

**Inigo Jones's Library and the Language of
Architectural Classicism in England, 1580-1640**

by

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February 1986

Submitted to the Department of Architecture in Partial Fulfillment of the
Requirements for the Degree of Doctor of Philosophy in the Field of Architecture,
Art and Environmental Studies

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LIBRARIES

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ABSTRACT

Inigo Jones's collection of books is a unique and early survival of an architect's annotated library. The combination of standard sixteenth century Italian and French editions of classics, mathematical and scientific treatises, and specialized architectural books, comprised the library of a professional whose approach to his field was based on an understanding of practical humanism and the study of antique precedent. The library is the starting point for an investigation of the relationship of humanist learning and the creation in England of a classical architectural vocabulary. The forty-six books record in Jones's marginal annotations to the text and plates his interpretation of continental architecture and textual exegesis. For Jones, books were a crucial resource for the study of classical architecture as practised in continental Europe; and necessary for an understanding of the intellectual precepts inherent in that architectural vocabulary. Jones's architectural self-education reflected and repeated the desire by patrons for a visible document of their humanist learning and aspirations.

From the evidence of the marginal annotations by Jones, I discuss three central themes of the shift in architectural style in England during the period 1580 to 1640: the role of reading as an essential professional skill for the architect and its mnemonic function in design method; the use and significance of the orders as a system for representing ideas of personal and public decorum and learning; and Jones's use of the methods and resources of English antiquarians in his study of ancient architectural precedent. Each of these themes are located within the cultural and intellectual history of Renaissance England.

The descriptive language created for architecture, and the images used to encourage its study, was the language of education and classical learning, and specifically, the language of books. The appropriation by Jones and his patrons of the Vitruvian notion of decorum—the distinction between the exterior of a building and its internal distribution—formed a central tenet of English classicism, in Jones's terms the creation of an architecture "masculine and unaffected."

The library of Inigo Jones represented one of the architect's essential professional tools, a repository of ideas and models which could serve as an ever present resource and comparable to other professional collections created by those seeking advancement within the late Tudor and early Stuart court. An annotated and descriptive bibliography of the surviving volumes, and further likely titles, attests to Jones's wide-ranging interests and design acumen.

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While Inigo Jones may be a bit distressed to know that his books and instruments are no longer together in one place, I do think that he would be pleased to hear that the books he purchased and read with such devotion are in good hands and carefully tended. I am grateful to Ben Weinreb in London; Myra Nan Rosenfeld and the Canadian Centre for Architecture, Montreal; Peter Day, Archivist of the Devonshire Collection, Chatsworth Trust; The Provost, Fellows and Librarians, Queens College, Oxford; and finally, the Provost, Fellows and Librarian of Worcester College, Oxford. Before her retirement in September 1991, Mrs. Lesley LeClare as Librarian of Worcester College welcomed me, with the many other scholars who came to use the outstanding collections there, with warmth and the greatest of support for all scholarly research.

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While I started this project with a sense of what was to come, my husband, Kevin Gallagher, and *hundkinder*, Clarence and Clio, went along as its unwitting partners, editors, and muses. They waited, and knew Logan Airport better than I did.

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INTRODUCTION

Every man must have credit in the art professeth: but no power to perswade a business which we call into deliberation, and may concerne his advantage in particular. For the Architect and master of workes will alwaies advise us to build, though we have neither matter enough prepared, nor purse sufficiently lined for such a purpose: because it for his proper imployment and benefit. So States must be advised and over-ruled by the souldier, in the manage of a warre; but be seldome admitted to the deliberation of undertaking it.

—Robert Dallington, *Aphorismes Civill and Militarie: Amplified with Authorities, and exemplified with Historie, out of the first Quaterne of Fr. Guicciardine*. London, 1613.

"Noot that most writers of Architecture doe leave out those partes wch the[y] understand nott . . . "

—Annotation by Inigo Jones in his copy of Vitruvius, *I dieci libri dell'architettura. Tradotti & commentati da Mons. Daniel Barbaro*, Venetia, 1567.

On the flyleaf to his Roman notebook, the English architect Inigo Jones (1573-1652) carefully transcribed his motto adopted from his copy of Daniele Barbaro's 1560 commentary on Vitruvius: "Altro diletto che Imparar non trovo" (I find no other delight than learning). The means of learning for Jones was a combination of methods: the thorough study of printed books, careful observations of ancient and modern buildings, and the collecting of prints and drawings. For Jones, books were a crucial resource for the study of classical architecture as practiced in continental Europe, and for an understanding of the intellectual precepts inherent in classicism. Jones's architectural education reflected and repeated the desire by patrons for a visible document of their humanist learning and aspirations. Jones's architecture should be seen at the time of its inception as a coterie taste, which was

centered within the early Stuart court; and with its references to foreign language treatises, ancient building and the educational world of a small elite.

Inigo Jones initiated a stylistic change in English architecture against a resilient backdrop of architectural practice based on his reading of treatises and humanist literature. Centered on a study of Jones's library, my thesis investigates this stylistic change within the cultural and intellectual context of England and Europe during the early seventeenth century. Although Jones has been highly praised as the founder of English classicism, due in large part to the promotion of Lord Burlington in the eighteenth century, it is too easy to lose sight of the radical, even reactionary, nature of his restrained architectural style. The tenacity of a composite, nationalistic style in England developed under Elizabeth continued in fact until the end of the seventeenth century. Tudor, Jacobean, and courtier styles all operated on a different set of aesthetic conventions and did not prize the naturalism or classicism promoted by Jones and his supporters.

During the period 1580 to 1640 there is evidence of an increased dialogue on architecture within a limited patronage network. An architectural culture among the aristocracy at court developed, concerned with higher standards of workmanship and studies of the classical architecture of continental Europe, and with a belief that architecture could be a highly visible symbol of learning and family status. My project traces this connection of architectural classicism and humanist education in England from the mid-sixteenth century through the early Stuarts. Treatises such as Henry Wotton's *The Elements of Architecture* (1624) make explicit this connection between architecture and learning when he comments that architecture "can want no commendation, where there are Noble men, or Noble minds." For those with a humanist education and a belief in the power of the visual world to fix in the mind the ideas learned from books, Jones's architecture struck a chord of recognition. This referential nature to Jones's architecture and the reasons for the stylistic change in England within this group are questions at the center of my work. Why do styles change, and who supports them and why? And in more architectural terms, how does the language of classicism assume and create meaning at any particular moment?

Inigo Jones's library is a unique and early survival of an architect's annotated library. Through this study of the marginalia and its connection to comparative sources, the library is the key to understanding the architectural culture of this crucial moment in the development of English classicism. Aside from limited studies of Jones's use of Palladio, encouraged by the eighteenth century Palladianism of Lord Burlington, the library has not been examined in its entirety.

The majority of Jones's library is housed at Worcester College Oxford, with other volumes in collections throughout England and North America. Of these books twenty-five are heavily annotated by Jones. These notes take many forms, including translations of key passages, underlining, redrawing of plates, references to other treatises, notes and drawings after building, and commentary based on his travels and discussions with other architects. The books used by Jones were both professional, essential references for architects; and popular editions of ancient authors as prescribed for humanist education. As with many of his patrons, Jones acquired books during his travels, from books sellers in London, or from ambassadors abroad. The difficulty in obtaining books contributed to their value and esteem.

For Jones the theory and practice of architecture was directly paralleled in other disciplines, as when he comments in his copy of Scamozzi that "architectur houlds much of filosofi morall & naturall." This approach is made explicit in Jones's annotations as he frequently compares the books at hand to other sources which support or refute the author. Following the method used by historians and antiquarians, books as one resource were evaluated against surviving buildings, historical accounts, coins, and prints. This comparative method of reading allowed Jones to evaluate the argument as presented, yet also to form his own rules. As Surveyor to the King, and in his work for learned collectors and patrons such as the Earl of Arundel, it was crucial for Jones that he have at least a broad familiarity with the literature of a humanist education. Central to my thesis is an investigation of the way in which Jones read and studied. It is important not only to investigate what Jones wrote in the margins, but how he responded to the text and images in front of him. Places of misunderstanding and difficulties in translation reveal crucial differences between the language and terminology of building in England and Italy.

Jones's library is a unique starting point for this study of English classicism. I had a unique archive, personal in containing the annotations of the foremost classical architect of the period, yet broader in its cultural implications. The combination of standard sixteenth century Italian editions of classics, mathematical and scientific treatises, and specialized architectural books, comprised the library of a professional whose approach to his field was based in an understanding of practical humanism and the study of antique precedent. Inigo Jones's choice of books and subsequent reading practices marked a change in the practice of architecture, but these were comparable to those of other readers of his time. The libraries of Elizabethans John Dee and Gabriel Harvey are similar to

Jones's in their holdings of ancient authors and contemporary writings all collected with a sense of their direct applicability to their professional lives.¹

For as I shall discuss in the chapters that follow, the library of Jones was more than a gathering of sources for Jones, it was an essential resource for his professional practice. John Harris has described Jones's tastes through his library as "serious and professional", and the interest in architectural books is an obvious aspect of the library's function. A portrait of the Scottish master-mason John Mylne shows him against a background of classical texts, Euclid, Archimedes, Appolonius, all related to scientific practice. (Figure 1) Mylne holds a pair of dividers over a drawing, and adopts a pose of the gentleman scientist, far removed from the physical labor of building.² The architectural practice is by the 1630's in Britain well-established as an intellectual pursuit, based on ancient texts and study.

The research on Jones's library, however, have stayed within the boundaries of the field of architecture. There has been no questioning of Jones's interest in the mathematical studies of Guidobaldo del Monte, of his interest in military treatises, or of his careful reading of Plutarch. As each of these types of books represent a substantial investment of time by Jones in their study and annotations, they too must be seen within the educational program Jones saw as essential.

The immediacy of the books is evident in their physical presence, in much the same way that drawings promise an intimate glimpse at the working ideas of the architect. Even now most of the books are in a single room at Worcester College, Oxford, where they have been since the early eighteenth century. Although George Clarke, their owner from the late seventeenth century and donor to Worcester College, re-bound some of the volumes in his own binding of mottled calf, many of the books are still in the plain limp vellum bindings used by Inigo Jones. When I first began working on the books during the summer of 1989 I was amazed that some of the silk ties used to fasten the books shut survived. Inside the covers the sense of their personal connection to Jones and to the period was even more striking. Many had margins filled with the small, and rather difficult, handwriting of Jones, with occasional pointing hands drawn to point to items of particular interest, or the frequent underlining in his characteristic brown ink of passages which did not require further explanation, only demarcation.

¹ On Dee see Sherman 1991; for Harvey, Grafton/Jardine 1990.

² See Deborah Howard, "Scottish Master Masons of the Renaissance," in *Les chantiers de la renaissance*, ed. Jean Guillaume (Paris: Picard, 1991), 279-87, esp. 284.

The library has both an immediate appeal as an extraordinary resource in its presence of the architect; yet it is less transparent in revealing the personal response of its reader. For all the promise which the library holds to an understanding of the design method of Inigo Jones, it is upon closer examination a recalcitrant form of evidence. For everywhere in the marginalia, except on extremely limited occasions, the motivation and meaning behind Jones's reading seems closed to us. Many of the annotations are essentially paraphrases and translations of the text. There are few of the personal responses we would wish from Jones. For in all the comments on the buildings of Rome which Jones saw on his travels, discussions of contemporary Roman architecture, the finishing of the facade of St. Peter's for example, never appear in the annotations.³ Jones kept to the text. He recorded comments on the buildings in the texts he used as travel guides.

However, to approach the library hoping for a more emotive statement by Jones of his buildings is to ignore the very nature of the archive. For even in its incomplete survival the library of Inigo Jones preserves a cross-section of the intellectual and architectural terrain of the time. It provides the evidence of Jones's sifting through the enormous amount of technical information, editions of classics, and architectural literature available to any reader in the early seventeenth century.

John Summerson described this resistance to interpretation in the work of Inigo Jones in his study of the architect and his architectural context:

Inigo Jones was the first English classical artist; he was also the posthumous sponsor of the Palladian movement of the eighteenth century. But the obvious magnitude of his claim as founder and progenitor has, for the last two hundred years, diverted attention from the actual nature of his own art. It has become easier to see Jones as the source of someone else's artistic enterprise than to see Jones as Jones. If we try for a moment to forget that he was 'the first' in this issue or that, that it was his 'influence' which had this or that effect, if we try to enclose him in his own time and look into his works

³ In this Jones is not alone. Most travelers commented on antiquities rather than contemporary buildings. See R.S. Pine-Coffin, *Bibliography of British and American Travel in Italy to 1860*. Biblioteca di Bibliografia Italiana, 76 (Florence: Leo S. Olschki, 1974), 30.

instead of outward from them, we find ourselves gazing at something extremely hard to bring into focus.⁴

The number of articles, books and exhibitions devoted to the work of Inigo Jones in the nearly 30 years since that book appeared has continued at a steady pace. Yet the understanding of Jones within the rich context of the time, the goal that Summerson set out as the crucial question, remains largely unanswered. Despite the numerous studies on Jones's work within the Stuart court, and detailed analyses of his design method, there is still a need to understand his interpretation of continental exegesis within the intellectual interests of England from the period 1580 to 1640. This question can only be answered by understanding the relationship between Jones's formation of a classical architectural style and his reading of humanist texts and architectural treatises.⁵

The perfectly ordered facade created by Jones, and held in such high esteem by all English classicist architects after him, was not only the by-product of a style based on humanist educational ideals. The distinction made by Jones, and his patrons, between the exterior of a building and its internal distribution formed a central tenet of English classicism, the creation of an architecture "masculine and unaffected" in Jones's terms.⁶ The transformation of a Vitruvian notion of decorum into a particularly English concept of appropriate behavior for gentlemen, a central theme throughout the thesis, created an architecture which relies for its effect on the beauty of the facade and the clear demarcation between public presentation and an internal emotional exuberance.

The library of Inigo Jones offers a rare opportunity to see the training of an architect in action. The marginalia constitutes a personal archive, yet equally

⁴ Summerson 1966b, 13.

⁵ The connection of humanist learning to Renaissance art in Scotland has been discussed by Martin Kemp and Clare Farrow, "Humanism in the Visual Arts, circa 1530—1630," in *Humanism in Renaissance Scotland*, edited by John MacQueen, 32-47 (Edinburgh: Edinburgh University Press, 1990). Scotland's strong connection to the continent brought a steady influx of humanist learning in general, and architectural and art literature in particular. Further, the stylistic changes in England during the early Stuarts came south with James I (James VI of Scotland) on the occasion of his accession to the throne in 1603. Deborah Howard's book on Scottish Renaissance architecture (forthcoming) will discuss this topic in detail.

⁶ See the discussion of this passage from the notebooks of Jones in the following chapter on the orders.

public in its ultimate aim in supplying the knowledge Jones felt was necessary to establish him as architect who could create a classical architecture for English patrons and building practice. I approached this material in broad, thematic terms. In the first half of the thesis I discuss the three essential elements in Jones's creation of a classical architectural language: the significance of the orders as a system for representing ideas of personal and public decorum; and Jones's study of the antique through travel and book study, and his use of the resources and methods of English antiquarians. Much of Jones's interest in the antique paralleled the collecting enterprise of Thomas Howard, Earl of Arundel. Arundel's desire to re-establish his family's noble status surfaced in his passionate collecting of antiquities, and was echoed in Jones's architecture, based on antique models. Jones's collection of treatises and books established a parallel classical parentage for his architecture, and formed a link with the ideals of his patrons.

The marginalia by Jones stands as a record of the reactions of the reader, and one section of this thesis discusses the reading strategies used by Jones in the light of what is known of other readers in the Renaissance. Reading was a crucial skill for the architect, and particularly so in England where the transmission of classical learning was widely available through printed books.

Language is an important theme of this thesis in its literal sense in the formation of a new language of description for architecture available to both patron and architect. As all the architectural writers noted in England during this period, the visual and descriptive language of architectural classicism was not native to England. To learn about classicism it was necessary to know foreign languages to read treatises published abroad. The language created for architecture and the images used to support its study was the language of education and classical learning; and even more specifically the language of books. For England, so far from the antiquities of Rome or even those in France, books were essential to the study of classical architecture. Learning itself was in an analogous way described as a building, whose foundations must be constructed of grammar and philology. The architectural language of description took over many of the terms associated with books, education, and mnemonic techniques. Through this intertwining of the language of architecture, literature and humanist education, classical architecture acquired an irrefutable pedigree of learning and scholarship. Classical learning and scholarship, increasingly popularized for the gentry, still remained the essential mark of the English gentleman who could now trade in his banner of war for a badge

of scholarship.⁷ After the dissolution of the monasteries by Henry VIII, the nobility, now with a new found power and wealth through the acquisition of church lands, appropriated education as training for national service and class pre-eminence.⁸

A second notion of language, more commonly called within the theoretical literature as discourse, provides a means to discuss the stylistic changes in architecture and their significance, within larger patterns of change in English culture.⁹ Architectural classicism lends itself with particular ease to this kind of analysis. Its linguistic structure is replete with a vocabulary, grammar, and idioms by the end of the sixteenth century. For English readers and architectural students, the architecture of the continental theorists could be approached as if it were a foreign language. Even the methods for its study were similar to those for the learning of languages: study of grammar, travel abroad to understand the culture, and then practical use.

The notion of parallel structures and analogous language lies at the heart of this study. It is my belief that the very language of description and the vocabulary of visual forms were able to communicate the essence of their cultural ideals, for a limited group who shared these cultural beliefs in the power and efficacy of humanist education and classical culture. It is an approach which relies on the English Renaissance ideas of the multivalence of words, that metaphor and paradox are fundamental means of expressing ideas by emphasizing the complexity of their meaning and references. Too often studies of the work of Inigo Jones, in deference to a classical style, ignore the frame of reference in which his architecture was understood. Thomas Coryat, for example, when he travelled compared many of the buildings he saw with Montacute House back in England, an important sixteenth century manor house near to his own Odcombe Hall in Somerset. Coryat described the Archbishop's Palace in Bonn in these terms:

Here the Archbishop hath a Palace situated hard by the Rhene, a most magnificent and princely building, but much inferior to divers Palaces both of our King James, and of many Noblemen of England. Which I therefore adde because one of my company that advised me to behold it well, told mee

⁷ Hexter 1979.

⁸ Hexter 1979, 69.

⁹ See the discussion by Penelope J. Corfield, "Introduction: historians and language," in *Language, History and Class*, edited by Penelope J. Corfield (Oxford: Basil Blackwell, 1991), 1-29

it was a Palace of so great magnificence, that he thought all my country of England could not yeeld the like. But surely his opinion was very false and erroneous. For besides many other English Palaces that do surpass that of the Archbishop of Colen, there is one in mine owne country of Somersetshire, even the magnificent house of my most worthy and right Worshipful neighbor and Mecoenas Sir Edward Philippes . . . in the towne of Montacute, so stately adorned with the statues of the nine Worthies, that may bee at the least equally ranked with this of Bonna, if not something preferred before it.¹⁰

Coryat is an excellent example of how travelers interpreted the buildings and sights abroad in terms of what they knew at home. Buildings in England served as exempla, even in light of the effect of the marvelous sights seen outside of England. The traditional patterns of building in England remained as the predominant model for building and for the conceptualization of building, even for the most devout advocates of the new classical style.

Jones's Biography and Social Position

By all accounts Inigo Jones's origins were humble and his ultimate position as Surveyor of the King's Works within the early Stuart court due to his own self-education. The skillful and nearly self-engineered rise of Jones was mocked by Ben Jonson, his collaborator on masques from *The Masque of Blackness*. In his comedy *Tale of a Tub*, the character of Medlay is meant to be Jones; and he offers an explanation of both his training and profession.

Indeed there is a woundy luck in names, Sirs,
 And a maine mysterie, an' a man knew where
 To vind it. My God-sires name, Ile tell you,
 Was *In-and-In Shittle*, and a Weaver he was,
 And it did fit his craft: for so his Shittle
 Went in, and in, still: this way, and then that way.
 And he nam'd me, *In-and-Inn Medlay*: which serves
 A Joyners craft, bycause that wee doe lay
 Things in and in, in our worke. But I am truly

¹⁰ Coryat [1611] 1905, 584-85. Also see Michael Strachan, *The Life and Adventures of Thomas Coryate* (Oxford: Oxford University Press, 1962), 9-10.

Architectonicus professor, rather:
That is (as one would zay) an Architect.¹¹

In this passage Jonson lampoons Jones's unusual name, probable start as a joiner, father's profession as a weaver, and intellectual ambitions; and most of it was a harsh but likely sound summation of Jones's origins and temperament.

Jones was baptized July 19, 1573 at the Church of St. Bartholomew-the-Less, Smithfield, in the City of London. His father was a clothworker, and lived in the adjoining Parish of St. Benet, Paul's Wharf until his death.¹² Little is known of Jones's early education. There are no records that he attended a grammar school in London, or that he had any formal education at all. According to Christopher Wren, Jones was apprenticed to a joiner in St. Paul's churchyard; and it is likely that Jones's career began in the carpenter trades for the next word about his career is connected with drawing, painting, and scenery design, all crafts categorized under the rubric of carpentry. John Webb in his biographical statement in the study of *The Most Notable Antiquity of Great Britain called Stone-Heng, Restored* (1655) wrote that "he was early distinguished by his inclination to drawing and design and was particularly taken notice of for his skill in the practice of landskip-painting."¹³ In 1603 there are records of payments to him by the 5th Earl of Rutland for work as a picture maker.¹⁴ The payment is recorded on 28 June 1603, the day before the Earl of Rutland left for Denmark, and the Court of Christian IV, brother of the queen, Anne of Denmark. Jones may have gone to Denmark and been employed by Christian IV, who had previously hired the English lutanist John Dowland for eight years.¹⁵ When Dowland returned to England he became a member of the Queen's court, and foreign service to a relative of the English family may have seemed to Jones an excellent way to ensure his own position back in England.¹⁶ The library

¹¹ *A Tale of a Tub*, Act IV, Scene I. [Jonson 1927, III, 63.]

¹² Less-Milne, 19.

¹³ Webb 1655.

¹⁴ Harris 1973, 17.

¹⁵ Webb's biography states that Jones called out of Venice to go to Denmark.

¹⁶ Less-Milne, 25 n. 1.

formed the basis for Jones's self-education, crucial for an ambitious man at the Stuart court where education was highly valued.

