarico, Libro n. 145 “Disegni delle case di Roma.”

33. “ad perpetua memoria, et conservazione delle ragioni di essa compagnia (per obviar le fraudi, che si potessino fare).” ASR, SSma Annunziata 1209 (1563), c. 130 r.

34. ASR, SSma Annunziata, 233, fols. 103r–104r, cited by Weill, Housing and Urban Development, 915.

35. Fregna, Pietrificazione, 143 citing ASR, S. Giacomo degli Incurabili, 1504, cc. 47 bis. This is a digest of documents titled “Libro, ovvero Catasto delle canoni perpetui della Venerabile Compagnia, et Archiospidalde di San Giacomo degli Incurabili di Rome” and dated 1661. The litigation concerns a lot on the corner of Via Ripetta and Via delle Colonnelle that had been resurveyed when the area was developed earlier in the century. Antonia, the wife of Simone Guadagnino “pretende che tutta la casa secondo l’hodierno suo stato non è fabbricata sopra il terreno del nostro Archiospidale, asserendo che la parte anteriore sopra la via Leonina [via Ripetta], alias del popolo, ha fabbricata sopra il sito pubblico, concesso a detto Simone dalla maestra di Strade, çò come tutte l’altre case sopra la detta via Leonina sotto la nostra proprietà, cominciando dalla detta via prima trasversale sino la via dei Pontefici.” (Antonia claims that not all the house [that she occupies] stands on land that belongs to the hospital. She maintains that the front of the house that faces the Via Leonina [now the via Ripetta], also called the Via del Popolo, is built on public land that was granted to her husband Simone by the Maestri di Strade, and that this is the case for all the houses of the hospital on Via Leonina beginning with those on the first cross street and extending to those at the Via dei Pontefici.)

36. For some institutions this situation survived well into the eighteenth century. The reform of the archive of the convent of S. Cecilia was under taken in 1727 “accio possa servire ad ogni occorrenza in dare la propria notizia di tutto ciò che è seguito, e dove siano le scritte necessarie per giustificare tali fatti.” (So that it [the archive] can provide a record of everything that has occurred [in the history of the institution’s estate] and a guide to the location of the papers that document it.) Marino, I “Libri delle case,” 8 and 19 note 6, citing ASR, Benedettine Cassinesi di S. Cecilia in Traste- vere, busta 4052/1 containing the “Istruzioni per la compilazione del Catasto.” Dated by Marino to 1727. The house book titled “Catasto di tutte le Case et altri beni liberi, con misure, piante e prospetti,” dated 1735 was part of this reform of the archives. (ASR, Benedettine Cassinesi di S. Cecilia in Trastevere, busta 4055/2.)

37. Fregna and Polito, “Fonti di archivio” (1971), 10 note 7 says reform of legal practice under Gregory XIII made documents (as opposed to verbal testimony) more probatory. “La funzione di questi [emphyteutic] contratti venne riconfomulata nella sostanza e ridefinita nella forma con il rinno vimento dei rapporti giuridici introdotto da Gregorio XIII, regolando il regime probatorio dei beni dal valore dei documenti ricognativi posseduti dai concessionari. I libri delle visite e i cadastri dei Pii Istituti accertavano la proprietà garantendo il diritto di esigere censo enfiteutici e la esazione dei canoni nei confronti degli affittuari.” (Though the form of emphyteutic contracts was modified by the judicial reforms introduced by Gregory XIII, their essential function was confirmed. The reforms gave the documents held by property owners primary evidentiary value. The books of house inspections and the cadasters of the pious institutions verified ownership and guaranteed their right to inspect and inventory the property and to exact rental payment from their tenants.)

38. ASR, SSma Annunziata, 920, c. 130r. The 1575 Libro delle piante delle case libere e dell’aspettato all’ospitalare e chiesa di S. Giacomo degli Incurabili assigns the job of making a survey of the institutions property to Alessandro degrande, one of the officers of the hospital. “In questo libro sonno scritte le misure et siti di tutte le case orti et terreni che si affittano del venerabile Archiospidale de san Iacomo del Incurabili detto in Augusta di Roma con tutti le confini de luogo in luogo li quali sono stato et visitati et misurati per il Magnifico Signore Alessandro degrande uno dei guardiani di detto pio luogo eletto et deputato dalii altri signori guardiani sopra detti a detta visita et misura el quale tutto a fatto SS spese sue nel presente anno MDLXXV.” (This book contains the location and measurements of all the houses, gardens, and fields rented by the hospital of San Giacomo and includes all abutters for each property. The properties have been inspected and measured by the noble lord Alessandro degrande, one of the overseers of this pious foundation, chosen and authorized by the other overseers responsible
[for this census]. He did the work at his own expense.) The document is reproduced without more precise citation in Fregna, Petrofazione, 104.