Jones's rise in court circles was by all accounts due to his particular skills and talents. Throughout the few surviving documents of Jones's early career his knowledge of architecture and design through travel and book study, and his skill at visual communication, are praised by his patrons and scorned by his detractors. His skill at drawings, painting and masque design served him in the service of Anne, and the first recorded masque designs in his hand are for the *Masque of Blackness*, for Twelfth Night, 1605. The next summer Jones created the designs for the reception of the King and Queen at Christ Church Hall, Oxford. There he is described as "one Mr. Jones, a great traveller".¹⁷

These skills, however, served Jones on both a personal and professional level. He continued his learning by studying each new book as it appeared in his field; and continually refined his drawing technique through the study of drawing manuals and the models of other artists.¹⁸ Jones's career was built on the study of books, and owed much to the wide availability of books from continental Europe through books fairs, dealers in England, and travel itself. Specialized technical treatises, such as those in architecture, and standard French and Italian editions of ancient authors were ever more available for scholars, professional readers and the interested amateur. The expansion of printing and print culture throughout Europe encouraged a rapid dissemination of information in all fields.

The study of libraries, even those such as Jones's which only survives in part, allows us to see the interests of readers of any period from the range of available material. Private libraries, then as now, record a sifting and selection, the creation of a personal reference archive and form a record of any reader's interests. Libraries can, of course, be filled with books with uncut pages, what Henry Peacham in 1626 warned against, the purchasing of books solely for their outsides.¹⁹

Libraries can be studied from two direct sources: from surviving books, as in the case of Jones's library; or from library lists, catalogues made of the contents. Surviving books provide additional information not contained from a mere listing of

¹⁷ Less-Milne, 27.

¹⁸ For a discussion of his drawing studies see Wood 1992.

¹⁹ "Lastly, have a care of keeping your books handsome and well bound, not casting away overmuch in their gilding or stringing for ostentation sake, like the prayer books of girls and gallants, which are carried to church but for their outsides." Peacham [1634] 1962, 66.

the titles: physical evidence in the form of binding, pastedowns, annotations, additional inserted leaves, evidence of provenance, and other copy specific information. In the annotated bibliography I have included this information to the degree that it is unique to the surviving copy and relevant to the thesis as a whole. Without a list of all the books in Jones's library it is impossible to know exactly what he owned, or suggestions on how he had the books organized-library lists often are organized into categories, e.g. "libri mathematici," which gives some indication of how the books were arranged in the study, and the categories of subjects. In lieu of a library list for Jones, I have made an additional bibliography of books which it was likely he owned from references in the annotations, or other documentation.

My interest in this thesis is with the library of Inigo Jones, and this must be distinguished from an equally important pursuit, the study of Jones's sources. The role of sources in the work of Inigo Jones is essential; it could even be said that his architecture and masque designs are studies in inventive use of sources. In a review of measured drawings of the work of Inigo Jones in the 1901 issue of *The Builder*, the reviewer writes

the remarkable thing about Inigo Jones's genius is the power which he seemed to possess of putting his own life and vigour and originality into the use of architectural features which in one sense can hardly be called original, seeing that there was Classic precedent for their use, but which became stamped with originality from his bold manner of using them.²⁰

That characterization of Jones's work is still valid. However, the self-consciousness of Jones's use of sources, a theme in the chapters that follow, has encouraged an approach to his work which takes the identification of those sources as an end unto itself. I hope in this study to have presented an additional set of questions concerning the significance of Jones's use of sources within the context of the seventeenth century. That Jones's sources, most especially the printed ones, survive is of utmost importance, for as I shall discuss throughout the thesis, Jones architecture is inherently about the sophistication of his sources and the

²⁰ "The Genius of Inigo Jones," Review of *Some architectural works of Inigo Jones: a series of measured drawings and other illustrations*, by H. Inigo Triggs and Henry Tanner, Jr. [1901] *The Builder* 81, no. 3048 (6 July 1901), 1-3, esp. 2.

sophistication of a contemporary viewer to recognize their value.²¹ As opposed to the architecture that preceded Jones, and continued to be favoured by the majority of builders and patrons through the seventeenth century, Jones's architecture operates according to rules based on scholarly study and a discerning eye, two factors highly prized by a discrete group of nobles during this period. It is the library of Jones, a collection of books carefully studied and essential to his architectural practice, that is the permanent legacy to his seriousness and the importance of his profession and position as architect.

For this reason I decided to focus on the library of Jones, rather than discussing the sources which he used. This is reflected in the bibliographies at the end of the thesis of surviving books from Jones's library, and those which can be assigned to Jones from marginalia or other documentary sources. I have not included a further list of additional sources used by Jones. Such a list, while a useful exercise, would have been a different project altogether. A central premise to my thesis has been that the physical presence of books gave much of the value to their use as a professional tool for the architect. Jones laid a great emphasis on the books which were his by signing his name on the title-page and often marking the place of purchase and the price he paid.

A large category of the books in Jones's library are sixteenth century humanist editions of the writings of classical authors. In nearly each case Jones owned the standard, and scholarly, edition by the foremost Italian translators of his day. This is particularly true in the case of the Segni edition of Aristotle's *Ethics*, and the translations of Xenophon and Plutarch by Lodovico Domenichi. The humanist interests of Jones, it should be noted, was not the strictly literary or rhetorical humanism of the 14th and 15th centuries. Recent work on the development of humanism has shown how its character changed up to the seventeenth century. In their study of humanist education in the Renaissance, Anthony Grafton and Lisa Jardine traced the shift "between humanism-the zealous faith in an ideal-and the humanities-a curriculum training a social élite to fulfil its predetermined social role."²² The point they make which is crucial for this study is the transformation of scholarship into active service, "that the aim of classical

²¹ The interest in the sources of Inigo Jones has been of major interest in the Jones literature. See for example these important studies: Smith 1952; Harris 1961; Peacock 1982; and most recently, Wood 1992.

²² Grafton/Jardine 1986, xvi.

education is to produce effective writers and active participants in civic life, rather than original scholars and philosopher kings."²³ A constant theme throughout Jones's reading of humanist texts is the public efficacy of private action. Individuals affect the larger political and social arena through scholarship and directed activities. For Jones, reading for his profession in architecture, these annotations most often take the form of comments on the role of the visual arts in affecting individual viewers or in creating potent public imagery for patrons.

In his study of *The Crisis of the Aristocracy*, Laurence Stone gives the credit to architectural patrons for the change in patterns of building based on the collections of architectural treatises created by the most important patrons of the day.²⁴ Inventories of the private libraries of patrons, or the non-professional reader, reveal an increasing number of architectural treatises. As in many other areas, such as agricultural interests, medicine and science, books were powerful agents in shaping the ideas of the gentry and nobility in foreign ideas about building.²⁵ In this way Jones's reading of technical architectural literature and humanist writings was directly tied to the rise of the architectural profession in England. Often claimed as the first professional architect in England, Jones based his claim of the importance of architecture as a noble activity on its scholarly foundations.

Yet although patrons were collecting large amounts of architectural publications and drawings, it is not clear that they were reading them with an interest in the technical information. With the exception of the surviving architectural books collected by Henry Percy, Earl of Northumberland, most of these books were not annotated. There is a distinct difference to be made between those reading architectural books with a general interest in architectural theory as part of a general aristocratic education and the reading of Inigo Jones, obsessed with the working system of the classical language of architecture for professional practice. This difference in reading technique marks the rise of the architectural profession as distinct from the architectural amateur, and Jones's positioning himself as a professional architectural reader. Patrons, while interested in architecture generally, may not have had the need to know the technical aspects of

²³ Grafton/Jardine 1986, 197.

²⁴ Stone 1965, 710.

²⁵ See Joan Thirsk, "The Fashioning of the Tudor-Stuart Gentry," *Bulletin of the John Rylands University Library of Manchester* 72:1 (Spring 1990), 69-85.

architecture aside from the more general categories of 'the antique manner', or 'like the house in the nearby town'.²⁶

The Library and other Sources

Since the eighteenth century Jones's copy of Palladio has attracted a great deal of scholarly energy directed toward the creation of a unified and linear history of English architectural classicism. Only recently in the work of John Newman and Gordon Higgott has the range of interest widened to include other books from Jones's collection. Most recently John Newman has published a detailed account of Jones's early annotations—before the 1613 trip to Italy—placing them in a sequential order based on an analysis of Jones's handwriting.²⁷ The annotations reveal much about Jones's working methods, and taken with a consideration of the drawings, allow an analysis of the design theory of Jones which preceded the resulting buildings.²⁸ Yet each of these thorough analyses take only part of the library as evidence.²⁹

The recent catalogue of architectural drawings by Jones reveals a similar selectivity. The drawings have traditionally been divided, and subsequently studied, by two distinct groups of scholars. The masque drawings, which represents a large portion of Jones's professional career, have been catalogued and studied by scholars whose central interest is the development of the masque in all its verbal and visual forms.³⁰ The catalogue of architectural drawings, based on the doctoral research of Gordon Higgott, re-dates many of the drawings based on a careful analysis of drawing style.³¹

²⁶ The control of information determined a crucial balance of power in patron relationships, as Wilfred Prest notes in his study of *The Professions in Early Modern England*: ". . . the balance of authority in professional-client relations was . . . the extent to which professional expertise and standing depended upon mastery of a body of knowledge and skills which lay outside the familiar acquaintance of the uninitiated laity." Prest 1987, 16.

²⁷ Newman 1992.

²⁸ Higgott 1992.

²⁹ See for example Newman 1992.

³⁰ Orgel/Strong 1973.

³¹ Harris/Higgott 1989.

The importance of Jones as a cultural and artistic figure has put off all but the bravest in tackling his artistic production as a whole. Partly this must be due to the period itself. The late Elizabethan and early Stuart period is one of the richest in terms of its scholarship in all fields. As the moment just before the English Civil War, political and social changes seem to predict the cataclysmic changes at mid-century. In terms of literature it is the age of Ben Jonson and the late plays of Shakespeare. As yet, there is no one biography of Jones which places him within this rich cultural context. John Summerson's study of the architect's work was too brief to take in much of the broader implications.³² The biographies by J.A. Gotch and J. Lees-Milne remain the standard if slightly dated sources for a study of the architect as a whole.³³

This study takes the annotations by Jones and the library as a whole as the starting point for a broader investigation of the relationship between architectural classicism and humanist culture in England. The annotations in Jones's books are what allow us to trace his reactions to his reading in the context of his activities as architect. They are the record of his making sense of the text.

Classicism in English architecture

In even the most recent studies of Inigo Jones his importance remains defined as the first classical architect in England.³⁴ Classicism as an architectural style has traditionally in England been given a special status within the standard histories. The relative delay in its 'arrival' in England has been explained away, or at least apologized for, by historians. In the first history of English Renaissance architecture J. A. Gotch wrote "It is not surprising that England, in common with the rest of Europe, should have felt the influence of Italy. It is, perhaps, rather a matter for wonder that she should not have felt it earlier."³⁵ Classicism as it is used

³² Summerson 1966,

³³ Gotch 1928; Lees-Milne 1953.

³⁴ "Inigo Jones's position as the founder of classical architecture in England remains secure." Newman 1992, 18.

³⁵ Gotch 1901, 6. This idea is still common in Jones studies, used to mark the late arrival of classicism in his work: "Rubens described Jones's friend and patron the Earl of Arundel as an evangelist of art. The term could have been even more aptly applied to Jones. As the first English artist to acquire a deep and inward knowledge of the whole Renaissance tradition, he was able to grasp just how marginal to that tradition was the visual culture of his own

in this context implies a use of architectural detailing based on continental, mostly Italian, treatises. This form of classicism appeared in English architecture not only with the work of Inigo Jones, but as a series of interests in classical architecture beginning in the mid-sixteenth century. The treatise by John Shute (1563) on the classical orders and a limited number of building projects such as Longleat (1570, Wiltshire), and the entrance porch at Somerset House (c. 1547-52, London) are the surviving evidence that a small group of courtiers around the Duke of Somerset studied foreign architecture and ancient models intent on building in that style in England.³⁶ The flowering of a mid-Tudor classicism receded into the background as a new national architecture emerged during the reign of Elizabeth, integrating classical ornamental detail within the vernacular of English building practice.³⁷ There has been a debate about whether Elizabethan patrons were ignorant of classical models, or uninterested due to a lack of a refined taste in the arts. The evidence from libraries of patrons and architects is that there was a widespread awareness of continental models but a preference for classical ornament used within a vernacular tradition which valued visual surprise and paradox.³⁸ The classical style of Jones could also be seen as a brief interlude in a pattern of English building only mildly affected in the main by Jones's purer classical style.

The role of foreign sources in the use of the orders is of course a central question that continued throughout the seventeenth century and into eighteenth century debates over the re-use of the Gothic in England. The whole of the sixteenth century is seen by some historians as a struggle between native traditions and foreign influence.³⁹ Often seen in nearly heroic terms, the appearance or disappearance of 'English' elements in the culture has been a highly charged topic. Until recently however the Jonesian classicism was a moment of great redemption after the mannerism of the visual arts under Elizabeth. The two styles have been

country: in spite of the impact of Holbein and numerous lesser continental artists, English art was still in outer darkness." Peacock 1990a, 246.

³⁶ See White 1982.

³⁷ Friedman 1989a.

³⁸ White 1983; Friedman 1989a.

³⁹ In the field of literature this debate can be clearly seen in the interpretation of role of Seneca on Elizabethan tragedy. See for example John W. Cunliffe, *The Influence of Seneca on Elizabethan Tragedy*, London, 1893; and the emphasis on native tradition in C.S. Lewis, *English Literature in the Sixteenth Century Excluding Drama*, Oxford, 1954. For an overview see Bradford 1984, 3-5.

seen dialectically, one rising at the expense of the other, and only at times held in an uneasy tension in particular works. Alan Bradford's interpretation of Longleat adopts this model as both Gothic in its use of fenestration as the syntax for the facade; and classical, or Latin, in a simultaneous use of a sequence of orders.⁴⁰ There is a question though that this polarity of classical and mannerism is too rigid, and risks placing works in one or the other category, a system that did not exist in the period itself.

In the study of Jones's use of foreign sources too much emphasis has been placed on the notion of influence, Jones's synthesis of the continental theory of classicism as an individual act of genius. To focus so closely on Jones has tended to divorce his work from the rich architectural culture in which he worked. There was an audience for architecture that was accustomed to seeing the elements of classicism, the vocabulary integrated within their own tradition. The orders were used by the masons and architects working at the same period in rich and vital ways. As both a member of this architectural audience and an insider, Jones would of course been aware of the meanings evoked by the use of columns in architecture or their representation in written description of visual form. That Jones's architecture has been discussed as if there were no classical tradition before and during his practice, diminishes the significance of his work.⁴¹

The history of classicism in the English Renaissance has become inextricably connected with the story of individuals, the artist as classical scholar and inventive genius and the patron as inspired benefactor. This is not a retrospective view of history, but was central to the classical enterprise at the time. The reading of biographies, whether of ancient heroes in Plutarch's *Lives* or their modern equivalent in Vasari's lives of artists or Bernardino Baldi's lives of

⁴⁰ Bradford 1984, 17.

⁴¹ This problem has been more fully discussed in the literature on Shakespeare and the dramatic tradition in England. "This relationship between originality and tradition resulted in a supreme balance between experimentation, innovation, and revitalization. Wherever else the manifold elements of Shakespeare's greatness are to be found, it is here that one of the most essential springs of his creative power has its source - at a point in the development of culture and literature that fostered a newly complex, but nonetheless balanced, relationship between individual creativity and communal activities and traditions. . . . The new self-consciousness of literary art did not eradicate the experience of generations of plebeian actors; rather it facilitated the assimilation and transformation of their experience into the poetic drama of the English Renaissance." Robert Weimann, *Shakespeare and the Popular Tradition in the Theater. Studies in the Social Dimension of Dramatic Form and Function* (Baltimore: The Johns Hopkins University Press, 1978): xvii.

mathematicians, served as models for modern achievement and the creation of an identity of eminence.⁴² Jones's interest in the stories of the ancients in Plutarch and Vasari was fuelled by his own desire to create himself as an artist in England with a social and professional position to ensure his place at court. The many reports of squabbles with the poet Ben Jonson had at their heart a debate over the status of the poet versus the artist, and the larger context of the verbal versus the visual arts. For Jones, the formation of a personal and professional library was an essential tool for the creation of architecture and creation of himself.

In England as well as in Italy, architectural classicism was directly tied to humanist culture and learning. Through these connections architecture was defined as a discipline like geography or medicine. The foundation of architectural classicism through the study of the surviving text of Vitruvius, the use of rhetorical models from Cicero, Aristotle and Quintilian, and the use of the architectural vocabulary of Rome were part of the pattern of practical humanist education. It is a commonplace to say that classical architecture in the Renaissance is learned and scholarly. For England, however, the entire status of architecture as a profession relied on its associations with other fields of study, its base in Euclidean geometry and perspectival study, fortifications and military arts, and the classical exegesis of building description. In his "Mathematical Preface" to the 1570 translation of Euclid, John Dee justifies architecture as a discipline because of the presence of an ancient commentary in the form of Vitruvius, and based on the necessity of the architect to be trained in science. Architecture required knowledge from books; it required formal education. When Henry Peacham in 1624 praised architecture as a skill necessary for young men to know, he could do so with impunity for in the intervening fifty years the profession itself had come to be seen as a scholarly pursuit and an appropriate interest for gentlemen.

The scholarly foundation for architecture was most often a suitable endorsement for building, even for building lavishly or to glorify one's own name. Sir Thomas Tresham's great expense in building at the end of the sixteenth century was tempered by his equally lavish use of inscriptions to honor God or his fellow residents and noble families in his home county of Northamptonshire. There was still, however, criticism of lavish building. In his poem "To Peshurst" Ben Jonson

⁴² See Greenblatt 1980; Anderson 1984.

praised the seat of the Sidney family by listing lavish architectural ornament it did not have:

Thou art not Penshrst, built to envious show,
 Of touch, or marble; not canst boast a row
 Of polish'd pillars, or a roofe of gold:
 Thou hast no lantherne, whereof tales are told;
 Of stayre, or courts; but stand'st an ancient pile,
 And these grudg'd at, art reuerenc'd the while.⁴³

For Ben Jonson, architecture and the description of one house in particular, served as a locus for a broader treatment of the themes of hospitality, ostentatious show, and the disconnection of a monarch with his country.⁴⁴ In the period after 1580 and up to the Civil War at mid-century architectural imagery and the language of classicism could seem to speak to a broad range of concerns. The richness of that language, and Jones's skillful use of it, are central themes in this thesis. The library of Inigo Jones survives like a relic of the interconnectedness of architectural studies and the many other subjects represented in the titles of Jones's books. By tracing out the themes which interested Jones we have a firmer sense of the intellectual place of architectural classicism in the minds of its patrons and architects, and their experience of this radical change in architectural style.

⁴³ Jonson 1975, 95.

⁴⁴ For the extensive bibliography on this poem see Don E. Wayne, *Penshurst. The Semiotics of Place and the Poetics of History* (Madison: The University of Wisconsin Press, 1984).

THE STRATEGIES OF PROFESSIONAL READING

L'uso é padre della sapienza, & la memoria é la madre.

—Cyprian Lucar, *A Treatise Called Lucarsolace*, London, 1590.

The noble Pindare doth compare somewhere,
 Writing with Building, and instructs us there,
 That every great and goodly Edifice,
 Doth aske to have a comely Frontispiece.
 Where (Guillim) better can the curious looke,
 T'have this observ'd, then in they present booke?
 Where, for thy proper matter, thou hast made
 A Front so true, as Spight cannot invade.
 First, England, being thy Scene thou soest present,
 In a Triumphall Arch, her Regiment, [. . .]

—John Guillim, *A Display of Heraldrie: Manifesting a more easie accesse to the knowledge thereof then hath beene hitherto published by any, through the benefit of Method*, London, 1610, sig. A2r.

This chapter explores the method by which Jones assimilated and interpreted architectural information through reading. In contrast to the two following chapters on the cultural, intellectual and architectural context of Jones's reading, this section concentrates on the exegetical strategies Jones used, and the significance of these strategies for an understanding of the importance of printed sources to his architectural thinking. Reading was a crucial method by which Jones assimilated knowledge and the chief way he had access to continental ideas about architecture. Rather than seeing Jones's reading as a neutral act, a simple transfer of knowledge, recent work on the theory of reading and on Renaissance reading in particular has

suggested how complicated an act reading was, that it was never neutral, that it was often overladen with moral, political, and pragmatic agenda, and that it varied with individuals. Reading was also the basis for many professions which required a high level of literacy in order to interpret the large amount of available printed material. In the early modern period levels of literacy varied to such a degree that careers could be formed by carefully defining one's reading abilities, developing proficiency in a particular field of reading and study, and with the great surge in the available material to read, serving as a learned guide for patrons in any field. It is my intention to show in some detail the nature of reading in English culture of this time, how proficiency in reading could be a great asset to his architectural and design career, and the implications this can have in understanding Jones's drawings and architecture.

Texts and Books

The study of architectural treatises has tended to focus on the writers rather than the readers, and at best the noble patrons to whom the books were dedicated. There has been a growing literature on architectural writers as evidence for the study of architectural theory within any given period. New books have appeared on treatises specific periods and the bibliography of architectural publication.¹ Yet these studies have for the most part ignored the reception of architectural literature. How were architectural treatises read and understood? Even the most recent study of fortification treatises goes no farther than to discuss the intended readers on the most ideal level, while only conceding that there must have been a general audience with an interest in the topic as well. Even given the small print run of editions in the early modern period, the intended readership by author and publisher alike must have far broader than "chiefs of great armies, military leaders, condottieri, diplomats, political personalities, and the larger members of the nobility."² Unfortunately for the historian, readers were never so neatly categorized nor their methods and motivations consistent with dedicatory pages and prefaces.

By locating the authority of the text in the author, architectural historians have followed the formalist tradition of literary criticism most directly connected

¹ See for example Guillaume 1988, E. Harris 1990.

² Pollak 1991, xvii.

with the New Criticism popular in English studies from mid-century in America. It is very easy to see the architect in this scheme as the author, encoding his buildings with meaning which only required the viewer's careful analysis to decipher.

Treatises, like architectural drawings, are seen as one further form of evidence in determining the architect's authorial intentions in design. In this scheme, books and drawings are transparent, pure carriers of ideas and meaning, and offering up to the reader or observer only one possible interpretation. While in the study of architectural drawings there has begun to emerge studies that stress the complex relationship between architect, draughtsmen, patron and building site, the study of architectural treatises lags behind.³

The paradigm for studying architectural readers has been to determine how books were mined for design solutions and architectural detailing. While that is certainly one way in which architectural treatises were read, as pattern books, clearly not all were read in this way. Different books seem to have been approached in unique ways. Large format, often folio, volumes, mostly with plates of the orders, are now rare; due perhaps to their use on the building site by masons. The harsh conditions of their use would mean that they did not last long. The large number of editions of books such as Hans Blum or Vignola's treatise on the orders suggests that there was an ongoing need for repeated printings.

The explosion in the number of studies of the theory of reading has much to offer architectural history. It allows us to see in a more complex fashion the process of architectural design as a series of negotiations between the architect, patron and the culture in which they operate, focussed in a common text. The study of reading, in all its guises, seeks to make visible a process previously taken for granted, a process that only occasionally appears in the marginalia of readers and the commonplace books of notes taken by readers from printed texts. As architectural historians this should also suggest that many architectural drawings, taken from printed sources, or copies of other drawings, are equally a record of the draughtsman's interpretation of an earlier source.

The study of the role of the reader in creating meaning, loosely termed reader-response criticism, is a broad and loosely defined field that draws from a number of specific approaches. In general, it is a reaction to the New Criticism of texts that placed all meaning in the text itself. As Susan Suleiman surveys in her

³See for example Christof Thoenes, "St. Peter's: First Sketches," *Daidalos* 5 (15 September 1982), 81-98.

essay on "Varieties of Audience-Oriented Criticism," a list of the practitioners of reader-response criticism would include many not normally grouped together.⁴ Each, however, from Iser's discussion of the implied reader to Stanley Fish's shared interpretive strategies, seeks to complicate the idea of an autonomous text.⁵

A central concern for an historical understanding of the genre of architectural literature is the context in which the work was written and then read. Hans Robert Jauss's proposals for a literary history is grounded on a retrieval of the 'horizon of expectation' that preceded the work itself. Like Stanley Fish's idea that there is always interpretation occurring, based on the cultural and literary expectations of the reader and author alike, Jauss stresses the climate in which a work is born:

The analysis of the literary experience of the reader avoids the threatening pitfalls of psychology if it describes the reception and the influence of a work within the objectifiable system of expectations that arises for each work in the historical moment of its appearance, from a pre-understanding of the genre, from the form and themes of already familiar works, and from the opposition between poetic and practical language.⁶

The notion of a shared horizon of expectation, a structure that encompasses both audience and culture, also appears in the work of Michael Baxandall's notion of a period eye, built up from everyday experiences and culturally specific skills.⁷ The study of architectural treatises could equally benefit from an approach that seeks to understand the genre system of literature that operated at any given time. What was the climate within which a work of architectural literature was written and read?

The theoretical abstractness of the reader-response criticism, directed at general ideas of audience more often than at the particular circumstance of any one reader or historical period, has more recently been tempered by the emergence of the loosely-defined field centered on the history of the book. Envisaged as truly

⁴ Susan R. Suleiman, "Introduction: Varieties of Audience-Oriented Criticism," in Suleiman/Inge Crosman 1980, 3-45.

⁵ Iser 1974; Fish 1980.

⁶ Jauss 1982, 23.

⁷ Baxandall 1972.

inter-disciplinary in nature, historians of the book examine the role of books as physical artifacts, and as the matrix where readers engage with texts.⁸ While the history of the book takes many forms, the study of publishing, printing, bookselling, literacy and reading aim in general to integrate the book back into a cultural context. The book then becomes more than a passive receptacle of ideas and circumstance but an active agent which gave rise to "a plurality of possible responses, not a tidily univocal interpretation" by its readers.⁹

Roger Chartier and Robert Darnton in their study French eighteenth century books, approach their material as one aspect of cultural phenomenon. Their work has focussed the attention of scholars on the interaction of texts and readers. Their use of the notion of "print culture," taken up by others, gives an indication of the breadth of these interests and the foray into the fields of anthropology and cultural history for methodological arsenal.¹⁰ For the study of "print culture" takes within its boundaries the product of printing technology, not only books but printed ephemera, single sheet prints, maps, etc., and the culture of its production and reception.¹¹

In particular the field of bibliography has expanded into "the sociology of texts," the study of "texts as recorded forms, and the processes of their transmission, including their production and reception."¹² The impact of a new kind of bibliography, such as that encouraged by Don McKenzie, has been to see the very physical structure of the book as a cultural phenomenon. One possible effect this could have on the study of architectural treatises would be a study of the format, choice of printing style and illustration technique in light of the prevalent modes of printing technology at any given time. It would require looking at the general mass of book production to see how architectural treatises compare with other books produced by the same printer, using the same type face and paper, for example. The English translation of Serlio's treatise is an excellent case in point, for the use of

⁸ For an overview of the issues in the field see John P. Feather, "The Book in History and the History of the Book," *The Journal of Library History* 21:1 (Winter 1986), 12-26; David D. Hall, "The History of the Book: New Questions? New Answers?" *The Journal of Library History* 21:1 (Winter 1986), 27-38.

⁹ Grafton/Jardine 1990, 32.

¹⁰ See for example Natalie Zemon Davis, "Printing and the People," in Davis 1965, 189-226.

¹¹ The two classic works in this field are still Eisenstein 1979; Febvre/Martin 1984.

¹² The term "sociology of texts" was coined by D. F. McKenzie, *Bibliography and the Sociology of Texts*. The Panizzi Lectures (London: The British Library, 1984), 4.

black letter type by the Stafford printer appears to have been re-introduced precisely for that type of large format book, often financed by London merchants, for the burgeoning trades.¹³ The re-use of blocks from the Dutch edition, the introduction of an alphabet at the end of Book IV, and the intended audience are all questions of the book's production which require a careful analysis of the bibliographic history of the book and an understanding of the book's relationship to other books printed before. The limitations of the printer and the expectations of the reader are two closely related, though seemingly distant, aspects of the study of any one book. Basic questions about what was available through the local press and from book dealers or book fairs needs to be resolved, especially for architectural publications, in order to understand the possible range of material available at any one time. How difficult and how expensive was a book? Domenico Fontana's treatise was a rarity in England even by 1630, as Nicholas Stone's sons purchased a copy in Italy for a friend of their father.¹⁴ Which books were produced in manuscript copies, either in translation or transcribed? Detailed bibliographies such as the recent *British Architectural Books and Writers 1556-1785* by Eileen Harris are excellent starting points for the study of any national production. Yet even this excellent study needs to be incorporated within a larger study of the whole landscape of the book trade and reading practices of any one period. All surviving library lists indicate that British books were read or used in conjunction with foreign imprints.¹⁵

Reading and Writing

One of the most important results of the history of the book has been the new attention paid to the activity of the reader in history. From Chartier and Darnton's work has emerged an interest in the activity of reading within specific historical periods and for various purposes. Reading has been categorized as an activity that occurs over time and in specific physical space. Tracing the rise of silent reading, for example, has led to studies of the creation of private library rooms specially designed for the purpose.¹⁶ Both Darnton and Chartier have studied how readers

¹³ See the discussion of the printing history in E. Harris 1990, 414-17.

¹⁴ See the entry under Domenico Fontana in the Additional Books Appendix.

¹⁵ See for example the appendix of library lists in Gent 1981, 66-86.

¹⁶ Roger Chartier, "The Practical Impact of Writing," in Chartier 1989, 134-38.

came to expect certain textual layout and presentation, and that those horizons of expectation affected their eventual reading of any given text.¹⁷

As historians and literary historians have become attuned to "reading" as an engaging field of study, attention has turned from the general, theoretical and cultural models to the individual and particular. From the interest in those moments when public reading became silent, and the impact of print made texts more readily available, individual readers are being studied on the basis of their surviving books, library lists, letters, diaries and commonplace books. Micro-history, as it is sometimes called, has produced important studies of particular readers, such as Carlo Ginzburg's study of the reading of a sixteenth century miller.¹⁸ The individual reader complicates the more generalized theory of period changes. Individual motives vary for reading, and when the evidence is available in the marginalia or correspondence, it is possible to see the wide variety of readings taking place.

From the marginalia of Jones it is possible to see just how active reading in the Renaissance could be. A text was not received passively, but digested, processed, addressed and argued with. From the moment of purchase and the choice of binding (books were most often purchased unbound) the book was made into a personal—and often unique—copy. While some book owners may have been more collectors than readers, Jones's library was not by any indication a large one, nothing like the thousands of volumes in the Lumley Library that became the Royal Library. Those books that Jones read, such as his copy of Palladio and Vitruvius, he read more than once and over a long period of time. There is in the margins of Jones's books the traces of his working through the material, tracing themes through the solutions of the orders, seeking to understand the principles underlying the system of architectural classicism. While some of these strategies are discussed later in this chapter, the point to be made here is the directed activity of reading, "the energy which must be acknowledged as accompanying the intervention of the scholar/reader with his text."¹⁹ As Grafton and Jardine stress in their study of the political readings of the Elizabethan Gabriel Harvey, that energy was always goal oriented, "reading as intended to give rise to something else."²⁰

¹⁷ Robert Darnton, "Readers Respond to Rousseau," in Darnton 1984.

¹⁸ Giovanni Levi, "On Microhistory," in Burke 1991, 93-113. Ginzburg 1982.

¹⁹ Grafton/Jardine 1990, 30.

²⁰ Grafton/Jardine 1990, 30.

The process of sorting the printed material required particular skills in reading and categorization. As Jones received information in its printed form it was still far from available in a useful form. The text and illustrations still needed to be sorted into categories, cross-referenced, to make sense of it. A general type of Jones's reading strategies is in the nature of this indexing, the creation of marginal reference points to facilitate finding the information later, and to summarize the difficult points. Like many readers Jones then transferred this 'digested' reading to another place, notebooks or commonplace books. Only one of these notebooks by Jones survives, wrongly termed a 'sketchbook,' and now in the collection at Chatsworth. This book should be seen as a commonplace book, and, given that the major material of Jones's study was visual, filled with sketches taken from other sources and passages copied from his readings.²¹ (Figure 2) The lack of drawings in the margins of his books, while initially surprising given that other readers often did add illustrations or even doodles in the margins, may have been because Jones had a reading system that included notebooks for the copying of drawings as well as the transfer of notes.²²

The formation of epitomes was a reading strategy intended to make the information usable and better able to remain in the memory. By summarizing the difficult and often convoluted technical information into short summaries in the margin, Jones is creating a mnemonic system for his own use. This method of study was prescribed by Cicero, Quintilian and Erasmus as the basis for rhetorical study and moral philosophy, and continued through the middle ages and into the renaissance as a fundamental skill of scholarship. It was a technique encouraged by writers such as Peacham, urging young gentlemen to use their books, write in the

²¹ On the Roman sketchbook see Peacock 1989; Wood 1992.

On commonplace books in general see Joan Marie Lechner, *Renaissance Concepts of the Commonplace* (Westport, Ct: Greenwood Press, 1962). I am grateful to William Sherman for this reference and subsequent discussions about the creation of commonplace books in the Renaissance.

The earliest commonplace book that I have found devoted to architectural topics is British Museum Ms. Sloane 531. In a mid-17th century hand, the book is organized into alphabetized sections, with some of the headings and topics filled in, ie. "orders", etc; and includes some notes on painting taken out of Lomazzo. Also see the notes taken out of Vitruvius, Vasari, and Palladio in the notebooks of Richard Symonds (1630's). BM Ms. Rawlinson D121, fo. 116-117, 132, 138-140; BM Ms. Harley 943, fo. 260, 264. See Beal 1984.

²² John Dee, for example, often illustrated his books. See Sherman 1991, 127-29. For the role of the margins for visual commentary see Michael Camille, *Image on the Edge: The Margins of Medieval Art* (Cambridge: Harvard University Press, 1992); Carruthers 1990, 244-48.

margins, appropriate them as their own. "...for your owne use spare them not for noting or enterlining (if they be printed) for it is not likely that you meane to be a gainer by them, when you have done with them..."²³ To write in the margin was the mark of the scholar, and distinguished him from girls and gallants who carried their prayerbooks to church "but for their outsides." Annotating the text indicated a seriousness of study, and the surviving books from the period in libraries indicate the wide variety of methods used by readers in annotating. There were various types of annotating depending on the readers interests and purpose in reading.

Printed books may well have been designed with wide margins precisely for the purpose of allowing the reader to make marginalia. The tradition is an ancient one, and Quintilian urged that waxed tablets should be left with wide margins for corrections and *dilatatio*, ideas that might arise while you are correcting text. As Mary Carruthers notes, this tradition from the *Institutio oratoria* valued a text that showed the various stages of corrections and amendations by the readers, and was to be preferred over a clean copy of the original text with the new incorporations, but a page with the evidence of its changes over time.²⁴ This classical tradition and its continuation in the Renaissance gives a new importance to books such as those which survive from Jones's library, marked over. These scholars' books may well have had more value than the 'perfect' copy for they showed a text corrected and updated and the physical remains of scholarly reading.

Renaissance readers annotated books in a number of ways which were directly related to their professions, and annotational systems could be as individual as the reader. Henry Percy, the ninth Earl of Northumberland (1564-1632), had an important collection of architectural treatises and annotated many of them. Unlike Jones who never left a statement of his method of annotating, Percy wrote in his copy of Plutarch that a set of three underlinings above a caret set out "places . . . whiche concerns generall heds if the name of the head be set down in the margene, if not then it is somme simile or notable saing or sutche like. Theas points in the end . . . signefies the end of that matter." Annotations could also mark in the table of contents or index which sections he had read as a record of accomplishment or to remind him when he turned to the book for a second reading: "the chapters whiche

²³ Peacham [1634] 1962, 54.

²⁴ Carruthers 1990, 204-205.

ar of greatest note ar marked with a triangle. Note that suche titells of chapters as ar noted with O ar red."²⁵

William Sherman, in his study of the sixteenth century annotated books in the Cambridge University Library, has proposed a taxonomy of the marginalia by editors, respondents, teachers and students, scholars, practitioners and collectors.²⁶ As Sherman notes, most readers' annotations fall into more than one group, as any one person read in different ways depending on the task at hand. Editors' annotations, for example, are concerned with the accuracy of the text, often checked against a manuscript source. Respondents often made more personal annotations consistent with the Renaissance pedagogical practice of dialogue.

As background for his study of Platonic exegeses, James Hankins has proposed a "typology of reading" for the fifteenth century and its developments over time.²⁷ Hankins creates an admittedly formal system of reading, from meditative reading based in monastic communities, through doctrinal, scholastic, imitative and allegorical methods fully developed in the middle ages. Critical and aesthetic reading are newer developments in the fifteenth and into the sixteenth century. As Hankins notes, each type of reading developed within specific communities and with particular genre of literature as the focus; yet readers were likely to have been able to draw upon more than one method in their reading.

For the Renaissance, there has not yet been such a systematic survey although recent studies have defined the reading strategies of particular readers. Carlo Ginzburg's study of one reader in the sixteenth-century seeks to understand the "screen that [the reader] unconsciously placed between himself and the printed page: a filter that emphasized certain words while obscuring others, that stretched the meaning of a word, taking it out of its context, that acted on [his] memory and distorted the very words of the text."²⁸ The work of Ginzburg is among that of others who have sought to discuss the reading process of specific, historical readers.

The reading practices and reading theory of Michel de Montaigne have attracted the attention of literary critics and historians of reading. He seems to be

²⁵ Batho 1960, 256.

²⁶ Sherman 1991, 82-112. The following discussion of reading taxonomy is indebted to his summary of the material.

²⁷ Hankins 1990, I, 18-26.

²⁸ Ginzburg 1982, 33.

an ideal subject for the study of reading as his essays are ripe with comments on the nature of books, texts and his own responses. Yet Montaigne, for all his apparent ability to stand as representative of the Renaissance reader, represents the reader as solitary scholar, cloistered away from the world in the sanctity of his study.²⁹ This notion of the privacy of the library and the subsequent privacy of the reading should not be taken as the only type of reading, or reader, in the Renaissance. For as Hankins has suggested there were various strategies employed by readers for various purposes, and many of these were techniques developed for professional readings.

Jones's reading falls into two general types: the scholarly reading and the professional reading of architectural practice. Jones's earliest annotations are those where he is clearly using his books as professional source material, creating a resource to which he could return for information on the orders and building technique (Palladio); and a basic history of artists and styles (Vasari). There is the sense in these books that Jones is creating a "working copy", with no intention to maintain the pristine appearance of the book. While others in England would also have had a copy of Palladio or Serlio, Jones's re-working of the text through reading, annotations, and the digestion of the text, increased that book's value for him as a professional resource. Other examples of this kind of reading are most often seen in Renaissance medical texts, particularly copies of Galen's *Ars Medica*.³⁰

Professional Reading

In his essay "Of Bookes," Michel de Montaigne comments on the nature of reading and the role of marginalia to aid the memory:

Somewhat to ayde the weaknesse of my memory, and to assist his great defects; for it hath often beene my chance to light upon bookes, which I supposed to be new, and never to have read, which I had notwithstanding diligently read and runne-over many years before, and all bescribbled with my notes: I have a while since accustomed my selfe, to note at the end of my booke (I mean such as I purpose to read but once) the time I made an end to read it, and to set down what censure or judgement I gave of it; that so, it may at least at another time represent unto my mind, the aire and generall idea, I

²⁹ Ophir 1991, 163-89; Sherman 1991, 39-40.

³⁰ See Nutton 1985. Cf. Sherman 1991, 102-5.

had conceived of the Author in reading him. I will here set downe the copy of some of mine annotations, and especially what I noted upon my Guicciardine about tenne yeares since: (For what language so ever my bookes speake unto me, I speak unto them in mine owne) . . .³¹

For Montaigne, the role of the reader was to enter into a dialogue with the text, based on personal interests and particular circumstance. The annotations record the creation of a new text that lies between the printed page and the reader.³² Manuscript marginal notes are evidence of the reader speaking back to the text, the dynamic connection across the space of the page itself. Like printed marginal notes, which in their references to other sources record a dialogue of textual exchange, the hand of the reader in the margin indicate an even more immediate response.³³

Why did Jones seemingly spend so much 'energy' on reading, and for what purpose? Some of the answers are obvious. Being a long way from Italian or French classical architecture, books were available for study before he ever travelled and after his return. Architectural treatises served as a ready reference, and the scholarly activity of reading aligned Jones with the educational and moral values of his patrons.

The making of marginalia was a useful procedure but it was also a moral one. Careful reading was the sign of seriousness, scholarship and an internal moral fibre defined by the core and structure of the mind's memory. Jones's concern with moral philosophy in his reading of Plutarch indicates the extent to which he saw his own scholarship as the key to "continence." As Mary Carruthers notes "the choice to train one's memory or not, for the ancients and medievals, was not a choice dictated by convenience: it was a matter of ethics. A person without memory, if such a thing could be, would be a person without moral character and, in a basic sense, without humanity. Memoria refers not to how something is communicated, but to what

³¹Montaigne [1580] 1886, Bk. II, Ch. X, 210.

³² See Cathleen M. Bauschatz, "Montaigne's Conception of Reading in the Context of Renaissance Poetics and Modern Criticism," in Suleiman/Crosman 1980, 264-91. For a view of Montaigne as the prototypical heroic and solitary reader of the renaissance see Margolin 1989, esp. 15-19.

³³ See Don McKenzie, "The London Book Trade in 1644," in *Bibliographia. The Marc Fitch Prize for Bibliography*, ed. John Horden (Oxford: Leopards Head Press, 1992), 131-52, esp. 143.

happens once one has received it, to the interactive process of familiarizing—or textualizing—which occurs between oneself and others' words in memory."³⁴

The great ability of Jones to design from within the classical language, to enter into the rules and vocabulary of ancient forms and modern usage, was founded on his exceptional memory of the architecture he had seen and studied. What is left in the margins of his book are the traces of his own mnemonic exercises composed of corrections and affirmations of the text. So many of Jones's annotations, too readily dismissed as merely translations of the text, are the evidence of his struggling to memorize a complex system of form, tradition and use; and then to write it again through his own designs.

Reading was a skill as necessary to the architect as drawing or surveying. Barbaro's commentary on Vitruvius urged the architect to read texts that would help to fix ideas in the memory and supplement other types of training. Against the following text Jones wrote "learned in thos tonges whear in the arte ar written."

(Vitruvius): Ma perche cosi bisogna sia, questa è la ragione. E necessario che lo Architetto habbia lettere, accioche leggendo gli scritti libri, commentari nominati, la memoria si faccia piu ferma.

(Barbaro) Il giudicare è cosa da prudente; la prudenza compara le cose seguite con le instanti, & fa stima delle seguenti. Le cose seguite per memoria si hanno, pero è necessario a quell'ufficio di giudicare apartiene allo Architetto havere memoria ferma delle cose, & la memoria ferma si fa per la lettione, perche le cose stanno fermamente ne gli scritti: però bisogna, che lo Architetto habbia la prima arte, detta cognitione di lettere, cioè del parlare, & dello scrivere drittamente. Egli si ferma adunque la memoria con la lettione de'commentarij. il nome istesso lo dimostra, percioche Commentario è detto, come quello, che alla mente commetta le cose, & è breve, & succinta narratione di cose; la dove con la brevità souuene alla memoria. Bisogna adunque leggere, & le cose lette, per la mente riuolgere; altrimenti male ne auerrebbe dalla inuentione delle lettere (come dice Platone) percioche fidandosi gli huomini ne gli scritti, si fanno pigri, & negligenti. Vit. hebbe cognitione di lettere Greche, & latine: usò i vocaboli Greci, & confessa havere da Greci molte belle cose ne i suoi commentarij traportate. In questo modo io dichiaro ha vere cognitione di lettere: perche piu sotto 'pare, che Vit. cosi uoglia: espondendo cognitione di lettere esser la Grammatica. Altri intendono l'arti scritte: ma io uedo, che l'arti scritte

³⁴ Carruthers 1990, 13.

senza Grammatica, & letteratura no si hanno. Et forse dal non intendere le lettere è nata la difficultà di intendere Vitruv. & la scorrettione de i testi.³⁵

For Barbaro, and for Jones, reading as one method of mnemonic facility was an essential *praxis* of the architect, part of the professional training and experience. In his phrasebook of Latin and English useful for the various professions where Latin would have been a common language for craftsmen of different nationalities, William Horman defined the standing of the mason or architect by his ability to write and draw. "He is not worthy to be called mayster of the craft that is not cu[n]nyge in drawynge and purturyng. No[n] est architecti nomine dignus qui graphidis peritus non est."³⁶ Later in the century John Shute repeats the advice of Vitruvius and directly connects the skill of reading with the necessity of drawing: "If he [the architect] haue (saith [Vitruvius]) learninge he shall strengthen his memory with all written bookes, and throughe drawing vtter his fantasie and shewe the trike or fascion of the thing that he goeth about to make".³⁷

The Roman notebook contains additional evidence of Jones's memory study through visual images. Against a sketch Jones wrote "in memoria della madonna dell parmesano in sta[m]pa."³⁸ (Figure 3) By making sketches Jones aided his memory visually to record images and techniques.³⁹ Sketches by Jones after Serlio are further examples of his drawing and writing in order to digest the ideas and also to remember the image. (Figure 4) Three sheets survive with graphite and pen and ink studies by Jones of rusticated windows, for which he writes "the exampell of this . . . is in Serlio Li. 7. fo. 63."⁴⁰ The drawings are studies of the length of the rustication on the top of windows, and their relationship to the rustication on the sides. It is not clear which project, if any, Jones had in mind as he studied this rustication. In the years around 1617 Jones studied with some care the rustication of the Palazzo Thiene, where a similar kind of rustication appears on the windows of

³⁵ Vitruvius 1567, I, 12-13.