39. Carla Keyvanian, “The ‘Books of Houses,’” 17–22. Of the authors of the libro, Maggi may have been the most distinguished. In addition to positions as “architetto” at the hospital and at the University of Rome, he was the man in charge of maintaining the bed and banks of the Tiber. For the hospital of the Trinità dei Pellegrini he designed the church at the corner of Via dei Pettinari and Via di Capo di Ferro.

40. Bentivoglio, “Il taccuino di Prospero de’Rocchi,” 31–36. The notebook is held in the Vatican Library, Archivio del Capitolo di San Pietro. Bentivoglio, who saw the book in the 1970s, records the archival designation of the document as Archivio del Capitolo 46/10, c. 37v. The book is currently not traceable. Bentivoglio reports the few pieces of information we have about de’Rocchi’s professional activity. It consisted of measuring for architectural projects and of estimating the value of completed construction work. My thanks to Professor Bentivoglio for his many contributions to this project.

41. ASR, SSma Annunziata, 921 [4 r].

42. “Qual casa abbiamo visitato, assieme con il R. Pre Ministro Carlo et Horatio officiali del detto Collegio questo di 4 luglio 1630. Horatio Torriani Architetto del Venerabil Collegio de mano proprio.” (We visited the house together with the ministers Carlo and Horatio, official of the company, on July 4th, 1630. This document written by Horatio Torriani, architect of the Company.) Cristallini and Noccioli, Il catasto del Collegio Inglese, 57. A version of this formula is repeated after the description of every house.

43. ASR, San Salvatore 381. Dated on cover Catastum Bonorum 1420.

44. ASR, S. Salvatore 378. Catasto segnato 1452 usque 1492 (1695 copy), 44.

45. “Item una alia domus terrina et in parte solatara cum orto retro eam.” (item: another single story house (alternately: another house of tamped earth construction), with an upper story over part of it, with a garden to the rear.)

46. ASR, S. Salvatore 381. Dated on cover Catasto di Case,” cc. 80r–93r). As an example, this entry on c. 80r: “una caseto” (ASR, SSma Annunziata 837. “Stracciafoglio di Catasto di Case” of 1551 characterized properties with single words: “caseto,” “casa” (ASR, SSma Annunziata, Registro Instrumenti 24/1, document 16.

47. Even in the age of house books the old formula survived in those archival volumes dedicated to the documentation of ownership and rent. A “Stracciafoglio di Catasto di Case” of 1551 characterized properties with single words: “caseto,” “casa” (ASR, SSma Annunziata, Registro Instrumenti 24/1, document 16.

48. “Item una alia domus terrina et in parte solatara cum orto retro eam.” (item: another single story house (alternately: another house of tamped earth construction), with an upper story over part of it, with a garden to the rear.)

49. ASR, S. Giacomo degli Incurabili, Libro delle Piante delle case libere e delle Casali postettani all’Hospitalè e chiesa di S. Giacomo degli Incurabili. The text is illustrated in Fregna, Petrofazione, 105, figs. 21–22, without more precise citation. For the text of the description and a translation see appendix.


51. Venerable English College, Liber 246, 18. Riseone of the Regola, casa n. 3.

52. Ibid. An excerpt from that description—shorn of the references to materials—with an attempt at a translation: “Si commincia dal appartamento sotto teto. Una loggetta sopra la facciata dente a teto . . . e stanza sotto la loggia. Seguito detto piano primo sotto teto verso al cortile una stanza . . . Seguito un'altra camera che divide con il cortiletto, e scala . . . seguita dente una stanza sotto le stanze di loggia, il secondo piano verso la strada . . . seguito a detto piano verso al cortile una loggetta scoperta et una cocinetto . . . soffittato a teto . . . si cala da detta cocinetta alla loggetta scoperta con scalini 18 alla fratesca con parapetto di filagnie e tavoletto sopra disse esser fatto con robbia del pegionante per suo consedo.” The full text of all the house descriptions are transcribed in Cristallini and Noccioli, Il catasto del Collegio Inglese this description, 36–37.