³⁶ William Horman, *Vulgaria viri doctissimi* (London, n.p., 1530), sig. V5v.

³⁷ Shute 1563, sig. Biiv.

³⁸ Roman Sketchbook, 41.

³⁹ See the discussion of Jones's drawing technique in Wood 1992.

⁴⁰ RIBA Jones & Webb 76 (Harris/Higgott 1989, cat. 26, 96).

the piano nobile.⁴¹ These drawings, however, represent one aspect of Jones's working method in making studies of design problems and correlating those images with the sources in printed texts.

The importance of memory in architecture is one aspect of the architectural design that is difficult to reconstruct from an historical distance. The presence of a text—or of a drawings—depended on a number of ephemeral events which took place but were never recorded. Like the role of talking in design, the gestures and conversations held over drawings between patron and architect, or the discussions among workmen at the site, beyond the evidence of marginal annotations there are only faint hints to these interactions. What is clear is that reading was a process, an event, that involved human activity and is now mostly invisible.⁴² It is possible from comments such as those by Barbaro to see how the treatise was to be used as the reference point in the architect's training and practice.

Reading for Jones was part of his professional activity and essential for his professional training. By 1600 the genre of architectural literature was vast and included many commentaries on the ancient textual sources of Vitruvius, Pliny and the range of ancient authors who included architectural descriptions, the many translations of Euclid, and a large literature of travel descriptions and guides to ancient Rome and elsewhere. The extensive range of Jones's reading in all areas of architecture and related humanist literature follows Vitruvius's prescription for the training of the architect, and the later suggestions by writers such as Philibert de l'Orme. Taking a model developed for the study of other readers in the English Renaissance it is perhaps more accurate not to see Jones solely as a professional architect but also as a professional reader of architecture. Grafton and Jardine have recently argued "that scholarly reading . . . was always goal-oriented—an active, rather than a passive pursuit. It was conducted under conditions of strenuous attentiveness; it employed job-related equipment (both machinery and techniques) designed for efficient absorption and processing of the matter read; it was normally carried out in the company of a colleague or student; and it was a public

⁴¹ This treatment of rustication appears frequently in the designs of John Webb, including in a design after Jones for the facade of the Star Chamber (1617). See Harris/Higgott 1989, 100.

⁴² See Tzvetan Todorov, "Reading as Construction," in Suleiman/Crosman 1980, 67-82. On its relationship to architecture see Rykwert 1988.

performance, rather than a private meditation, in its aims and character."⁴³ Jones's reading meets many of these assertions about the scholarly reader. His reading was goal oriented, directed toward specific building problems; the density of the annotations indicate his attentiveness; he often drew with compass and pen at hand, the tools of architectural drawing; his reading was at times done in the company of his assistant John Webb or perhaps for masons. Finally, as I have stressed elsewhere, Jones's reading was decidedly a public performance, directed toward the demands of life at court and the immediate needs of his patrons.

One of Jones's earliest professional positions we know of was his travels through France, Germany and Italy with Francis Manners, Lord Roos, brother of Roger, 5th Earl of Rutland from 1598.⁴⁴ By the late sixteenth century travel rivalled university attendance as a form of education.⁴⁵ Scholars as tutors were often included in the entourage, experts in specific fields or more generally well-read members of the father's household.⁴⁶ In a letter to Manners from the Earl of Essex advising him on his studies in a manner that reappears in other letters of the type, Essex recommended that he pay special attention to the two phases of learning: "to conceive or understand and "to lay up or remember." It was necessary to have assistance and he advised that Rutland "read with somebody . . . and to that end you must either carry over with you some good general scholar, or make some abode in the universities." Essex advised the specific technique of making "notes and abridgments."⁴⁷ Jones certainly acted as an artistic expert on his later trip with Arundel, and he may well have served in that capacity for Francis Manners fifteen years before.

⁴³ Grafton/Jardine 1990, 30-31. Their idea of the professional reader qualifies the more modern—and romantic— notion of the reader in the Renaissance as an individual struggling with a text in the search for meaning. Cf. Margolin 1989, esp. 12.

⁴⁴ Harris 1973, 17.

⁴⁵ Stone 1965, 692-702.

⁴⁶ Grafton/Jardine 1990, 33-5.

⁴⁷ Printed in W.B. Devereux, *Lives and Letters of the Devereux, Earls of Essex* (London: John Murray, 1853), i:322-30; cited in Sherman 1991, 80. Also see Norman K. Farmer, Jr., "Fulke Greville's Letter to a Cousin in France and the Problem of Authorship in Cases of Formula Writing," *Huntington Library Quarterly* 22:2 (Summer 1969), 140-47 and Vernon F. Snow, "Francis Bacon's Advice to Fulke Grevill on Research Techniques," *Huntington Library Quarterly* 23:4 (August 1970), 369-78.

A clear indication of how Jones intended to use his reading in his later practice comes in an examination of his surviving notebook, the so-called Roman Sketchbook. The book is a compilation of notes taken from Palladio's *L'antichita* and Lomazzo, as well as drawings after prints, drawings and printed books. The most famous of the pages is a passage transformed by Jones from earlier annotations in his Vasari, the note on architectural ornament (see the following chapter on antiquarian studies). Each of these notes or drawings are taken out of other sources, epitomized from his reading, and organized in a form available for ready use at a later point. The notebook was to be an aid to memory, a commonplace book. Here we see Jones following a standard method of reading by those for whom reading was an essential professional activity.

One of the areas of greatest interest in the study of Jones's marginalia has been the recent efforts to date the handwriting. John Newman and Gordon Higgott have studied the mass of Jones's marginalia, and through the few dated annotations, have been able to show how Jones's handwriting changed after his trip to Italy in 1613-14.⁴⁸ Before that trip Jones used a modified secretary hand, with distinctive English letter forms for the letters 'p', 'r', and 'h' in particular. From early annotations in his copies of Palladio, *I quattro libri*, Barbaro's edition of Vitruvius, Vasari's *Vite*, and the two volumes of Serlio Jones owned it is possible to see how his handwriting changed over time.⁴⁹ This change in his handwriting has made it convenient for historians, eager to date annotations to different periods in Jones's career and architectural development. While it may not be easy to pin down the date of any undated annotation made after Jones's return to England in 1614, it is relatively clear which annotations were made before the trip, written in a small hand with many secretary letter forms.⁵⁰

⁴⁸ See the articles by John Newman, "The dating of Inigo Jones's annotations," in *Essays presented to Peter Murray* (1980), typescript in the University of London Library; Newman 1992, 19-20; Higgott 1983, 24-34.

⁴⁹ See the entries for each of these titles in the Annotated Bibliography Appendix that follows.

⁵⁰ The important work by John Newman and Gordon Higgott on this topic has been an invaluable help to all those who work on Jones's library. The dangers, however, with using their chronology too closely are many. There are annotations, dated by Jones to late in his career, which still use the unchecked secretary letter forms. That this is so is not surprising. His annotations were a personal form of writing, and much as he would have wanted to fully "italianise" his hand, the inevitable "English" form creeps in from time to time. Much more useful in their work has been the general description of the change in Jones's hand, accompanied by so many other self-conscious continental affectations.

Jones's handwriting changed after his trip to Italy with the Earl of Arundel. It was only one of his new mannerisms he adopted after this crucial trip. Like other travelers who return home with new-found habits as a record of a meaningful journey, Jones took on the outer trappings of the intellectual and cultural life of Europe. While in Italy he noted their calendar by writing the date in the "new style," the Gregorian calendar, as he did in the list of ancient ruins he recorded as having studied in Rome in his copy of Palladio.⁵¹ The change in his handwriting is ascribed to the later period in Jones's life, after the 1613 trip to Italy, but it may well have been under way before he left England. Certainly some of the annotations in the Italic hand were made while Jones was in Italy.

Jones's earlier secretary hand was the kind taught to the middle classes and particularly to those trained in the trades up to the end of the sixteenth century. The use of a second hand, the italic, was often learned in conjunction with a secretary hand, and fast became the standard form of handwriting for the educated classes and those attending university. The rise of the humanist hand in Italy (the Papal chancery hand) in the fifteenth century arrived in its "italic" form much later in England, the mark of humanist education.⁵² The introduction of the Italic hand stands as the mark of a larger cultural change in education and the cultural connections between England and continental Europe. As Jonathan Goldberg writes in his recent study of handwriting in Renaissance England.

In the course of the sixteenth-century, when at least a dozen different hands were written-varieties of secretary, the ordinary hand that developed from earlier 'gothic' scripts, as well as a number of fixed hands used in the keeping of records of various branches of the government and law—a new hand, imported from Italy, superceded the native types, not initially as the usual documentary hand, but as the hand in which to write private correspondence. It is the hand of the humanist pedagogues, and in England, unlike Italy, it is the hand of a centralized monarchy. Edward's exemplary humanist education

⁵¹ See the following chapter on the study of antiquities where this note is described in detail.

⁵² See the work of Armando Petrucci, *La scrittura: Ideologia e rappresentazione* (Turin: Einaudi, 1986 ed.); idem., "Scrittura, alfabetismo ed educazione grafica nella Roma della primo Cinquecento," *Scrittura e Civiltà* 2 (1978), 163-207.

began in his hand; Ascham taught the Queen to produce a handsome italic script.⁵³

Jones's use of an italic hand, especially for his most private of annotations in the margins of his books, attests to his desire for the inward as well as the outward marks of humanist learning.

While the italic gained popularity as the hand of the nobility and educated gentry, the secretary hand continued to be used, especially for documents written in the vernacular rather than in Latin, or for letters written by a clerk and to be signed by the author. More than the general text it was through the signature, the personal sign, that denoted the presence of the individual; and if written in an italic hand, the indication of status.⁵⁴

Jones's use of an italic hand was only one part of his architectural professionalism. Closely related to his ability to read and annotate his books was his ability to draw. The pen was an instrument suited for both script and architectural drawing, and the one activity could well spill over into the other. As in the many sheets which survive by Michelangelo where a draft of a letter was ended, the sheet turned, and a sketch begun, writing and drawing were similarly closely related for Jones.⁵⁵

One of the most distinguishing marks of Jones's books is his distinctive italic signature on the titlepage. Nearly always placed in the lower right hand corner, it was a carefully wrought and practiced signature, at times with a decorative flourish. (Figure 5) In his most important book, Palladio's *I quattro libri*, at the beginning before any text, Jones left a flyleaf filled with his signature, motto and evidence of his ownership. In a way uncharacteristic of his other annotations, there most often tied closely to the text at hand and always within the constraints of the margin, Jones has used the flyleaf as a practice field for his signature and for writing the name of the author, Andrea Palladio, over the page. While almost no other sketches of Jones survive, and few architectural sketches survive, here is one place

⁵³ Goldberg 1990, 51-2.

⁵⁴ " . . . an italic signature would indicate class or class aspirations, the trammels of 'civilization'—the high culture of the writer." Goldberg 1990, 239.

⁵⁵ On this connection between drawing and writing for Michelangelo see Michael Hirst, *Michelangelo and his Drawings* (New Haven: Yale University Press, 1988), for example study for St. Lawrence, Vatican, Codex Vat. Lat. 3211, fol. 88v; discussed on pp. 38-9.

where it is possible to see Jones experimenting with a crucial form of self-identity, his signature. The signature also appears on some of Jones's presentation drawings, as evidence of authorship and authenticity.⁵⁶ (Figure 6)

Jones's use of an italic hand coincided with a change in his architectural drawing technique. The earliest known drawings by Jones, such as his elevation for the New Exchange in the Strand (1608), use standard English forms of representation, a mixture of orthogonal projection and perspective, with varying scales for different parts of the drawing.⁵⁷ (Figure 7) While part of this 'awkwardness' must be ascribed to his lack of experience and first tries at architectural rendering, Jones rapidly adopted Italian drawing techniques based on his study of Palladio's drawings and methods put forth by Vincenzo Scamozzi. From 1616 to 1619 Jones carefully studied the drawings of Palladio, adding to his understanding of Palladio's use of orthogonal projection from drawings he had purchased in Italy.⁵⁸ Jones adopted Palladio's conventions for showing openings and staircases on plans, and the form of wall rustication.⁵⁹

An essential aspect of Jones's professional training was his ability to communicate his ideas to patrons through speech and drawing. All of his carefully acquired book-learning and study of ancient monuments would have been in vain had he not been able to convince patrons of his own skill as a learned architect. Of the many stories that were recorded about Jones during his own time many recount the architect's great skill in discussing architecture or the visual arts in a public setting. The often repeated story of Jones's display of bravura connoisseurship gives some indication of how Jones used his education. When a shipment of pictures arrived at court in early 1636, a gift from Cardinal Barberini to Queen Henrietta Maria, the papal agent, Gregorio Panzani, records how Jones used the occasion to

⁵⁶ Jones's signature appears on the following drawings: Plan and elevation for a brew-house, ascribed to Hassenbrook Hall, Essex, RIBA Jones & Webb 58, Harris/Higgott 1989, no. 90; Longitudinal section for a triumphal arch at Temple Bar, RIBA Jones & Webb 54, Harris/Higgott 1989, no. 83; Elevation for the entrance bay for an unidentified house, RIBA Jones & Webb 73, Harris/Higgott 1989, no. 73; Elevation and plan for the inner side of the Vineyard gateway, Oatlands Palace, Surrey, RIBA Jones & Webb 64, Harris/Higgott 1989, no. 18; Elevation for the outer side of the Vineyard gateway, Oatlands Palace, Surrey, RIBA Jones & Webb 62, Harris/Higgott 1989, no. 17.

⁵⁷ See the discussion of this drawing in Harris and Higgott 1989, 36-8.

⁵⁸ See Gordon Higgott's discussion of Jones's architectural drawing method in Harris/Higgott 1989, 25-6.

⁵⁹ Harris/Higgott 1989, 25-6.

demonstrate his knowledge of painting. Panzani wrote back to Cardinal Barberini "The very moment Jones saw the pictures, he greatly approved of them, and in order to be able to study them better threw off his coat, put on his eye-glasses, took a candle and, together with the King, began to examine them very closely." In a letter a few days later Panzani again wrote about the discussion surrounding the shipment.

The King's architect Jones believes that the picture by Leonardo is the portrait of a certain Venetian, Ginevra Benci, and he concludes it from the G. and B. inscribed on her breast. As he is very conceited and boastful he often repeats this idea of his to demonstrate his great knowledge of painting. As the King has removed the names of the painters, which I had fixed to each picture, he also boasts of having attributed almost all the pictures correctly. He greatly exaggerates their beauty, and says that these are pictures to be kept in a special room with gilded and jewelled frames, and in spite of his being a very fierce Puritan he said this publicly in the ante-chamber of the Queen.⁶⁰

Jones's proclamations on painting are also recorded in the lecture notes of Thomas Marshall, a student at Oxford in the 1630's. Headed in his commonplace book as "Observ. of Inigo Jones," they are notes on the painting styles of Michelangelo, Giulio Romano, Raphael and others, taken from Vasari's *Vite*.⁶¹ While it is not certain from the manuscript the exact context in which these notes were taken—they may have been at some form of informal lecture or discussion—the notes attest both to Jones's public presentation of his learning and his direct use of his library as a resource.

The importance of treatises as records of architectural thought has, I believe, tended to overshadow this oral aspect of the transmission of architectural ideas and the role of talking in design. John Dee in his preface to Euclid (1570) lists the skills necessary for the architect: "For, the true Architect, is hable to teach, Demonstrate, distribute, describe, and Iudge all workes wrought."⁶²

⁶⁰ Transcribed from the PRO documents in Wittkower 1974b, 68. Also discussed by Wood 1992, 247.

⁶¹ Bodleian Library, Oxford. Ms. Marshall 80. Transcribed by Wood 1992, Appendix III, 269.

⁶² Dee 1570, sig. diiiiv.

Mary Carruthers posits that part of the problem is the modern definition of literacy, as it "privileges a physical artifact, the writing-support, over the social and rhetorical process that a text both records and generates, namely, the composition by an author and its reception by an audience. The institutions of literature, including education in the arts of language, the conventions of debate, and mediation, as well as oratory and poetry, are rhetorically conceived and fostered."⁶³

By the end of the sixteenth century in England lectures at Gresham College in London formalized the oral transmission of building knowledge. When Richard More ended his treatise on *The Carpenters Rule* (1602) he referred the reader wishing further information to the lectures at Gresham College on Thursday nights.⁶⁴ Sir Thomas Gresham, the Elizabethan financier, founded the lectures in 1597 for the benefit and education of the city's guilds. These lectures are one way, easily traced, by which new ideas in building technology, geometry and surveying passed amongst masons and so into buildings.

Jones certainly learned about architecture from such an informal route, and acting as Surveyor of the King's Works and advisor on building projects throughout the city, helped to disseminate his ideas on buildings in a similar way. For all the importance of this manner of transmitting information one of the distinctions which marked Jones as an architect and assured him status as a professional was his humanist and scholarly approach to his topic, gained through the study of books and sources.⁶⁵

The Techniques of Reading

It is in Jones's copy of Palladio that we see the greatest variety of reading practice, and like Gabriel Harvey who read his copy of Livy as a central source and the fulcrum of his reading practice, Jones used Palladio as a central source.⁶⁶ The importance of Jones's reading of Palladio for architects after 1650 and into the

⁶³ Carruthers 1990, 11.

⁶⁴ Richard More, *The Carpenters Rule*, sig. A3r.

⁶⁵ Cf. the more secretive and hermetic approach suggested in Rykwert 1988. For medieval architecture Rykwert makes a distinction between the Vitruvian discourse of architecture, "public, literary and used in talking about building by the lords and clergy and literati". The second type of architectural communication was secretive, and "carried on, compass in hand, by masons and carpenters and other building workers as well as by jewellers". (46)

⁶⁶ Grafton/Jardine 1990.

eighteenth century, specifically for Lord Burlington and other Neo-Palladians, has blinded historians of the earlier period to Jones's reading of more than one text and his critical reading of Palladio. There have been various studies which have sought to correct this imbalance and to see Jones using a variety of sources including Serlio, Scamozzi, Vignola and Vitruvius in conjunction with his reading of Palladio.⁶⁷ This need for a revision in the study of Jones's use of sources should not, however, overshadow the important role of the Palladio as the central book in Jones's study, the fulcrum around which his other reading rotates. It was one of the earliest books Jones owned and he continued to read and annotate it throughout his career. Whereas other books such as Rusconi were read through once or twice, Jones returned to Palladio again and again, making notes from other books into the margin of Palladio especially in his later readings after 1620.⁶⁸

One of the most distinctive aspects of Jones's reading and annotations is his use of one text against another. One of the central techniques of scholarly readers was to cross-reference the text at hand with other sources. As William Sherman notes in his study of John Dee's library "Extensive cross-referencing, both within the volume and to other volumes, is almost always in evidence in scholarly readings: no word appears in scholars' margins with a higher frequency than 'vide.' By reading with all other authorities in mind, and by entering them into the margins, the scholar provided a network of, and map to, an ever-growing body of knowledge."⁶⁹ While Jones most often used the vernacular "see" rather than the latin "vide" his annotations record his extensive reading of one book in conjunction with another. This occurs most frequently in his readings on the orders and the various solutions provided by authors for the details of each order.

Jones occasionally wrote references to buildings he had seen elsewhere which differed from the plate in front of him. In an annotation in Palladio's chapter on loggias, which Jones wrote when he had returned to London, he recalled the palaces he had seen in Genoa and their placement of loggias at either end of the facade. "London 18 Jan 1614. At Genoa the youse most commonly to have 2 on at each end, and yt doth well for each apartment hath his logia to walk in ye morning

⁶⁷ See in particular the studies by Gordon Higgott and John Peacock. Although John Harris urged the need to see the Palladio in a broader context in his catalogue of the *King's Arcadia* in 1973, 65.

⁶⁸ See John Newman's discussion of the earlier phase of Jones's readings in Newman 1992.

⁶⁹ Sherman 1991, 97.

or to make on roddy in in ye sommer, without trobling ye haalle, but on ye outside on is more gracefull farr bringing a frontispiece in the middest wch is ye greatest ornament a house cann haauē."⁷⁰

There are a variety of ways in which Jones marked a passage. Often Jones drew hands or fists in the margin pointing to text that particularly interested him. Most often these are pointing hand with an extended index finger to mark passages that did not need a textual annotation. (Figure 8) The use of 'fists' by Renaissance readers became so standard an annotation of special interest that they were eventually printed in the margin of some texts as a "nota bene" mark for the reader from the author.⁷¹

Jones worked through not only the text with some care but also the accompanying plates, and employed a technique of marking the plate most often with capital letters, transferring the letters to the margins, and then summarizing the visual detail into textual heading. He often used this procedure for plates of the orders, breaking down each part of the capital, base or arcuated bay into individual elements. This technique had a number of advantages for Jones. Firstly, he could then understand the composition of the order in terms of its details. This was an essential part for his early study of the orders for he could then learn the orders in a sequential and logical manner. At times Jones could simply repeat into the margins the letters printed onto the plate, and often already provided by the author. Palladio included letters on the plates and then a key to the letters in the facing page of text. Jones added these when the author or engraver did not include them, following Palladio's layout for its exemplary clarity. On a plate of Scamozzi showing the plan of the ancient Roman house Jones has added copious letters to the plate as a key to the various parts of the house, and then created a directory in the margin. (Figure 9) Where there were not headings to a page Jones added them to the top or bottom, identifying the image and its relationship to the book as a whole. While these are seemingly obvious ways for Jones to make sense of his texts, it indicates the powerful effect of the layout of *I quattro libri*, and one further motive for his continued use of that treatise as a model for clarity and legibility.

As a professional reader of architecture and art related books, Jones needed to know about the range of available publications. Jones often copied into the margin

⁷⁰ Palladio 1601, I, 52.

⁷¹ See Slights 1989, 698.

an author's reference to a further publication. These references may then have formed future reading, or more generally may serve to create a catalogue for Jones of the literature and precedents for the field. For instance, in his copy of Guidobaldo del Monte's treatise on mechanics Jones makes references to the author's use of the ancient mathematician Pappus as a source. It is unlikely in this case that Jones then went to read Pappus. The annotations by Jones serve to draw out Guidobaldo del Monte's use of precedent and ancient authors as evidence. Annotations could serve to record books Jones had heard of before or should be noted down to be acquired. In the case of Vignola, a book Jones did eventually own, Jones made an early note (before 1614) to Vasari's citation of the *Regole* in his *Vite*. (See the entry s.v. "Barozzi" in the Annotated Bibliography Appendix.)

Comparison to other sources

James Hankins has recently noted that "critical reading" only emerged in the later fifteenth century as the humanities became more professionalized; and is the natural result of humanists desiring to revive antiquity in their own time. Further, a critical reading looks at texts as *fontes* rather than as *auctoritates*.⁷² This form of reading, and one which I would suggest Jones adopted particularly in his later contextual readings using historical sources was philological and "sensitive to anachronism and therefore aware that the original intention of the author cannot simply be intuited but needs rather to be reconstructed by careful observation of contexts and parallels."⁷³

By reading with all other authorities in mind, and by entering them into the margins, the scholar provided a network of, and map to, an ever-growing body of knowledge.⁷⁴ As I have noted elsewhere, Jones's reading in architecture responded to the large number of sources available to him by the early seventeenth century. There is the persistent sense in the annotations that one source was not sufficient. Palladio had to be compared to Serlio, Scamozzi and Vitruvius in order to arrive at the "reading" that Jones wished. In this way, Jones's reading was as much a creative activity as his drawing and designs, and a vital source and method for his

⁷² Hankins 1990, I, 24-5.

⁷³ Hankins 1990, I, 24-5.

⁷⁴ Sherman 1991, 97.

architectural work as a whole. Like many other Renaissance readers, Jones sought to digest the text in order to form a body of knowledge that was of use to him.⁷⁵

Comparative reading was a technique that Jones used frequently in his later annotations after 1625. Perhaps inspired by King James's order to investigate the ruins at Stonehenge, Jones began in the 1620's to read historical material in conjunction with his architectural studies. For his study of figure drawing Jones used prints and original drawings in his collection and those available to him.⁷⁶ For his study of antiquities and the design of masque scenery Jones used prints.⁷⁷ In each of these cases it is clear that Jones had catholic taste in looking to all the available sources.

In his reading, however, the number of sources which Jones had in use at any one time strongly suggests that he employed additional machinery to help with the sheer mass of books in front of him. In the recent studies of reading there has been some discussion of the tools used by professional readers to facilitate the consultation of many books at one time.⁷⁸ Agostino Ramelli illustrates one such book-wheel which allowed one reader to easily move between volumes, comparing one with the other.⁷⁹ (Figure 10) In conjunction with their study of the reading practices of Gabriel Harvey, Anthony Grafton and Lisa Jardine argue that the book-wheel was an important aspect of professional reading. "The book-wheel and the centrifugal mode of reading it made possible amounted to an effective form of information retrieval—and that in a society where books were seen as offering powerful knowledge, and the reader who could focus the largest number of books on a problem or an opportunity would therefore appear to have the advantage."⁸⁰ This is particularly apposite in the case of architectural reading and Jones's study habits in particular. By 1600, the date at which Jones's concerted reading of architectural

⁷⁵ See the comparable description of Gabriel Harvey's reading practices: "In addition to the richness and density of annotation throughout [Harvey's books], there is persistent echoing of sentiments from one book to another; cross-referencing of one of these authors in the margins of another; recognizable continuity of handwriting, to the extent that we can sometimes hazard a guess as to which book succeeded which other in the circulating process of reading and annotation . . ." Grafton/Jardine 1990, 51.

⁷⁶ See Wood 1992.

⁷⁷ See Peacock 1982.

⁷⁸ Grafton/Jardine 1990, 46-9.

⁷⁹ Agostino Ramelli, *Le diverse et artificiose machine* (Paris, 1588).

⁸⁰ Grafton/Jardine 1990, 48.

theory could be said to have begun, there were, for example, a number of Vitruvian texts and commentaries available. Jones owned not one but many of the available works: Barbaro's Vitruvius, as well as Rusconi, Viola Zanini, Philander, Bernardino Baldi. While others, both architects and patrons, owned architectural treatises and often in great number, there is no evidence that any read and annotated them in the intensive manner of Jones. He read the architectural literature as both a scholar and practitioner, a combination of techniques which helped to ensure his professional position and give him an extensive knowledge of architectural precedent.

The use of specialized equipment for this research was consistent with the reading practices of others at the time and Jones's own interest in the use of the latest instruments and scientific advances. Vincenzo Scamozzi describes many of the specialized instruments of use to the architect in his treatise — under the chapter "Come si deono fare le inventioni, e disegni, e le maniere più risolute per disegnare," and the following "De gli stromenti, che servono all'architetto, e le materie per disegnare, e de' modelli: e l'ordine per farli bene".

There is evidence that Jones used his books as travel guides and occasionally journals to record his impressions of the buildings and his conversations at the site. When he saw the Temple of Castor and Pollux in Naples he records a conversation with a friar at the Church of S. Paolo Maggiore who told Jones of the vaulting system under the stairs, a detail of construction which particularly interested Jones. "Vnderneath this Portico is a Valte wch is volted a medza botte 3 of them and at the ends a Crochara and Pillasters grecanns this the friar tould mee was antike".⁸¹ In Vicenza the masons at the Palazzo Thiene told Jones that "this capitell was carued by Palladio his owne hands".⁸²

Books were purchased often at a great price and travail. Jones records on the flyleaf of some of the books purchased abroad where it was purchased and the price. On the title-page of his copy of Sarayna, Jones wrote his name and "Venetia 30 Juli 1614" and the price paid. That he wrote the place in its vernacular spelling indicates his attempt to take on the local customs, as in his adoption of the italic hand, or the Gregorian calendar while abroad. Local guide books to a city are

⁸¹ Palladio 1601, IV, 96.

⁸² Palladio 1601, II, 14.

marked by Jones with the city's name on the title-page, a further testimony to his presence in the place itself.⁸³

There are very few drawings by Jones in his books. In Vasari's *Vite* Jones drew two studies of heads, similar to the many that survive by him in various collections, and added a drawing of the missing portrait of Antonio da Correggio to the front of the life in Vasari.⁸⁴ Occasionally he added a small diagram in the margin to explain a point that is not clear in the text, as in Lorini where Jones draws out a diagram of a *saliccie* and its support, following the description in the text. (Figure 11) Jones added a small sketch of the stairway at the Temple of Castor and Pollux at Naples, where the stairway had been changed since Palladio's treatise was published. In the margin Jones drew the stair with its additional wings added. (Figure 12) In his copy of Vitruvius he drew two small diagrams in the margin to demonstrate the reinforcement of walls at the edge of the sea. (Vitruvius, *I dieci libri*, V, 269) (Figure 13) Problems of joinery were a practical issue, and Jones made one detailed drawing of the support structure of a bridge in his copy of Palladio. (Figure 14)

One unusual case where Jones used his copy of Palladio directly as a sketchbook occurs on the pages in Book II showing the Palazzo Thiene in Vicenza. On these pages Jones made a number of sketches of details of the building, the construction of the rusticated columns in the entrance loggia, the part of the building actually completed on the plan of Palladio, and the construction of the vaults.⁸⁵ Jones was particularly interested in vault construction having just discussed the topic with Vincenzo Scamozzi in Venice a month before, and made annotations on the subject the day before his visit to Palazzo Thiene on 14 August 1614.⁸⁶ (Figures 15, 16)

⁸³ See for example Jones's guide books to Naples by Summonte.

⁸⁴ See for example the studies of heads in Worcester College, Oxford; Devonshire Collections, Chatsworth. These studies of heads are extremely numerous, and as John Peacock and Jeremy Wood have shown, central to Jones's interests in investigating the individual elements that comprise an entire composition. The study of heads, like the study of the details of the orders, emerged from Jones's interest in descriptive visual vocabularies. See Peacock 1990a; and Wood 1992.

⁸⁵ On Jones's annotations to this building see the discussion by Fusco 1985, 125-32.

⁸⁶ Jones comments on vaulting systems appears in Palladio 1601, I, 54; and are dated 13 August 1614. Against the illustrations of vaulting systems Jones wrote "friday the first of August 1614 I spoake wth Scamozo in this matter and he hath resolved me in this matter in the manner of voltes."

Jones records his conversations with Scamozzi in the margins of Palladio, as Scamozzi's treatise had not yet been published, though Jones knew it was scheduled to appear. Jones had discussed ancient planning with Scamozzi, and notes the architect's dislike of Palladio's design "Scamozo utterly dislikes this desine of Paladio and hath maad on wch must comm fowrth in his book as far in my opignion from Vittruuious as this"⁸⁷ This, and the annotation to the plates of vaults, suggests that Jones discussed Palladio's book with Scamozzi.

Indices

Jones was diligent in making indices to the material covered in the book as a whole or on particular pages. Adding entries to an index allowed Jones to quickly find again those passages that he had annotated while reading. In his copy of Lorini he adds "come si faccino le falciccio.c.160," a reference to a section he had carefully read before and drawn an illustration to clarify Lorini's text.⁸⁸ In his copy of Serlio's *Tutte l'opere* Jones corrected the index, adding in missing entries, or defining them more fully to provide easier access to the text. Jones personalized the important printed index made to Serlio by Giovandomenico Scamozzi.⁸⁹ In a similar way, particular pages are titled with a heading caption. This is particularly true in chapters which treat a series of similar items, such as the orders or temples.

At times Jones would compile a check-list of the buildings he had seen as a document of his studious and systematic approach to the material. At the beginning of Book IV of Palladio Jones made a list of the antique buildings from the treatise that he had seen and studied. (Figure 17) As I discuss in the following chapter on antiquities this list served as a testimony to his seriousness and scholarly method in antiquarian study. The list also served a much more pragmatic purpose as an index to the chapter which the printed text does not include. A standard procedure for readers in this period was the organization of their material into a usable form, whether that was through the creation of indexes on the flyleaves, creation of epitomes as copia into a commonplace book, or making heading on each page of the contents and subject matter.

⁸⁷ Palladio 1601, II, 69.

⁸⁸ Lorini, *Le fortificationi*, sig. b2r; also see *ibid.*, sig.b3r, where the following is added to the index: "spugnatione da ostenda.c. 180.

⁸⁹ Bury 1989, 95.

There was for Jones a close relationship between drawing and his reading, and aside from the few sketches in the books themselves, evidence that he read with the tools for drawing close at hand. The connection between drawing and annotating is naturally close, as both activities use a pen as the fundamental implement. For Jones, however, reading could lead directly to drawing. On some of the plates in his books Jones used a compass to trace over the solutions for composing the orders given by each author. In others Jones used the plates as guides for the composition of the orders, drawing and annotating on the plate in order to understand the relationship of the parts of the order and how they were drawn. The most striking example of this is on a plate in Palladio's first book of the Corinthian capital. (Figure 18) There Jones used a series of letters and symbols to mark the plate and then to nearby write out his understanding of Palladio's method of proportioning the capital. He criticizes Palladio's capital for not having sufficient projection of the acanthus leaves. "a thes prict lines sheaues the proiecture of the foglio from the extreame of the abacco vnto the extreame of the astragell but this is nott enough sporto, See Scamozzo p. 2. li. 6. fo. 139."⁹⁰ On the page before Jones criticized Palladio and Vignola's solutions for the Corinthian order as not having the sail of the leaves extending to meet an imaginary line drawn from the ovolo to the astragal.⁹¹ In Scamozzi Jones wrote on the plate of the Corinthian order "the leaves do tuch a line drawne from a cercell of a diameter & 3/4 drane in the

⁹⁰ Palladio 1601, I, 42.

⁹¹ Jones wrote "& he meanes from the side of ye square of ye Abacco wch is all on as from the rose straight doune and not as Viniola hath it but this of Palladio is to littell saile as the other is to much between them boath Scamozio is ye best which is To make a Circle of on diamiter and threequarters and the line to tuch ye astragall and the said line as I haue yoused and it doeth well." Against the text of Palladio, marked by Jones with a pointing hand and an ampersand "Si tira poi vna linea dell'estremità delle detta corna, all'estremità dell'Astragalo, ouero tondino della colonna, e si fa le lingue delle foglie la tocchino: ouero auanzino alquanto più in fora, e questo è il loro sporto." Palladio 1601, I, 42.

abbacco and tucheth the extret [extremity] of the astragall."⁹² Jones drew on the page to try solutions for himself, and check the accuracy of the author.⁹³

In contrast to the Neo-platonic view of Jones's interest in measure as proposed by Wittkower, Gordon Toplis and others, it is more useful to see Jones's interest in proportion as one central aspect of his architectural practice.⁹⁴

Throughout his annotations there are references to the system of measurement used by each author. In Scamozzi, Jones amended a pages showing the relative measures currently in use by adding the English foot at the bottom of the page. (Figure 19) On many of the pages where the system was represented through scales, Jones calibrated his compass on the image to establish the system in use. In Scamozzi for example there is evidence of the point of compass on the page, and then the use of the point of the compass to incise the relative dimensions. One of the most practical needs to understand systems of measurement was to transfer designs from the Vicentine foot into the English foot, a transfer that nearly always created problems with any clear proportional system used by Palladio.⁹⁵

Jones may have used one of the instruments recently available for reading the relative proportions of the orders, and for converting the details of each order to the appropriate scale and size. In 1627 Ottavio Revesi Bruti published a treatise devoted to the *archiesto*, a type of moving square which allowed architects to avoid lengthy mathematical calculations.⁹⁶

⁹² Scamozzi 1615, II, 138. The text in Scamozzi which deals with the proportioning of the corinthian capital is on page 136, and contains the following: "L'estremità delle prime, e seconde foglie toccano vna linea diagonale tirata dal Tondino del sommo sella Colonna al cerchio, che sia in diametro d'vn Modulo, e tre quarti; girato sopra all'Abaco; e media trà la diagonale tirata alle Corna, e la diagonale de'lati dell'Abacco (come dicemmo,) e cosi ricescono benissimo. A perpendicolo del sommo di questo maggior cerchio vengono le fronti de Viticij maggiori: il perpendicolo della Curuatura dell'Abaco, ritoua l'estremo delle prime foglie, & anco l'Orlo del vaso, e quasi le fronti de'Vitricij minori." (Jones's underlining) Scamozzi 1615, II, 136.

⁹³ At the top of the same plate of the corinthian order Jones wrote "[female symbol] in ye upper part of the Corronice I do finde thes numbers whear the prict line goith to bee falce for thear is sett done 19 partes and 1/2 and I do finde but 17 1/4". Palladio 1601, I, 43.

⁹⁴ See Higgott 1992, esp. 62-5, for a discussion of Jones's interest in proportion.

⁹⁵ See for example the series of annotations in Palladio 1601, II, 4; discussed by Newman 1992, 46-7. On English systems of measurement see Grierson 1972, 3-37.

⁹⁶ Ottavio Revesi Bruti, *Archiesto Per formar con facilità li Cinque Ordini d'Architettura; Con altri particolari intorno la medesima Professione* (Vicenza: Domenico Amadio, 1627). See John B. Bury, s.v. "Ottavio Revesi Bruti", in Wiebenson 1982, III-A-11, n.p.

Related to his concern with relative national linear scales, Jones made annotations on the dimensions of buildings that he visited. This was a standard practice by English masons, for whom existing buildings were often a more important source of inspiration than books.⁹⁷ Patrons could require their project to follow the pattern of other buildings. The Supervisor of Works at Trinity College, Cambridge, for example, took his carpenter to London to visit extant models, and paid 'carpenters and keepers of dyvers halles to view and measure them.' The measurements were eventually taken from Middle Temple Hall, and copied exactly for the hall at Trinity.⁹⁸

Jones noted in his copy of Palladio the dimensions of courtyards of major English country houses (Figure 20):

The length of the great courte at Windsour is 350 fo the breadth is 260 this I mesured by paaces, ye 5 of decembr 1619.

The great court at Theobalds is 159fo. ye cecond court is 110fo square the thirde courte is 88 fo - ye 20 of June 1621

The front of Northampton Ho is 162 fo - the court is 81 fo

The first court at Ha[m]ton Court is 166fo square

The second fountaine court is 92fo broad and 150fo longe

The Greene Court is 108fo broad and 116fo longe ye walkes or cloysters ar 14fo betwene ye wales. September ye 28 1625⁹⁹

The dates of these annotations are between 1619 and 1625, and were part of an ongoing list of buildings whose dimensions he had paced out himself. Jones kept a similar list of the story heights of palaces he had seen in Italy, with the dimensions

⁹⁷ This practice seems distantly related to the medieval belief that measures were literally embedded in the buildings themselves. Until the end of the 16th century a standard unit of measure was a "St Pauls foot," a measure sculpted in the base of a column at St. Paul's Cathedral, London. The first record of this unit is in 1180, and the dimensions of the church of the Grey Friars were given as *pedes de pedibus Sancti Pauli* in a register from c. 1327. The term may well have recorded the idea of St. Paul as the religious 'standard' for all other church buildings. On this unit of measure see Grierson 1972, 18-19. The belief that units of measurement are encoded within buildings continued through the 17th century. See John Greaves, *A discourse of the Romane Foot, and Denarius: From Whence, as from two principles; the Measures, and Weights, used by the Ancients may be deduced . . .* (London: M.F. for Wm. Lee, 1647).

⁹⁸ Airs 1975, 1939.

⁹⁹ Palladio 1601, II, 7r.

translated into English measures, perhaps as a resource for re-creating buildings of a similar dimension in England.¹⁰⁰

In contrast to his contemporary John Thorpe, Inigo Jones does not seem to have had a portfolio of possible floor plans and elevation designs. Thorpe's collection, taken from printed architectural treatises and designs passed on from one generation of masons to another, was the traditional way architectural designs passed from generation to generation. In contrast, Jones used his treatises and the original drawings of Palladio that he owned or to which he had access.

The need to know measures, to be able to determine the relative value of foreign systems with the English ones in common use, was a skill needed by many professions. Metrology was a crucial skill for traders as well as masons or architects, and in the preface to his guide for those going abroad William Bourne in 1578 recommended his book as the basis for mathematical skill in all fields.

A brief note, taken out of M. Dees Mathematical Preface that goeth before Euclides Elementes nowe extant in our English tongue, as touching what the mathematical Sciences are, that is to say, all those Artes that order number, measure, or wayght, and tyme, without the which, in respect, we can doo nothing. For what can be done in any respect, but we must use number, which is Arithmeticke? or what can be doone, but we must use measure or wayght, which is Geometrie?¹⁰¹

¹⁰⁰ The relevant annotations are: "The Romain palme is 8 yn $\frac{4}{5}$ of ye english foot this I have fro[m] my Passetto I brought fro[m] roome 1614. and it agreeth neear with ye measure in Scamozo. The new part of the pallas at the vatican the first story is in hight 53 roman palmes wch is about 40 english feett. The Second story The third story The Romain palme is 8.yn wanting $\frac{1}{6}$ part of an english ~~inch~~ foot but I think the measure aboue is truer. The pallas of Strozi in florence the first story is in hight wth the plinth 29 fo $\frac{1}{2}$ venetian wch is 34 fo - 4 yn. English feet. see Scamozzio. fo. 249 The pallas of the cornary in vennise the first story is in hight 30fo venetian wch is 35 english feet Se for the venetian foote and the proportion it houlde with our Inglishe foote the venetian foot is more then the English by 2 ynshes or $\frac{1}{8}$ part of a foote." Palladio 1601, IV, sig. RRRR4r.

The *passetto* was a ruler which corresponded to that unit of measure (*passetto* = 2 Florentine braccia). See the discussion of Jones's instruments in the following chapter on his library and collections.

¹⁰¹ William Bourne, *A book called the Treasure for traueilers, deuided into five Bookes or partes, contayning very necessary matters, for all sortes of Trauailers, eyther by Sea or by Lande* (London: for Thomas Woodcocke, 1578), sig. ***iir.

The skills of measuring were crucial for the surveyor, a field closely aligned to the process of design. Lucar Solace's compilation of practical building advice begins with a first book on terminology, measures, and surveying techniques.

The First Booke of Lucarsolace, containing definitions of divers words and termes, names and lengthes of diverse English measures, a true difference betweene an acar of land measured with a pearch of 12.foote, 18.foote, 20.foote, or 24.foote in length: and an acar of land measured with a pearch of 16.foote and 1/2 foote in length. Names & tipes of divers Geometrical instruments: Meanes to descerne whether or no the edge of a ruler be right; and infallible instructions by which an ingenious reader may easily measure upon any smooth table, drums head, stoole, or other superficies, measurable lengthes, bredthes, heightes, and depthes, apply known lengthes, . . . know recorded heigthes, lengthes & bredthes of some famous monuments in Sarum, in Westminster, and in the honorable cittie of London: know the antiquities of the said cities of Lo[n]don: draw the true plat of any place, make a fit scale for any plat or mappe, reduce many plats into one faire mappe, . . . and learne to note the commodities and discommodities of place . . .

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As in his use of a compass in transferring dimensions into English measure, Jones referred to other instruments for the use of surveying and for architectural design in general. In his copy of Lorini he refers to a geometrical square. "The knowlidge of the lines by theory and the practice in working make it both easye and delightfull. this donn by mathematicall instrumente The mouving Square the most esiest both to forme ye designs and reall worke."¹⁰³

Inventors of new measuring devices promoted their instruments by publication. In 1631 William Bedwell's nephew published his uncle's improved mesolabe, used for the measuring of building materials and distances generally. This

¹⁰² Lucar 1590, [sig. *****]

¹⁰³ Against the text of Lorini: "Qvando che con la intelligenza de lineamenti, che per Theorica dobbiamo intendere, si aggiungerà poi la pratica dell'operare per eseguire quanto, che ne seguenti libri si mosterà l'operatione veranno non solo facili, ma diletteuoli, e ciò si farà col mezo delli strumenti Matematici, & tra li più facili sarà la squadra zotta per formare non solo i disegni, ma l'istesse opere reali, e tale strumento viene fabricato di metallo con l'osseruanza della forma circolare, doue consiste la perfettione di tutti li altri strumenti, perche scompartito in due parti la circonferenza, si che il diametro, ouero l'Orizonte, che passa sopra al centro dal quale tutte le linee . . ." (Jones's underlining) Lorini 1609, 17.

book, the *Mesolabium Architectonicum*, promoted standardized measure, based of course, on their instrument.

And in deed it is an old saying of Protagoras, as Aristotle recordeth, That man is the measure of all things. And true it is, That Vitruvius, and Hero the mechanicke or inginer, do shew, That generally all measures are taken from the partes of Mans body, as a Finger, an Ynch (Pollex) an hand, or Hands breadth, a Spanne, a Foot, a Cubite, a Passe, an Elne, a Fathome.