53. Ibid. An excerpt from that description—shorn of the references to materials—with an attempt at a translation: “Si commincia dal appartamento sotto teto. Una loggetta sopra la facciata dente a teto . . . e stanza sotto la loggia. Seguito detto piano primo sotto teto verso al cortile una stanza . . . Seguito un'altra camera che divide con il cortiletto, e scala . . . seguita dente una stanza sotto le stanze di loggia, il secondo piano verso la strada . . . seguito a detto piano verso al cortile una loggetta scoperta et una cocinetto . . . soffittato a teto . . . si cala da detta cocinetta alla loggetta scoperta con scalini 18 alla fratesca con parapetto di filagnie e tavoletto sopra disse esser fatto con robbia del pegionante per suo consedo.” The full text of all the house descriptions are transcribed in Cristallini and Noccioli, Il catasto del Collegio Inglese this description, 36–37.

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53. Ibid., “Andito di sotto et sopra loggia scoperta.”
54. Ibid., “stalla et sopra fenile a tetto.”
57. Bentivoglio, “Il taccuino di Prospero de’Rocchi.” The plans are sketched freehand on the recto of an open fold and on the facing verso de’Rocchi wrote a textual record of the location, the condition, and the use of the house along with a list of the rooms that it contains. The plans, like the one of the inn and bakery on the Borgo Nuovo, locate all the property’s rooms and facilities. They fill the page and follow the page’s form. The plans are generally rectangular in outline and are not drawn in scale. Dimensions are reported by inscription. Where significant irregularity exists, it is recorded by freehand deviations from the orthogonal frame. I cite the example of the text (c. 29v) facing the plan illustrated in Figure 8: “La Pianta delle dette [case] sono su la strada dritta di Borgo nov d conto [sic] al principio del Palazzo de Rusticucci, dove se fa ostaria et forno. Case restarate di fresco. Bone per quella parte. Con cantine sotto et suoi membri come si vede nella pianta. Parte a due piani de solari verso la strada ritta et dentro al forno, parte a un piano. Con l’arme delle chiave nella facciata verso Borgo novo. Parochia di S. Pietro.” (The plan of the houses where there is an inn and bakery: it is on the straight street of Borgo novo, opposite the beginning of the Palazzo de Rusticucci, where there is an inn and bakery: it is on the straight street of Borgo novo, opposite the beginning of the Palazzo Rusticucci. It has been restored recently and is in good condition for that neighborhood. It has a cellar and the parts [membri] that can be seen in the plan. It has the coat of arms with the keys [of S. Peter] on the façade towards Borgo novo. It is the parish of St. Peter.)
58. Nicolo Tartaglia, Questi et inventioni diverse, Venice, 1606 (original, Venice: V. Ruffinelli, 1546), 129–31. Tartaglia describes a “bobbola” of his invention that allowed this double use. It represents an early attempt to simplify the mapping process that led eventually to the use of the plain table where survey readings were transformed directly into a plan on a sheet attached to the instrument of measurement. The plain table was known in the sixteenth century, but its accuracy was criticized by professional surveyors, who were threatened by the popularization of survey skills that it allowed. It was only in the late seventeenth and eighteenth centuries that the profession accepted it as a more efficient method of survey and mapping.
59. The inscriptions about the windows follows this pattern: “B. fenestra a piano nobilie senza ferrata et un altro sopra la detta simile che pigliano illum da questo Cortile” (B. a window on the first story above ground, indicating into the adjacent property. It does not have an iron grate. Also another like it and above it. Both take their light from this courtyard). The legal protection legislation and light drainage is in Statutorum Almiae Urbis Romae. Authoritate Gregorii PP. XIII, commentary by D. Leandri Galganetti (Rome: Typographia Reverendae Camerae Apostolicae, 1611), cols. 163–65.
60. ASR, San Salvatore 378. Catasto segnato 1452 usque 1492 (1695 copy). Houses: “posta in opposta hospitalis,” “in platea Lateranus,” “sita in via Maiore,” “sita iuxta ecclesiam Sancte maria in treppedina,” “iuxta flumen,” “porticum sancti Petri,” “principio duarum viarum,” “posta in piede del mercato.” (Houses: “opposite the hospice,” “in the piazza of the Lateran,” “located on the Via Maiore,” “located next to the church of Santa Maria in Treppedina,” “next to the river,” “at the Portico of St Peter’s,” “at the beginning of two streets,” “located at the foot of the market.”)