But who knoweth not, what great difference there is between man & man? And not only between men of diverse Countreys and climats: But ev'n between those of one and the same province: Nay of one and the same family, children of the same parents? And, the limmes of men being proportionall to their bodys, what difference must there needs bee, betweene the measures taken from them?¹⁰⁴

Independent tutors offered to give instruction in the use of these instruments, as well as in general mathematics. Thomas Bretnor, a "professour of the Mathematicks & Student in Physicke in Cowland, London," published an almanac in 1616 with an advertisement of his areas of expertise; including "Geometry. Principles thereof with practice & demonstration. Surveying of la[n]ds &c. with many [. . .] instrume[n]ts Mesuring of timber, stone &c. or any solid co[n]tent Reducing of Plots or Maps to any desired proportion Dialling in generall . . ."¹⁰⁵

On the title-page to his Vitruvius and on the first page of his notebook Jones wrote his motto, "Altro diletto che imparare non trovo," I find no other delight than learning. (Figure 21) Writing a motto on books as a sign of ownership was a common practice in the Renaissance. Jones's copy of Patrizii, for example, has Sir Walter Raleigh's motto on the title-page (see the Annotated Bibliography Appendix s.v. "Patrizii"); and books from the library of John Dee, Gabriel Harvey and others can all be identified from their distinctive mottos. Mottos were one type

¹⁰⁴ William Bedwell, *Mesolabium Architectonicum*. *That is a most rare, and singular Instrument, for the easie, speedy, and most certaine measuring of Plaines and Solids by the foote: Necessary to be knowne of all men whatsoever, who would not in this case be notably defrauded: Invented since by Mr. Thomas Bedwell Esquire: and now published, and the use thereof declared by Wilhelm Bedwell, his nephew, Vicar of Tottenham* (London: Printed by J.N. for William Garet, 1631), sig. A2r.

¹⁰⁵ Thomas Bretnor, *Bretnor 1616. A Newe Almanacke and Prognostication, for the yeare of our Lord God, 1616* ([N.p. 1616), sig. 3v.

of mark which signified ownership, as well as bookplates and distinctive bindings.¹⁰⁶ Jones's motto, however, expresses a particular academic and scholarly personal ideal. The motto is taken from Daniele Barbaro's commentary on Vitruvius, and appears only in the editions of 1567 and later.¹⁰⁷ It was the epitome version of a more complex exegesis on the Aristotle's metaphysics and his commentators, especially Giovanni Andrea Gesualdo (Venice 1541).¹⁰⁸ Jones came to the Vitruvian notion of learning as the basis for all architectural activity in a ready packaged form through Barbaro, and had no need of tracing through the previous sources. The motto was a perfect example of the English preference for *multum in parvo*, the summation of the usefulness of learning as a cultural and professional ideal in the form of a personal motto.

In the end, it must be asked if Jones thought that reading was enough for the architect. Certainly the answer is no. Reading for Jones was the key to a world of architectural knowledge, but not enough to ensure his court position or for that matter, to make him into an excellent architect. The response to the demands of architectural practice, however, was to be found in his reading as well. Jones's reading of Vegetius and the treatises on fortification urged the study of books with practical experience, as he noted "knowledge encreases vallor."¹⁰⁹

¹⁰⁶ Peacham [1634] 1962, 51-3.

¹⁰⁷ Barbaro took the motto from Petrarch. Pietro Testa also used this as his motto, and designed a print using this motto engraved on a shield. See Cropper 1984, 65, and n. 4; plate 88. I am grateful to Elizabeth McGrath for pointing out this connection to me.

¹⁰⁸ Cropper 1984, 66.

¹⁰⁹ Vegetius 1551, 10.

ORDERS AND THE LANGUAGE OF CLASSICISM

Clench: The Squire is a fine Gentleman!
 Medlay: He is more:
 A Gentleman and a halfe; almost a Knight;
 Within zixe inches: That's his true measure.
 Clench: Zure, you can gage 'hun.
 Medlay: To a streake, or lesse:
 I know his d'ameters, and circumference:
 A Knight is sixe diameters, and a Squire
 Is ive, and zomewhat more: I know't by compasse,
 And Skale of man. I have upo' my rule here,
 The just perportions of a Knight, a Squire;
 With a tame Justice, or an Officer, rampant,
 Upo' the bench, from the high Constable
 Downe to the Head-borough, or Tithing-man;
 Or meanest Minister o' the peace, God save 'un.

—Ben Jonson, *A Tale of a Tub* (1640)
 Act IV, Scene 1

It is said by such as professe the Mathematicall sciences, that all things stand
 by proportion, and that without it nothing could stand to be good or beautiful.

—George Puttenham, *The Arte of English Poesie*, 1589.

Introduction

If any great division separates the architecture of Inigo Jones from that of his
 contemporaries it must surely be his use of an architectural language of detailing
 based on his careful study of treatises and ancient buildings. In contrast to the
 traditional English use of columns as one part of a wide range of symbolic
 decorative elements, Jones used an architectural vocabulary of limited classical
 details, modified in subtle ways from the printed sources he had so carefully studied.
 The change in the architecture of Jones was his concern to design in accordance

with the authority of printed architectural treatises. Jones was far from unique in his interest in classical architecture in England at the time, but worthy of comment for his devotion to the learned study of their use.

A great deal of energy has been spent discussing Jones's architectural style and the later effect on English architecture of his stylistic innovations. Yet it is misleading to ignore the rich symbolic meaning associated with the image of columns in English culture before Jones. Columns were everywhere in English architecture, language and culture, in the sixteenth and seventeenth centuries. They appear with some frequency on English buildings, they served important roles in the court culture as a symbol of power and royal prerogative, and they were used to evoke images of humanist learning and print culture. The change in the architecture of Jones and his patrons was the desire to regularize that architectural language, to create an architecture that corresponded to rules within which an architect could design.¹ His transformation of the architectural vocabulary as presented in Palladio's treatise earned him the favour of architects in the eighteenth century and the posthumous—and perhaps inappropriate—title as the first Neo-Palladian. Architects before Jones, such as Robert Smythson or John Thorpe, had used discrete elements out of Palladio in combination with a range of native and northern European ornament, but it was Jones's formation of an English classical architectural vocabulary which earned him his reputation. Although Jones's architectural language owes much to English ways of thinking about the orders, although the interest of patrons to shun Flemish and Northern European ornament meant that the 'new' architectural style further distinguished that architecture from the rest of building in England.

Jones arrived at his study of classicism through his study of the orders: it was the essential vocabulary for understanding all that followed. Jones's study of antiquity, to be dealt with more fully in a subsequent chapter, was incorporated within the grammar of the orders he had already carefully acquired in the early years of his architectural education.² The emphasis on the linguistic nature of Jones's achievement has been a standard form of praise, but what exactly did it mean in the seventeenth century to perceive architectural style as a language?

¹The concern to codify meaning is prevalent in a broader sense in early modern England. See Ferry 1988, esp. ch. 1, "The Verb to Read."

²See Newman 1992.

What were the techniques Jones used in learning the vocabulary of forms and a grammar of use? What significance did the image of the orders have within the cultural consciousness of the period? By moving architectural design into the realm of language Jones could evoke powerful associations with changing educational practices, classical scholarship, rituals of kingship, and vernacular language reform itself in the early years of the seventeenth century. In this chapter I discuss Jones's formation of an architectural language of classicism through the study of printed texts; and its parallel discourse in the cultural community of his patrons. While excellent work has recently been done on the specifics of Jones's architectural language—the exact forms he so often used, his preference for certain numerical relationships³—in the literature the study of architectural classicism still remains a phenomenon detached from the rich context of its time.

In England, architectural classicism was conceptualized in linguistic terms. Advocates distinguished classicism from a less rule-based use of the orders and promoted its antique heritage, humanist theories and tradition of noble patronage throughout Europe. Training in classical architecture, like a skillful use of Latin, Greek or even the modern vernacular languages, required grammatical study and an understanding of its semantics. From John Shute's mid-sixteenth century treatise onwards, English authors stressed the need for the architect to be learned in languages and generally skilled in the sciences.

It is only possible now to imagine the discussions with patrons over the designs of his buildings as events where Jones would have supported his choice, the drawing in hand, with a reference to Palladio or Scamozzi or Vignola; and it would have been with a voice full of authority that Jones could have said the precedent was there, on the printed page. The impact of printed texts as authority would have been particularly strong for patrons who valued education and its role in determining status. Through the citation of ancient precedent and contemporary architectural theory Jones could appeal to these values of the patronage class.

It is my contention that the acceptance of Jones's architectural classicism by a learned elite was due in part to its emergence from printed treatises which were themselves based in a humanist culture and ethos highly valued by English patrons. Jones's use of the orders based on the authority of Vitruvius and sixteenth century Vitruvian studies equated his architecture with an established cultural value,

³See Higgott 1992.x

analogous to the value placed on humanist education. What distinguishes English classicism from that on the continent, however, is the existing substructure of viewer response to the orders which saw them as discrete and highly charged symbols, exotic and marvelous in their expense and magnificence. It is a commonplace to state that Jones created a language of English classicism, yet what did that mean exactly? In what ways is it English, and in what ways classical? While much energy has been spent defining how he transformed the use of the orders in English in conjunction with his study of Palladio and other Italian architectural writers, little attention has been given to the English context of this transformation, and the implication it had for architectural patrons. The imagery of the orders as symbols of learning acquired through the study of humanist texts gave Jones's architecture, based as it was in the theory of printed treatises, an added impact on the viewers who shared this culture. My final point in this chapter will be that classical architecture as envisioned by Jones could signify the wealth and status of its builder as had the tradition of architectural ornament before him, but now through analogous ideas of architectural decorum, architecture could fashion the image of its occupant through the language and theory of the classical orders.

Treatises as Rule Books

By 1600 there was a wide range of materials available in England for the study of the orders. Treatises by Hans Blum, Serlio and Palladio among others are known to have been in English collections in the late sixteenth century.⁴ Very early in Jones's architectural career, and definitely before his trip to Italy in 1613, he owned copies of Palladio, Serlio and Vitruvius.⁵ Early annotations in all these volumes indicate that Jones was studying the orders in a serious and systematic way based on the texts before him. Clearly, however, it was Palladio's exposition of the orders that Jones turned to most often and whose text he marked most frequently.⁶ This is not surprising given that Palladio's discussion of the orders was more systematic than the other books that Jones had access to at this date. Palladio

⁴See the Appendix in Gent 1981, 66-86.

⁵Newman 1992.

⁶For a related discussion of how a contemporary reader to Jones used one book as a central text see Grafton/Jardine 1986.

presents the orders as regularized and well-defined. Palladio's system of the orders, based on Vignola and Serlio, was visually codified due to the clear visual presentation of classical rules and grammar of form on the printed page.

Inigo Jones used the orders as if they were the visible structure of a set of rules imagined to be just below the surface. There was, in his mind, always a printed source against which to check their accuracy and to validate the authority of the orders. In this Jones is following the order of the "5 aggunte to ye artes" in his copy of Vasari, "Rulle 1 order 2 measur 3 desine 4 and manner 5."⁷ The treatises that were most useful to Jones were those that presented the orders as a normative, rule-based system. Throughout his career, however, he purchased the most recent publications, including Viola Zanini and Scamozzi. The evidence suggests that Jones wanted not just one book on the orders, but all the available publications. One book would only have given him the opinions of one writer, and Jones's interest in arriving at a consensus opinion required owning the range of writings on the orders.⁸

For Jones, wishing to master the classical architectural language, books were the vital resource that could allow him to study the vocabulary, grammar, precedent and use of the orders before he ever travelled and after he had returned. Architects in northern Europe, and particularly those in England far from classical examples, relied on books as reference material if patrons desired something like what they had seen abroad or as a standard guide to patterns of ornament. Walter Gedde published his *A Book of Sundry Draughtes, Principally serving for glaziers* in 1615 to provide a wide range of designs for practitioners in many fields: "I have published this practise of glazeing, knowing the expert maister is not unfurnished of these usuall draughts, though each workeman have not all of them."⁹ Collections of drawings circulated as well, such as the book of John Thorpe, now in the Soane Museum. Printed books, however, encouraged a wider audience, and allowed a designer such as Walter Gedde in England, as well as Palladio and Serlio, to promote their designs.¹⁰ Books were available for study when the monuments or

⁷Jones's copy of Vasari 1568, sig. *****2v.

⁸See Fusco 1985, 149-51.

⁹Gedde 1615, sig. A2r.

¹⁰I am grateful to T. Barton Thurber for allowing me to see his paper "Publication and Publicity in Sixteenth-Century Italy: Martino Bassi's *Dispareni in materia d'architettura et prospettiva*," (typescript, 1992).

drawings were not, and the increase in printed material meant that architectural ideas were available for readers beyond the privileged classes.¹¹

Jones looked to treatises as authorities, yet throughout the annotations there are examples of his awareness of an inherent disparity between the printed text and the world that those books represented. For the Italian architect or patron, the treatise was a reference to a world that was all around. For Jones books were an authority that came to stand for architecture he had seen only briefly and at a great cost and distance. The books had to be read so closely by Jones, they are dense with annotations, because that was his primary resource when he was far from the possibility of studying antiquities first hand. There is in the annotations, however, not just the sense that architecture in three dimensions and architecture as printed were different: books presented an architectural system infinitely more perfect than a building as built could ever hope to imitate. When Jones visited antiquities, he was quick to note the differences in Palladio's reconstructions of the monuments or failure to include details of the materials used or building construction techniques. At the Pantheon Jones noted that he included in his annotations to Palladio's text more than was provided.¹² In the treatises that Jones relied on most closely, Palladio, and later Scamozzi and Vignola, architectural classicism was presented as a well-defined and well-evolved language of forms and usage. Palladio by contrast, relying heavily on Serlio, sought to justify his personal decisions about the orders with the authority of ancient precedent and the illustration of his own buildings. With the dimensions included on the plates and the orders codified by the mid sixteenth century, Jones responded to Palladio's presentation more as rules than as general concepts.

Jones's method of interpreting the orders was to change as he became more familiar with the vocabulary and more synthetic in his approach. In each treatise he turned to he found not only new systems of the orders, but new methods of architectural thinking. When he first turned to Serlio's *Tutte l'opere* (1600) the majority of annotations suggest that he found additional descriptive information to supplement the sparse discussions in Palladio. This is especially true in Serlio's emotive passages on ancient monuments such as the Pantheon, heavily annotated

¹¹Eisenstein 1979.

¹²Jones's annotation: "This Tempell I Observed exactly ye last of Maye 1614 and have noated what I found more than is in Palladio." Palladio 1601, IV, 74.

by Jones early in his career. (Figure 22) As Jones continued to study the orders throughout his career his attitude to the role of design authority changed, and his later annotations after the 1620's indicate a stronger belief in the power of the architect as arbiter to choose between the orders as presented in treatises, the surviving antique models and the requirements of the project at hand.¹³ Jones embraces Serlio's emphasis on the architect's discretionary use of *giudizio* in design, an aspect of Serlio's method which Jones seemed less interested in when he first read Serlio for descriptions of ancient monuments.¹⁴

The search for rules, however, evident in Jones's early reading in Palladio and Vitruvius, is due in part to the type of treatise he reads, that is, to those that encompassed notions of divine proportion and the independent authority of prescriptive rules for design.¹⁵ That this was a literature he held in common with his patrons would have supported the argument all the more. As architecture came to take a place within the educational program in early seventeenth century England, it rose through the ranks of the disciplines with an increasingly vast literature. That Jones did not always agree with the text would have supported his position as a professional architectural reader, who could make his way through the morass of technical terms and translate that language for his individual patron and circumstance.

In a lengthy series of annotations in Book 1 of Palladio, Jones transcribes Palladio's notes on the ornamental detailing of the orders and writes out against the illustrations Palladio's manner of articulating the orders. The orders for Jones in these early readings are complex systems of ornamentation which must be used consistently and always authorized by reference to an external authority.

Jones's earliest reading of the orders was to understand the vocabulary of classicism, the details of columns, bases, and capitals, for each of the orders. It was comparable to learning a foreign language and the acquisition of a standard bibliography.¹⁶ Different parts of the building each had a name, and they were

¹³Onians 1988, 264-71.

¹⁴Higgott 1992.

¹⁵Smith 1991, 128.

¹⁶The idea that classical architecture was like a language found a clear expression after mid seventeenth-century in the treatises of Claude Perrault, translated into English in 1708. "As, in languages, there are several ways of Speaking, contrary to the Rules of Grammar, which long Custom have so authoriz'd, that there is now no correcting them; and others that are not yet so generally received, but their establishment might be prevented,

combined in ways according to rules. If the orders were the fundamental form of architectural ornamentation, then in Jones's thinking they corresponded to a systematic use that could be studied through the available texts. From his earliest readings on the orders in the treatises of Palladio and Serlio, Jones studied the rules that governed the composition and use of the orders. If Jones sought to find consensus in the proportions, detailing and use of the orders, he was quickly disappointed. In Italy the orders had never been codified into an agreed upon system, much as any author would have liked to present his solution as definitive. Even Vignola, who attempted to establish feasible *regole* for the orders through persuasive layout, minimal discussion, and no mention of *varietà*, intended his system as a guide rather than doctrine. The normative appearance of Vignola's treatise was heightened through the mode of presentation, burin engraving further enforced the use of only a limited amount of text.¹⁷ Although Vignola's publication was seen as prescriptive and authoritative from the time of its publication, it was not his intention to eliminate the role of the architect as designing within an established vocabulary.¹⁸

The emphasis on rules appeared as the foundation for learning in any field. When in the late 1620's Jones began an earnest study of fortifications he noted in his copy of Buonaiuto Lorini's *Le fortificationi* (1609) that "Rules are great helps for learners in fortification." (Lib. I, I, 7) The early phase of Jones's reading in the orders was part of his self-education in the orders, learning the language and grammar as described in the treatises he owned. His education in architecture was based in books, not in buildings; a marked contrast to Italian architects, for example, who had their resources at hand. By studying the orders from treatises rather than from actual buildings classicism would have seemed a much more regular and codified system, and Jones notes in his annotations as he travels that he describes

were they rejected by such as have the Reputation of Speaking well: So in Architecture, also, we may observe Abuses of both these Kinds." Claude Perrault, *A Treatise of the Five Orders of Columns in Architecture . . . to which is Annex'd, A Discourse concerning Pilaster: And of Several Abuses introduc'd into Architecture*. Made English by John James (London: Benj. Motte, 1708), 120.

¹⁷Zerner 1988.

¹⁸On Vignola's publication and its fortuna see Christof Thoenes, "Vignolas *Regola delli cinque ordini*," *Römisches Jahrbuch für Kunstgeschichte* 20 (1983), 345-76. I am grateful to Scott Opler for allowing me to see his paper "Palladio and Vignola on the Orders," (typescript), forthcoming in publication; and his comments on this section of my discussion.

more in the margins 'than is here' in the text or illustration. One technique often used by Jones was to make an index of the major points of the text or the image in the margin. (Figure 23) While Palladio gave Jones the careful details of the orders, presented with measurements and antique examples of their use, once Jones had mastered the basic vocabulary of the orders he moved on to more complex systems of their use and conception.

Jones first read Palladio as a pattern book, seeking to understand the vocabulary he presented for use in his architectural projects. An early annotation by Jones simplifies Palladio's methodical organization to an extreme: where Palladio writes in Book I, "Hora c'habbiamo parlato de'muri semplici; è convenevole che passiamo a gli ornamenti, de' quali niuno maggiore riceve la fabrica di quello, che le danno le colonne, quando sono situate ne' luoghi convenevoli, e con bella proportione a tutto l'edificio" Jones marks in the margin "Thus much for playne waales now for Ornament of which ye Collumbs ar ye Chefest."¹⁹ Jones follows Palladio's systematic argument, but overlooks Palladio's endorsement of columns as the purest expression of the beauty and internal proportion of the building. Jones is reading for the rules behind the system, the key to the classical language of architecture which will enable him to design from within its system. Jones sought to understand not just the visual motifs which could be applied to any facade, but the entire process of design for which the orders were the visual expression on the building.

Later in his architectural career Jones turned back to the study of the orders with a new critical attitude and historical interests in the antique sources for the orders. Most of these comments can be dated to later in Jones's career, and certainly after the 1620's. In a typical series of annotations Jones compared sources, looking to Palladio's own fourth book on antiquities to understand how ancient buildings were transformed into architectural prototypes for the orders. These annotations indicate careful study on Jones's part and an almost obsessive interest in tracing antique sources for the details of the orders. The attic base in particular was traced to its various sources. Against the attic base, put by Palladio to the Doric order Jones wrote "Atick base. Se Tem: Baccus fo. 87. Tempel at Tivoli fo. 92. Tempel at Napals fo. 97. Temp: at Trevi fo. 99 Tem: at Chissi fo 106 Tempel of Pola fo 108." (Figure 24) In the center of the page with illustrations he writes "this ovolo rostrato yoused in

¹⁹Palladio 1601, I, 14.

all ye Cimatioſ following is taken from ye Tempell of Mars ye Revenger fo. 22 and many other Tempels as I have noted."²⁰ In contrast an early reference on the same page is more general and only goes so far as to note that the sources of the orders could be found in antique models. "Both theſe ma[n]er of mouldi[n]gs Take[n] out of ye ansiente and ar verry fayre."²¹ The search for the genealogy of the orders became in the later notes an over-riding concern for solutions to the orders with the authority of the antique.

Perhaps more than any other aspect of Jones's architectural method it is essential to understand the significance of his interest in the architectural orders. Jones uses orders in a way that calls attention to them: through their appearance or non appearance; ultimately Jones became less interested in columns as ornament and more interested in general ideas about classicism. There is a shift in Jones's reading from the prevalent English idea of the orders as a system of columns on the facade to a more organic and representational concept of the orders as structuring the intellectual content of the building as a whole. After that change, the orders cease to be involved in solely a poetics of the frontispiece to a broader linguistic idea of structuring the entire surface. For Jones the orders come to be seen as a system that structures the building and its significance.

The orders as a system of language in England

That the orders, the vocabulary of classicism, were closely tied to language is evident from the general terms of description in which they were presented. From the attention paid to the orders in the mid sixteenth century, there was always an interest in how classical architecture appeared like a verbal language, with a grammar, vocabulary, syntax and idiomatic meanings.²² In fact, the early phase of Jones's study of the orders closely parallels contemporary pedagogy encouraged for grammar study.²³

²⁰Palladio 1601, I, 25.

²¹Palladio 1601, I, 25.

²²See Peter Burke, "Introduction," in Burke 1987, 1-20.

²³See Vivian Salmon, "Problems of Language-Teaching: A Discussion Among Hartlib's Friends," in Salmon 1979, 3-14.

The notion of grammar in the Renaissance had a far wider range of meaning and applicability than it does today. While derived from the discipline *grammatica*, that part of educational studies dedicated to teaching students to speak and write Latin, by the sixteenth century grammarians attended equally to general problems of composition and literature.²⁴ In the *studia humanitatis*, grammar was the foundation for all other studies, "the foundation of the whole education edifice."²⁵ Grammar books themselves from the period employed an architectural metaphor in promoting the crucial nature of their subject. John Colet and William Lily's *Shorte Introduction of Grammar* (1567) encourages the student to study Latin grammar for education is like a "buyldynge" which cannot "bee perfect, when as the foundation and ground worke is readye to fall, and vnable to vpholde the burthen of the frame."²⁶ As education is built on grammar, so too the study of classicism—the Latin of architectural composition—is founded on the study of the precepts of the use of the orders.²⁷

What was the significance of architectural discussion once it paralleled that of language? On a fundamental level, it raised the discipline of architecture from a solely manual to an intellectual enterprise, as in John Dee's support for the scientific basis of architecture in his preface to Euclid.²⁸

Classical architecture in England was, from its first exposition in an architectural treatise in the mid-sixteenth century, described as a language that required a knowledge of its vocabulary and grammar to be used correctly. John Shute's *First and Chief Groundes of Architecture* was published in 1563, and it appeared in four editions to 1597, suggesting a wide readership.²⁹ The importance of

²⁴Percival 1983, esp. 303-7.

²⁵Percival 1983, 307.

²⁶William Lily [et al], *A Shorte Introduction of Grammar 1567* (New York: Scholars' Facsimiles and Reprints, 1945), sig. Aiiir; quoted and discussed in Elsky 1989, 10-11.

The architectural metaphor is carried over from the titlepage, a series of ionic columns framing compartments for printers' devices. See plate 171 in Ronald B. McKerrow, *Printers & Publishers Devices in England & Scotland 1485-1640* (London: Printed for the Bibliographical Society at the Chiswick Press, 1913), 63.

²⁷For the discussion of classicism as the Latin of architecture, see John Summerson, *The Classical Language of Architecture* (Cambridge: MIT Press, 1963), 7-13.

²⁸Yates 1969, 20-41.

²⁹Shute's treatise was printed by Thomas Marshe, who specialized in the production of books on Italian and classical culture. Marshe also printed the same printed William Thomas's *Historye of Italye*, a standard guide in England for travellers to Italy throughout the

Shute's treatise rests on its systematic discussion of the orders, the emphasis on the broad training necessary for the architect, and powerful engraved images that spurred a growing interest in classical architecture among patrons. (Figure 25) Shute went to Italy sometime around 1550 in the service of the Duke of Northumberland "to confer wt the doinges of ye skilful maisters in architecture, & also to view such auncient Monumentes hereof as are yet extant."³⁰ Shute relies on the printed judgements of Vitruvius, the "author chieflie to be followed," and the opinions of Serlio and Philander. He follows the general prescription and description of the orders from Serlio and Vitruvius, but crucially differs in his method for arriving at "symetria" or proportion. Whereas Vitruvius relies on the column as the standard for deriving the proportions of the rest of the order, Shute begins with the ground plan and then proceeds upwards. All of Shute's orders rest on a pedestal, and it is the "Ichnographia or groundplot" which determines the upper part of the order.

John Shute apologizes to the reader for any errors: "But I the setter forth of this treatise in Englishe, acknolage myself not to be a parfaict Architecte (as he saie) nor yet Grammaria[n]."³¹ The knowledge of grammar, in terms of foreign languages, was necessary for anyone interested in the orders, as any true student would need that skill to study the available literature. John Shute states that his comments are taken out of Vitruvius, Serlio and Philander which he has summarized for the English reader. Seventy-five years later Henry Wotton as well claimed only to be "a gatherer and disposer of other mens stuffe," and cited a number of architectural writers as sources including Philander, Serlio, Vitruvius, and Palladio.³² Until the English treatises of Shute, and the translation of Serlio by Robert Peake into English in 1611 there were no systematic treatises available in English on the orders that discussed them in broad systematic terms.

The knowledge of foreign languages was part of a general training for the architect. Following Vitruvius's recommendations, Shute advocates an educational training for architects based on a study of mathematics, astronomy, geometry and

17th century. See the discussion of the publishing history of Shute in E. Harris 1990, 419-22.

There has been some question as to Shute's actual influence on building design in the 16th century. Two pilasters at Kirby Hall are taken from Shute, as are details on the Gates of Virtue and Honour at Gonville and Caius College, Cambridge.

³⁰Shute 1563, sig. Aii.

³¹Shute 1563, sig. Biiiir.

³²See Perry 1968.

history. In this context the study of grammar related to both the specifics of language study and to a systemic approach that sought to find parallel discourses across disciplines. Grammatical study was the key to a method of aesthetic response as well as to a body of knowledge to be put to memory, and essential for the architect.³³ Jones had marked a passage in Vitruvius that emphasized the need for architects to know languages as reading was the best way to commit ideas to memory: "Ma perche cosi bisogna sia, questa è la ragione. E necessario che lo Architetto habbia lettere, accioche leggendo gli scritti libri, commentari nominati, la memoria si faccia piu ferma."³⁴ Reading, like drawing, allowed the student to record those things seen and studied.³⁵

More generally, however, Shute's use of the term 'grammar' is a sign that architectural classicism was conceived of in England as comparable to a language, and could be learned in a similar way that to the study of foreign languages. Jones's emphasis on the details of the orders as the foundation of classicism is evidence of the importance of grammatical study, as in the incorporation of architectural metaphors in contemporary language treatises.

Classical architecture proved to be a useful metaphor for language, connected as it was to Latin in the common heritage of ancient Rome, and its related forms of construction and composition.³⁶ Treatises espousing the need for a new universal language are particularly ripe with architectural metaphors. "Thus is it that, as according to the largeness of the plat of a building and compactedness of its walls, the work-master contriveth his roofs, platforms, outjettings and other such like parts and portions of the whole; just so, conform to the extent and reach which a

³³ The implications for this approach to the study of Elizabethan art, and the tomb monument of Sir Christopher Hatton (1593) in particular, are discussed by Friedman 1989a, 107-8. "Words and figural sculpture take precedence over abstract forms, but when these are used they are meant to be treated associatively. At its core, the experience of the work is more literary and intellectual than it is visual." (107)

³⁴ Vitruvius 1567, I, 12. See additional discussion of this passage in the chapter following on Jones's reading method.

³⁵ See the chapter following on Jones's reading method and its relationship to the role of drawing for a fuller discussion of this point.

³⁶ For a related issue in literature see William McClung, "The Matter of Metaphor: Literary Myths of Construction," *Journal of the Society of Architectural Historians* 40, no. 4 (1981), 279-88.

language in its flexions and compositions hath obtained at first, have the sprucest linguists hitherto bin pleased to make use of the words thereto belonging."³⁷

Jones's simplified language of architecture would have been thought a parallel endeavor in the simultaneous standardization of the English language.³⁸ Printing, traveling and humanist education—exactly the same cultural changes that affected the interest in classical architecture—raised the English awareness of differences between their vernacular language and the languages of Europe. The need felt for reform (by some but certainly not all) was in the areas of grammar and especially vocabulary. The prominent role taken by foreigners such as John Florio in the late Tudor court urged on the study of foreign languages, and subsequently raised the consciousness of deficiencies in English. The interest in the English vernacular was accompanied by publications advocating the reform of spelling (by Thomas Smith, 1568; John Hart, 1570; William Bullokar, 1580) and general increase in the range of the English vocabulary. The large number of bi-lingual dictionaries that appear, including Florio's *World of Wordes*, helped to add new, foreign terms to everyday use. These dictionaries included architectural terms and were thus encouraging a lay reader to understand more closely the technical language of architecture; and to create a common readership for the technical architectural treatises. Jones's architectural reform had direct parallels in other professional fields. Roger Ascham's *The Schoolemaster* (London, 1570) was the most influential sixteenth century English text in setting forth the classical model as a cultural ideal for England based on the imitation of classical models. Like the movement from the 1570's to impose a reformed metric structure on poetry based on classical versification, Jones put forth a reform of architectural ornament based on classical models and continental theory.³⁹

For Jones, the idea of the orders was organic and even biological, with the system of the orders evolving genetically through a process of refinement, weeding out the idiosyncratic forms. Jones criticizes Serlio for presenting an improper doric;

³⁷Sir Thomas Urquhart of Cromarty, *The Jewel* (1652), eds. R.D.S. Jack and R.J. Lyall (Edinburgh: Scottish Academic Press, 1983), 66. I am grateful to Deborah Howard for this reference.

³⁸Cecil Grayson, "The Growth of Linguistic National Consciousness in England," in *The Fairest Flower. The Emergence of Linguistic National Consciousness in Renaissance Europe* (Firenze: Accademia della Crusca, 1985), 167-73.

³⁹See Helgerson 1988.

but then says that architecture was not so well known in Serlio's time.⁴⁰ This metaphor rationalized to Jones why the system of the orders would have changed over time. The argument for a Hegelian notion of the orders would have accounted for earlier 'failures' to understand the true form of the orders and established Jones's position as a seventeenth century scholar/architect to determine their purest form and use. Jones noted Scamozzi's comment that there should never be more than five orders and wrote in the margin "*never but 5 orders / orders not altered but bettered.*"⁴¹ In contrast to his follower John Webb, Jones never had an interest in creating a national order for England, following on the treatise by Philibert de l'Orme.⁴² The best use of the orders was not a rediscovery of ancient forms or creation of new forms but a constant improvement and refinement. Jones looked for rules for the use of the orders, but realized after returning from his trips abroad in 1609 and 1613 that the rules must be formulated out of the demands of practice in England.

Much as Jones may have Vincenzo Scamozzi, the treatise gave Jones the theoretical support for his own design preferences for a simpler architectural classicism. Scamozzi's purer classicism had eliminated the variety of Palladio's architecture, a position Scamozzi had put forth in discussions with Jones as well as in his published treatise. Scamozzi's influence on Jones is certainly much greater than has previously been thought, and extends beyond Jones's use of Scamozzi's plans for villas, or detailing of the individual orders.⁴³ Scamozzi treated the orders as a fixed system, with rules that could be learned and applied to buildings with measurable standards of success.⁴⁴

⁴⁰Jones's annotation against plate of Doric order: "The cimatum doricum i[s] as this and not a wave as Serlio make it but is to be excused for th[is] many things are made [he]re in Architecture wh[ich] in his time weare not kn[own]" Serlio 1559-62, 22r.

⁴¹Scamozzi 1615, II, 16.

⁴²There is no evidence I know of that indicates Jones ever had an interest in the generation of alternative capital designs, as did Webb. Webb's inventiveness, taken from sources such as Montano's *Cinque libri di architettura* and Sarayna indicates a different approach to the problems of design and the use of classical detailing. See John Bold, "John Webb: Composite Capitals and the Chinese Language," *Oxford Art Journal* 4, no. 1 (1981), 9-17; and Bold 1989, 32-5.

⁴³Jones used plans for villas in Scamozzi's treatise for the Prince's Lodging at Newmarket, as well as other projects. See Harris/Higgott 1989, 104 and passim.

⁴⁴"... i cinque ordini gli [Scamozzi] apparivano come un sistema stabile, millenario, immutato sin dal tempo degli antichi e immutabile nel futuro." Christof Thoenes, "Gli ordini architettonici: rinascita o invenzione. Parte prima," in Marcello Fagiolo, ed., *Roma e*

Jones's personal interpretation of the orders always maintained a respect for rules; yet those rules were inconsistent at best in the various treatises that Jones consulted. While Scamozzi offered a normative, even reactionary, system of the orders, Jones read treatises against one another in order to formulate his own judgement. The ability of an architect to choose and compose the ornament from the variety of sources and models was a right that Jones would have gathered from Serlio's idea of *giudizio* and Barbaro's commentary on Vitruvius.⁴⁵

Problems of Vernacular Terminology

The development of a technical terminology was central to the professionalization of architecture in England.⁴⁶ Classical building was more than a change in style; it was a change in professional practice and professional architectural communication. There needed to be names for the different parts of the classical architectural vocabulary which could form the core of communication between architect, patron and mason. In England learning the visual language of classicism required learning a corresponding descriptive vocabulary used in treatises and humanist architectural description. John Shute's treatise, the first to discuss the classical orders in English, discusses terminology in great detail, ending each discussion of the an order with a review of the terminology. For example, in the chapter on the Ionic order Shute provided a pedagogical interlude to ensure that the reader, supposedly unfamiliar with the nomenclature, was prepared for the next section: "Thus hauinge finished all the measures ending now at the highest of TRABEATIONIS. I shall name al the partes and parssels with their markes whereby is knowen the thing that is wrighten or spoken of to the clearnes or opening of matters, and an exercise for the reader to know the names by."⁴⁷

l'antico nell'arte e nella cultura del cinquecento (Roma: Istituto della Enciclopedia Italiana, 1985), 261.

⁴⁵Gordon Higgott, "Gateway and Entrance Designs," in Harris/Higgott 1989, 125.

⁴⁶An interesting distinction can be made here between an Italian humanist desire to decompartmentalize branches of learning in the 15th century and English need two centuries later to create more specialized vocabulary. The oratorical ideal was a mastery of speech in order to speak on any topic. Working against this Ciceronian model was the pressure of professionalization and related technical literature. See Smith 1991, 144.

⁴⁷Shute 1563, Folio viii.

The range of possible translation can be seen in the printed marginalia by Robert Dallington to his translation of the *Hypnerotomachia Poliphili* (1592). In one place Dallington adds a general explanation of the parts of the column, but the definitions are general, intended for a reader with no interest in a technical treatise. "A columns of his Capitell that is the head. Astragalus that is the sabiect of the capitell next the columnne. Hypotrachalie the shaft of the columnne. And Hypothesis, that is the foote whereon the Columnne standeth, exceeding the bignes of the columnne."⁴⁸ The terms are transliterated from the Greek and Latin, with little interest by Dallington in translating them into terms in common use in architectural treatises.

The problem of technical terminology in the English vernacular was not unique to architecture. It was more generally recognized in all the sciences, when through the introduction of new printed treatises into England, it was difficult to translate the terminology in order to disseminate the information through the professions. Thomas Digges, in his mathematical treatise *Pantometria* (1591) advocates a transliteration of the Latin and Greek terminology.

. . . let no man muse that writing in the English tongue, I have retained the Latin or Greek names of sundry lines and figures, as chords Pentagonal, lines Diagonal, Icosahedron, or such like. For as the Romans and other Latin writers, notwithstanding the copious and abundant eloquence of their tongue, have not shamed to borrow of the Grecians these and many other terms of art: so surely do I think it no reproach, either to the English tongue, or any English writer, where fit words fail to borrow of them both; but rather should we seem thereby to do them great injury, these being indeed certain testimonies and memorials where such sciences first took their original, and in what languages and countries they chiefly flourished: which names or words, how strange soever they seem at first acquaintance, by use will grow as familiar as these, a triangle, a circle, or such like, which by custom and continuance seem more English. Yet to avoid all obscurity that may grow by the novelty of them, I have adjoined every of their definitions.⁴⁹

Vitruvius had discussed the necessity of the clear language to be used in conjunction with architecture, and Jones annotated the passage "in architecture ye

⁴⁸Colonna [1592] 1973, fo. 11r.

⁴⁹Digges 1591, sig. T1r; quoted in Johnson 1944, 132-33.

wordes of arrt ar harly understood."⁵⁰ Vitruvius himself had incorporated many Greek terms into his treatise. For Jones reading Vitruvius in an Italian edition, too much should not be made of the Albertian disapproval of Greek terminology. For the non-academic seventeenth century English reader the problem of architectural language was both simpler and more profound. On the one hand Jones needed to understand the treatises central to his study of architectural classicism; and the more general dictionary of John Florio, while of great assistance for the definition of names of trees or non-technical language, was of little help with *stylobate*, *cyma* and other architectural terminology. But more generally, in order to secure a position for architecture within the hierarchy of the *studia humanitatis* in England, its language, the basis for its communication between individuals and its position within rhetorical education, had to adhere to accepted pedagogical principles. These principles such as clarity, philological integrity, avoidance of neologism, were adapted primarily from Aristotle's *Rhetorics* and *Ethics*, Cicero's *De Oratore*, Quintilian's *Institutione oratoriae*, books read by Jones in common with the standard humanist educational principles in England at the time.

In his treatise directed to "Noble Men, or Noble mindes" Henry Wotton did not need to treat architectural terminology in such detail. By 1624, when Wotton's treatise was published, the market and availability of foreign treatises had increased. For Wotton, writing a different kind of treatise directed to architectural observers and the general patron, the updating of professional terminology was important in only the broadest sense in architectural description. "I neede now say no more concerning Columnes & their Adiuncts, about which Architects make such a noyse in their Bookes, as if the very tearmes of Architraves, and Frizes, and Cornices, and the like, were enough to graduate a Master of this Art."⁵¹ Architecture was more than the sum of its terms for Wotton, and he preferred to describe the general sense of buildings rather than to worry about the number of fillets, and the details of mouldings, as did Jones throughout his career. Jones's concern for terminology was due to his personal desire to establish architecture as a profession as well as to a more general awareness of the importance of professional

⁵⁰The full annotation by Jones is as follows: "in architecture ye wordes of arrt ar harly understood," "fewe and clear sentenses: se Zenofon. of Socrates. li.4. fo.104 of sentenses see Arrstotells orratory. li. 2. fo. 86. Quintillian li. " Vitruvius 1567, V, 204.

⁵¹Wotton, Henry. [1624] 1903, 33-4.

language and philology in general from the commentaries of Daniele Barbaro and others.⁵²

What were the parts of the orders to be called? There were not terms in English to describe the various parts and taxonomy of the classical orders as described in foreign treatises. John Shute spent considerable time in his treatise at mid-century describing the elements of the orders and then marking them in his illustrations.⁵³ Wotton notes the change from pillar to column, "for the word among Artificers is almost naturalized."⁵⁴ The increased use of "column" may have been particularly related to a greater interest in ancient Roman architecture, and the study of travel and descriptive texts.

The study of a new architectural terminology as it entered into England through treatises and travelers also affected the integration of architectural thinking into the complete pattern of English life. Michael Baxandall has discussed how the language of visual description entered into more common usage in the Italian Renaissance, how "experience was being re-categorized—through systems of words dividing it up in new ways—and so re-organized."⁵⁵ As architectural terminology became "naturalized" as Henry Wotton described it, the language of architecture was found in the language already available, from transliteration and from the coining of new terms.

Jones's interest in creating an architectural style appropriate for a noble English patron involved him in a problem related to that of concern for translators of the ancient authors into vernacular, and the publication of revised editions of the

⁵²See the discussion of architectural terminology in Italy in the 15th century in Smith 1991, 142-44.

⁵³Alan T. Bradford, "Drama and Architecture under Elizabeth I: The 'Regular Phase,'" *English Literary Renaissance* 14, no. 1 (Winter 1984), 8.

⁵⁴Wotton, Henry. [1624] 1903, 23.

⁵⁵Baxandall 1972, 151.

classics.⁵⁶ The publication of architectural literature in England at this time was in large part translation, making foreign language material available for English masons and patrons. The discussion of the orders in England, and especially those printed in English, relied on foreign treatises. Each of the authors discussed so far who wrote on the orders did so with a nod to the ancient or continental text that by necessity served as a reference. Vitruvius was cited universally by Shute and Wotton, and in the English translations of Serlio and Blum. The practical building manual written by Cyprian Lucar was "in part collected and translated out of diverse authors in diverse languages, and in the greatest part devised by Cyprian Lucar Gentleman."⁵⁷ What is clear in all these compilations is the need to translate foreign treatises for practical purposes, for those unable to read foreign languages; but equally important, to translate a foreign tradition for its immediate use in England.⁵⁸

The problem of finding the right language for description can be seen most clearly in the glossaries attached to a group of English manuscript translations of Palladio. Three early English translations of Palladio's *I quattro libri* survive, all with identical glossaries of difficult Italian terms with their approximate English equivalents.⁵⁹ The similarity of the glossaries suggests that the three copies were made from a single prototype, or from one another as they circulated amongst

⁵⁶On the issue of terminology and language in translations of classics see Brian P. Copenhaver, "Ordinary Language, Jargon and Barbarism," in Schmitt 1988, 100-106; Olga Zorzi Pugliese, "English Translations from the Italian Humanists: An Interpretive Survey and Bibliography," *Italica* 50 (1973), 408-34; F.O. Matthiessen, *Translation, An Elizabethan Art* (Cambridge, 1931); Townsend Rich, *Harrington & Ariosto. A Study in Elizabethan Verse Translation* (New Haven: Yale University Press, 1940); Louis Kelly, *The True Interpreter: A History of Translation Theory and Practice in the West* (Oxford: Blackwell, 1979); Sergio Rossi, "Tradurre: Arte Elisabettiana," in *Letturatura e filologia. Studi in memoria di Giorgio Dolfini* (Milano: Cisalpino-Goliardica, 1987); Mary Augnota Scott, *The Elizabethan Translations from the Italian* (Boston: Houghton Mifflin, 1916); Glyn P. Norton, "Humanist Foundations of Translation Theory (1400-1450): A Study in the Dynamics of Word," *Canadian Review of Comparative Literature* 8 (Spring 1981).

⁵⁷Cyprian Lucar, *A Treatise Named Lucarsolace Devided into Fower Bookes* (London: Richard Field, 1590), titlepage.

⁵⁸John Onians' discussion of the formation of a Tuscan national style by Brunelleschi in the 15th century suggests an analogous process occurring in England two centuries later. See Onians 1988, 130-36.