61. “Strada che viene dal Collegio (the Collegio Romano), et va alla Piazza della Minerva.” The destination system is a common one for naming streets and identifying location in the sixteenth century. The house of the English College on the Via Monserrato is “posta nella strada che da corte savella va alla piazza del Duca” (located in the street that goes from the corte Savella to the piazza of the Duke). The site of a house between S.M. Aracoeli and Palazzo Venezia at c. 19 of Annunziata 921 is defined as the “Strada della Calata di Marfiorio, et va al Macello di Corvi.” (Street that goes from the Calata di Marfiorio to the slaughterhouse of the Corvi.) A property in Rione Ponte is sited on the “Vicolo del Pavone, che va verso Monte Giordano” (on the Vicolo del Pavone, that goes toward Monte Giordano) (c. 88). A property in Rione Colonna is sited on the “Strada che dalla guglia di S. Mauo va alla Rotonda” (Street that goes from the obelisk of San Macuto to the Pantheon) (c. 156). The examples are infinite. David Lord Smail, Imaginary Cartographies. Possession and Identity in Late Medieval Marseille (Ithaca: Cornell University Press, 1999) records a shift to street addresses in the cartularies of notaries from the middle of the fourteenth century in England, France, and in Florence, noting that elsewhere in Europe parish and administrative districts continue to predominate. He observes that street names were often a grammatical translation of the name of a monument. The method for identifying streets by their destinations that appears in the seventeenth-century Roman house books was not observed by him in the notarial records.
62. The practice of identifying streets by their end points began in the sixteenth century, e.g., Archivio Capitolino, Rome, Camera Capitolina 132, c. 13v; 6 April 1586, the concession by the Camera of a license to a builder to incorporate an adjacent property in the expansion of his residence. The house was “in via recta tendente ad ecclesiam santa maria Triantisiti” (on the straight street that goes in the direction of the church of the Triantisiti dei Monti). The practice of identifying streets by their destinations may be a reflection of the limited number of streets that had stable names. By the eighteenth century street names were more common, but Nollí’s 1748 map of the city still reflects the older situation. In areas developed in the Renaissance and later, new, straight streets, whose continuity gave them a clear identity, were given names that received wide acceptance, if not permanence, and Nollí was able to inscribe their names on his plan. Elsewhere in the city it is only the major streets that receive this treatment. The irregular streets of the old city, where names changed sometimes after only a few blocks, were marked by a number and identified in the accompanying index. Bufalini’s 1551 Roma, which had no index, identified a limited number of main streets by inscription.
63. The drawing is in the Uffizi, 4180A. It is published by Richard Bösel, Jesuitenarchitekturen in Italien 1540–1773 (Vienna: Österreichische Akademie der Wissenschaft, 1986), 1: 180–81, and is the subject of an essay by the present author: David Hodes Friedman, “UA4180 and the Urban Projects of Paul IV, Carafa,” in Geometrical Objects, ed. Anthony Gerbino (Cambridge: MIT Press, forthcoming).
64. “da Minerva,” “via a santo stefano del cacco,” “via a s mar[cl]o,” “a s marcello,” “strada di monte cavallo,” “verso piazza sciarra.” Leonardo Bufalini’s Roma of 1551 (Figure 14) named only one of these streets. It is, of course, the Corso, called the “Via Lata.” The draftsman of UA 4180 did not use that designation, inscribing instead “verso piazza sciarra” and “a S Marcello,” a square and a church on that street. As “Via Lata” was perhaps the most widely accepted of Roman street names, the draftsman’s choice says less about whether he knew the map than it does about his determination to situate the site and his method for doing so.
65. The books belong to the hospital of the S. Giacomo degli Incurabili and the monastery of San Silvestro in Capite. Both institutions owned large areas of open ground in the Campo Marzio. In the course of the sixteenth century they had laid out streets and subdivided blocks into house lots. The development of the property of S. Giacomo began on the Via di Ripetta, next to tomb of Augustus in 1509 (Fregna, Pietrificazione, 143–45) and continued northward to the church and then on the other side of the Corso between the Via Gesu e Maria and the Via Laurina through the first half of the century. The land owned by San Silvestro from the Via Capo le Case to the Piazza di Spagna was developed from 1551. (Fregna, Pietrificazione, 154–65.)
66. ASR, Ospedale di San Giacomo degli Incurabili, 1499, Piante e Catasto delle Case, eighteenth century. Plans similar to these, were attached to contracts from the beginning of the eighteenth century, are discussed in Sabina Carbonara Pompei and Daniela Esposito, “Attività di compravendita e locazione di Sebastiano Ciprani” in O. Verdi ed. “In postvaria mei notarii,” 97–125.
67. ASR, San Silvestro in Capite 5614, Catasto dei Canoni (1712).