⁵⁹The translations of Palladio with related glossaries are: Andrea Palladio, *I quattro libri dell'architettura* (Venetia: Bartholomeo Carampello, 1601); Worcester College, Oxford (B.3.12); owned by John Webb. Two others are at the Yale Center for British Art, New Haven; Kings College, Cambridge.

interested architectural readers.⁶⁰ The translations are interleaved with the printed text. John Webb, Jones's assistant, owned a copy of the 1601 edition of Palladio, interleaved with a manuscript translation. His annotations postdate the translation, and refer to projects from as early as the 1640's, suggesting that the translation was made sometime in the early years of the seventeenth century.⁶¹

The glossary in the Webb translation of Palladio lists fifty-nine terms from the Italian text of Palladio, with nearly half left blank. The terms to be defined are technical and often those for which there may be no direct equivalent in English. English architecture had no need of loggias in the Italian sense, and they are defined here in terms of English building practice and tradition: "a gallerie, a dyning rome a faire hall a walking place a faire porte upon the streate side a lodge a banquetting house." Especially for the terminology of the orders the translator was forced to search for a visual corollary. *Gola dirita*, for example, is "the blunter part of a piller in the very toppe like a greate nose." *Ovlo* is "a bryme or welt, a skyrt or edge." Most telling is the definition given to *Cimatio*, "thinge that be fore square, the upp[er] ledge of anie wainscott worke, or a kinde of piller soe graven that the carved worke resembleth the rowling waves."⁶²

⁶⁰Printed architectural treatises have received disproportionately more attention from scholars than manuscript copies. The evidence of the Palladio translations and other manuscript treatises of the period indicates that they were held to be of equal if not more value among collectors and architects. (Among the many manuscript translations is the translation of Vitruvius made by Fabio Calvo for Raphael, 1514-15.) Important collections of (manuscript) drawings circulated among architects and masons throughout Europe. In England these drawings are represented by the Thorpe drawings, or the Smythson collection. Although printing made information available across Europe, the scribal tradition did not die out, and was in fact, highly valued amongst those who wished to keep the readership of any material to a selected few, something that the development of print worked against. "The very choice of scribal publication in preference to print might well be dictated by a sense of identification with a particular community and a desire to nourish its corporate identity." Page 146 in Harold Love, "Scribal publication in seventeenth-century England," *Transactions of the Cambridge Bibliographical Society* 9, pt.2 (1987), 130-54. The creation of a literary coterie who shared manuscript copies is discussed in Arthur Marotti, *John Donne, Coterie Poet* (Madison: University of Wisconsin Press, 1986).

⁶¹The paleography is a Jacobean secretary hand, also suggesting an earlier date. The copy owned by Webb was rebound by George Clarke, and therefore binding can give no further information to the date of the translation.

⁶²The growing sophistication and application in architectural terminology is evident in [Nicholas Stone], *Enchiridion of Fortification, or A handfull of knowledge in Martiall affaires* (London: M.F., 1645). In "A Table" at the end of the book are Italian terms defined into English. "Astragall, Is a term of Architecture and is (according to Vitruvius, an ancient and famous Author thereof) a ring to deck or adorn the neck of a Columne; and is therefore

The surveyor John Thorpe is known to have been the translator of two architectural treatises, Hans Blums' *Quinque Columnarum Exacta descriptio atque delineatio*, published in English in 1601;⁶³ and a manuscript translation of Jacques Androuet du Cerceau *Leçons de perspective positive* (1576). The translation of du Cerceau was intended for printed publication, Thorpe notes on plate 1 "this to be cutt." The translation remained in manuscript, perhaps not finding the patron to financially back such an expensive project.⁶⁴ The interest in translating foreign treatises into the vernacular was part of a broader interest in making technical literature more widely available.⁶⁵ That impetus in the world of printing was directly felt in the popularization of an Italianate classicism throughout Europe and the availability of architectural treatises in vernacular languages.⁶⁶

Architect as Orator

In his Vitruvius Jones wrote "an exelett Comparason of Barbaro betwene the Orrator and the architecte."⁶⁷ The commentary of Barbaro is as follows:

& altro richiede la piacevolezza, altro la bellezza, & ornamento del parlare. similmente nelle Idee delle fabriche altre proportioni, altre dispositioni, altri

transferred to the Cannon, agreeing somewhat in shape with the Columne, or Pillar." Sig. Flr.

⁶³Thorpe copied out plates from Blum on the orders into his notebook. John Summerson, *The Book of Architecture of John Thorpe* (Walpole Society 40, 1966), T13/14.

⁶⁴The manuscript is in the Bodleian Library (LL 23* Art. Seld); and discussed by Karl Josef Höltgen, "An Unknown Manuscript Translation by John Thorpe of du Cerceau's *Perspective*," in E. Chaney and P. Mack, eds., *England and the Continental Renaissance. Essays in Honor of J.B. Trapp* (Woodbridge: The Boydell Press, 1990), 215-28.

⁶⁵Elizabeth Eisenstein, "Technical Literature Goes to Press: Some New Trends in Scientific Writing and Research," in her *The Printing Press as an Agent of Change* (Cambridge :Cambridge University Press, 1979), 520-74.

⁶⁶ For example, manuscript translations of Palladio were made in Spanish.

1. Madrid, Biblioteca Nacional 7373 (T 141) s. XVII. Andr. Palladio, *libro tercero de la Architectura*, Spanish by Francisco de Praves (1625). See B. J. Gallardo, *Ensayo de una biblioteca espanola* (4 vols, Madrid 1863-89), 121, 131. Listed in Paul Oskar Kristeller, compiler, *Iter Italicum, Vol. IV (Alia Itinera II)*. *Great Britain to Spain* (London, The Warburg Institute, 1989), 530.

2. Madrid, Biblioteca Nacional 9248 (Aa 90). s. XVI. Andr. Palladio, *Architettura*, Spanish by Juan de Ribero (1578). See B. J. Gallardo, *Ensayo de una biblioteca espanola*, 121, 137. Listed in Kristeller, *Iter Italicum, Vol. IV (Alia Itinera II)*. *Great Britain to Spain*, 534.

ordini, & compartimenti ci vuole, quando nella fabrica si richiede grandezza, & veneratione, che quando si vuole bellezza, o delicatezza, o simplicità.⁶⁸

The orator persuades through the combination of elegance of style and fullness of content. From his annotations and references to Quintilian it is clear that Jones was aware of rhetorical theory of the renaissance and its classical sources. There are two aspects of Jones's references to the art of the orator which are relevant here: the idea of the combination of opposites and the power of the orator to affect the listener. Barbaro's comments on oratory stem in part from Aristotle's *Nichomachean Ethics*, which he had edited.⁶⁹

Jones's careful study of the rules of classicism led him to a position whereby invention was permissible within limited rules. Aristotle's *Ethics*, and similarly Barbaro's commentary on Vitruvius, urged varying with reason between extremes, a position which Jones adopted as his approach to the formation of a classical language.⁷⁰ In his Vitruvius, however, Jones notes Quintilian in the margin as an authority on style for recommending "fewe and clear sentenses." The significance of the image of the orator for Jones is the power given to the architect to move the audience through his choice of style and fullness of content. These two elements were crucial and inseparable for Jones: the creation of a style, a "proportion", which held opposites of style together, which respected the rules of the system in which he was operating. These rules, as I discussed in previous sections, were based on a careful and eventually critical reading, of the printed treatises available to him, qualified with study of the buildings themselves and the use of comparative material. Quintilian stressed that the demands of style for the orator require equal rigor in the choice of content and the determination of its appropriate use and the needs of the audience.⁷¹ Jones accepts the Italian humanist concept of the architect as orator, which is only possible if architecture claims a position in humanist culture as a visual language with the same basis in ancient sources and moral philosophy as other areas of study such as mathematics and rhetorical study itself.

⁶⁷Vitruvius 1567, 115.

⁶⁸Vitruvius 1567, 115.

⁶⁹See Higgott 1992, 75 n. 46.

⁷⁰Higgott 1992.

⁷¹Smith 1991, 91.

Jones's awareness of rhetoric and the use of rhetorical models by architectural writers such as Alberti and Daniele Barbaro are especially significant in understanding his architectural method and its relationship to the pattern of English building at the time. Jones adopted Alberti and other Italian authors' belief that the persuasive effect of architecture and oratory are analogous.⁷² Architecture could communicate to the viewer through aesthetic pleasure and the emotional effects of beauty.

The Reason of Proportion

By the time Inigo Jones owned and annotated his copy of Leon Battista Alberti's *L'Architettura* around 1613 or 1614, he had already formed a firm opinion about the use of the classical orders. In a particularly important part of Alberti's text, read by Jones in the 1565 Bartoli Italian translation, Jones condemned excessive freedom by architects in design. He underlined Alberti's text "...& che piu presto habbia a dare loro piacere mediante la gratia d'una tale invention..." and wrote in the margin "and not as the fleminge breaking of orders to sem[e] full of invention but have no reso[n] of Proportion." Alberti's passage in the book on the ornament of private buildings allows for a certain license in the adornment of private houses, provided that it remains within the *concinnitas* of the individual members of the order. Jones's concern to balance the inventions of the architect with the governing rules of the orders guided his designs and his reading throughout his career. If one thing could be said to distinguish Jones from the other architects working in England it would be his careful maneuvering between a desire for visually pleasing design solutions and the need to justify those personal decisions with the authority of written texts and precedent.

Alberti discusses this relationship of opposites and individual elements in language based in classical rhetoric. It is a comment about style rather than content, and incorporates the orator as a model. The orator is judged on his effect on the listener, and may combine styles at will to achieve a desired effect.

Jones's main stab in this annotation is against the "Flemings" as he calls them, and refers to their popular treatises used by architects and masons in England. Jones may have been criticizing the decorative patterns popularized in these

⁷²Smith 1991, 82-7.

treatises: the strapwork and grotesques incorporated into English buildings throughout the sixteenth and early seventeenth century. The focus of the complaint however was against the treatises on the orders that improvised on antique models, such as the treatise by Hans Vredeman de Vries, *Architectura, die köstliche und weitberumbte Khunst* (1606).⁷³ Jones objected more to the freedom of those treatises, the orders in print, than to their direct use in buildings. For all the authority of Vitruvius as the ancient architectural treatise, Jones equally condemned the ancient use of the orders which did not adhere to an objective idea of numerical rationalism. That fault in Vitruvius Jones found discussed in detail in Scamozzi, the most rule-based of any of his authorities on the orders who sought to codify antiquity even more than his predecessor Palladio. Vredeman de Vries would not have thought his system of the orders lacked proportion but that he had improved upon the older systems through his adornment of the antique with the new.⁷⁴

That the orders should be commensurable, one part responding to another in like form, similarly emerged from Jones's search for an architectural system based on rules. The orders as presented in printed treatises or in ancient buildings rarely followed this precept, and this perceived shortcoming was criticized by Jones. Against Scamozzi's plate of the Doric order with arches Jones wrote: "The plinth & heyght of the capitell returns about ye Coynn. I think to answear with ye plinth below of ye Pillaster: but I do not approve yt for ye Pilaster endes at ye Impost of ye arrch. that above is waale, See palladio Li. 2 fo. 9."⁷⁵ (Figure 26) Jones thought that Scamozzi had repeated errors in the architectural detailing of the ancients, and Jones did not excuse him from failing to refine the orders in his treatise. Jones notes that Scamozzi, like Palladio, used the base from the Temple of Nerva (Minerva) for the base of the Corinthian order. "The Ansiente yoused not to put over a Simbia. a gola as is hear. but in the Tempell of Scici thear is a Dentell cutt over the Scimbia. fo 106. but I do not approve yt for yt varries to much fro[m] the baace."⁷⁶ (Figure 27)

⁷³Erik Forssman, *Säule und Ornament. Studien zum Problem des Manierismus in den nordischen, Säulenbüchern und Vorlageblättern des 16. und 17. Jahrhunderts* (Stockholm, 1956); J. Ehrmann, "Hans Vredeman de Vries (Leeuwarden 1527-Anvers 1606)," *Gazette des Beaux-Arts* (1979), 13-26.

⁷⁴Kruft 1988, 216.

⁷⁵Scamozzi 1615, II, 75.

⁷⁶Scamozzi 1615, II, 135.

Jones uses the term "proportion" here to indicate that ornament such as that in pattern books by Hans Vredeman de Vries and in other German and Flemish treatises does not adhere to an internal logic which determines the relationships of individual elements one to the other; nor to a classical tradition of aesthetic theory concerned with viewer response. Alberti's use of the term *conciinnitas* was meant to describe the relationship of parts and the reciprocal nature of opposites.⁷⁷

Proportion is the basis on which Jones Northern European architecture, and it was the crucial step in his formulation of English architectural classicism. What did proportion mean to Jones, and what connotations did proportion have among his patrons as a theoretical basis for a new architectural style? In the literature on Jones's use of the orders a great deal has been made of his sensitive and sophisticated use of proportions in translating the architecture of continental classicism for an English audience. In fact, most of the praise and recognition of Jones as an architect is due to his incorporation of number as a central concern of design.⁷⁸ Number was an important consideration for Jones. He carefully annotates proportional systems in his treatises, noting the varying ways Vitruvius, Lomazzo, Palladio, Vignola and others arrive at their solutions for the orders.⁷⁹ He was particularly interested in problems of proportion during his early phase of reading, as he sought to formulate rules for architectural compositions. Jones's careful modulation of the intercolumnation of his architecture and a preference for a broader and "masculine" architecture was paralleled in writings on the refinement of English as a vernacular language. But what did he think proportion meant and how did it work within architectural design? First, proportion was a means to an end, a way to design using printed source material which was always presented in a system of measure different from the English feet. If designs were based on modules then they could be expanded or contracted based on the project's requirements. The system of modules was presented in Serlio, except that there pedestals were devised through a different means. For English designers who did not read Serlio in the Italian or French, Robert Peake's translation in 1611 made that system available to the English

⁷⁷Smith 1991, 89.

⁷⁸Significantly, this too had been a source of praise for Palladio, a critical source for Jones. Palladio's inconsistent use of number has been recently discussed as a corrective to this overly Neo-Platonic view of his architecture. See Deborah Howard and Malcolm Longair, "Harmonic Proportion and Palladio's *Quattro Libri*," *JSAH* 41, no. 2 (May 1982), 116-43.

⁷⁹Higgott 1992.

craftsman.⁸⁰ Serlio's system was not always easy to follow and did not provide measurements on the page, a further hindrance to its widespread use.

Jones derived his ideas on proportion from a careful reading of Vitruvius and Barbaro's commentary; and Jones's subsequent study of Vitruvian ideas in practice in the treatises of Palladio, and others. As Gordon Higgott has recently shown Jones emphasized in Vitruvian theory the freedom given to the architect to change proportions based on the appearance of the finished building to the eye of the viewer.⁸¹ The importance placed on the viewer in architectural design stems in part from Aristotle's *Ethics*. Like many other mid-sixteenth century writers on art, Barbaro developed an aesthetic of reception based on Aristotle.⁸²

Rudolf Wittkower's work on Jones as the fore-runner of neo-Palladianism in England marked a high point in the study of Jones's formation of a classical vocabulary. Wittkower in his article "Inigo Jones, architect and man of letters," (1953), saw Jones's intellectual interests as evidence of his serious study of the Italian architectural theory of the sixteenth century.⁸³ In contrast to the architecture of the preceding generations in England, Wittkower saw Jones as the appropriate heir to the Palladian interest in number.

Wittkower's proportional approach to the orders has been followed by the most recent full length study of Jones's design practice in the catalogue by John Harris and Gordon Higgott. While allowing for a more flexible interpretation of the orders by Jones, they still begin from the idea of mathematical systems which were then altered from the printed exempla. That Jones was interested in number and proportion is clear. The annotations to the proportions used by Palladio, Scamozzi, and Vignola appear throughout his copies of the treatises.⁸⁴

The main criticism against the mathematical approach of Wittkower is that there is no evidence of buildings ever having been described in proportional terms. What viewers said about buildings was that the perfect proportioning contributed to making the building appear beautiful, even magical. As in Alberti's approach to

⁸⁰Bury 1989.

⁸¹Higgott 1992, 62-5.

⁸²Mendelsohn 1982, 10-11.

⁸³"Inigo Jones, architect and man of letters," *RIBA Journal* 60 (1953), 83-90; reprinted in *Palladio and English Palladianism* (London: Thames & Hudson, 1974).

⁸⁴Higgott 1992.

proportions, Jones would not have expected viewers to identify mathematical relationships, but to see the buildings as visually satisfying.⁸⁵ The category used to praise buildings can be exemplified by a letter sent by William Cecil, Lord Burghley, to Sir Christopher Hatton in 1579, praising Hatton's house Holdenby in Northamptonshire. ". . . approaching to the house, being led by a large, long, straight fair way, I found a great magnificence in the front or front pieces of the house, so every part answerable to other, to allure liking."⁸⁶ Jones changed the proportions depending on the project, and ultimately, how the design looked. A correctly proportioned building meant more than number, the relationship of parts to ensure an internal dialogue within the building's design, and most importantly, available to an informed viewer. Wittkower changes an implicit process to an explicit one, and thereby lays too much emphasis on only one aspect of classicism.

The power of numbers as the voice of authority found its apogee in the treatise of Vignola. Jones owned Vignola, but from the later handwriting and annotations throughout to treatises we know he purchased later, he must have acquired that volume some time well after 1615. Jones heavily annotated the treatise, often criticizing Vignola for his awkward proportions and solutions for the orders. In a series of annotations Jones criticizes Vignola's proportioning of arches with applied columns, noting that the "membretto," the space between the columns and the impost was most often not in proportion with the rest of the order.⁸⁷ Jones did not see Vignola as proposing a system for determining the orders based on a simple modular formula, but as providing design solutions.

In contrast to the other treatises on the orders which Jones owned, Vignola sought to eliminate doubt by basing his solutions on the fact of number and proportion. Vignola's system of basing the orders on the radius of the column simplified the objective proportional system used before. Number was an ordering principle, not the thing to be ordered; and gave the voice of authority to Vignola's own design decisions and rationale. This shift to number as the voice of inevitability was crucial for Jones, and ultimately for later English architects who

⁸⁵Howard Burns, "A Drawing by L. B. Alberti," in Joseph Rykwert, ed., "Leonis Baptiste Alberti," *Architectural Design* 49, no. 5-6, n.d., 45-56.

⁸⁶Cited in Eric St. John Brooks, *Sir Christopher Hatton* (London: Jonathan Cape, 1947), 158.

⁸⁷As in Vignola's Doric order where Jones wrote "this membretto is to bigge by much," (Vignola, *Regole*, fo. XI) and a series of related comments done in the same hand. See also fo. XXIII and fo. XXII.

used classicism in architecture as a positivist statement. From the incorporation of Vignola into the language of English classicism, number came to take a place of importance in the theory as well as the practice of architecture. Jones could use the argument that the Flemings lacked proportion as a condemnation because he believed that numbers determined good from bad design. This distinction is hard for the twentieth century viewer to see, especially those raised on an Anglo-American view of classicism that has the cast of Puritan values and upper class taste. Jones eliminated the variety of Elizabethan design for a rule bound architecture justified by numerical notation.

The emphasis Jones placed on number and proportion as the basis for the correct use of the orders was not only due to his criticism of their current use in English architecture, but also to his belief that the orders, if understood mathematically, could be part of a new scientific mentality. Jones was not new in attempting to raise the standard of the discipline of architecture by emphasizing its basis in mathematics. John Dee, in his *Mathematical Preface* to the Billingsley translation of Euclid (1570), justified architecture on these grounds and placed it in a hierarchy of other sciences dependant on number for their operations. As Joseph Rykwert has recently written "The science of the classical orders . . . seemed to Jones to display the operation of number as wisdom analogous to that of navigators, map-makers, engineers of time."⁸⁸

Jones's reading of Plutarch's *Moralia* gave philosophical support to his interest in proportion. In the discussion of the theory of ancient music, Jones heavily annotated those passages that discuss the numerical aspect to harmony.⁸⁹ It was in his copy of Vitruvius, however, that Jones found the precedent for the discussion of these general qualities of proportion, symmetry, eurythmia and decorum.

Vitruvius discusses architecture in terms that could be applied to a number of different arts. Architecture could be discussed in the same language as music, both based on mathematical systems and with related aesthetic qualities. Thus in

⁸⁸Joseph Rykwert, "The Seventeenth Century," in *The Cambridge Guide to the Arts in Britain*, Vol. 4, *The Seventeenth Century*, ed. Boris Ford (New York: Cambridge University Press, 1989), 29.

⁸⁹See the discussion of these passages in D.J. Gordon, "Poet and Architect: The Intellectual Setting of the Quarrel between Ben Jonson and Inigo Jones," in his *The Renaissance Imagination*, ed. Stephen Orgel (Berkeley: University of California Press, 1975), 100-101.

England, Vitruvius was used by Robert Fludd, for example, as a source in his treatise on musical theory.⁹⁰ Jones notes in his *Vitruvius*, following the commentary of Barbaro, that there must be the specific application of the general to a given discipline.⁹¹

The beautiful proportioning of a building, like music correctly composed, could transform the ordinary as if by magic. In the *Hypnerotomachia Poliphilii*, translated into English in 1592, Francesco Colonna in his typically impassioned tone describes the effect of harmonious proportion on the viewer: "And with such an Eurithmie or apt proportioning of members, hee did shew the subtiltie of the art of Lapidarie, as if the substances had not beene of the hardest marble howsoever, but of soft chaulke or Potters claie, and with what conclansature the stones couched, and by what Artillerie, rule and measure they were composed and set, it was woonderfull to imagine."⁹² Wotton defines eurythmia as "that agreeable Harmony, betweene the breadth, length and height of all the Roomes of the Fabrique, which suddenly where it taketh every Beholder, by the secret power of proportion."⁹³

Proportion is the element that turns buildings into architecture, the poetics of the structure. Proportion was the place where poetry joined mathematics, and George Puttenham devoted his second book on poetry to the subject. "It is said by such as professe the Mathematicall sciences, that all things stand by proportion, and that without it nothing could stand to be good or beautiful."⁹⁴ If ornament was the "courtly habillements" to poetry then proportion was the structure, meter and measure.

⁹⁰Peter J. Ammann, "The Musical Theory and Philosophy of Robert Fludd," *JWCI* 30 (1967), 198-227.

⁹¹Vitruvius 1567, I, 27.

⁹²Colonna, [1592] 1973, 25r. On the English translation of the *Hypnerotomachia*, also see Hölting 1984; Dudley Wilson, "The Strife of Love in a Dreame, an Elizabethan Translation of Part of the First Book of Francesco Colonna's *Hypnerotomachia*," *Bulletin of the Society for Renaissance Studies* 4, no. 1 (April 1986), 41-53.

⁹³Wotton, [1624] 1903, 95.

⁹⁴Puttenham [1589] 1970, 78.

The Module

Serlio's modular system of design found widespread popularity in the English translation of the most popular European treatise on the orders, Hans Blum's *Quinque Columnarum Exacta descriptio atque delineatio*, and first published in 1550. Like Walter Gedde's *Book of Sundry Draughts*, it was written not only for architects and was directed to 'Free-Masons, Carpenters, Goldsmithes, Painters, Carvers, In layers, Anticke-Cutters and all others that delight to practice with the Compasse and Squire'⁹⁵ Blum used the module as the means for calculating the orders. (Figure 28) Relying more on image than text, he included the entablature and pedestal into Serlio's system. The book was enormously popular and often reprinted in at least thirty-two editions in Europe from 1550 to 1678, with seven editions in English during that period.⁹⁶ As Eileen Harris notes in her discussion of Blum's treatise, the layout of the book is clear and the illustrations make the text nearly superfluous, so that a foreign language edition could serve nearly as well for English masons. The popularity and usefulness of the treatise would have meant that copies did not last long on the building site. Like school text books which were often updated, a technical manual would not have been the type of precious book kept by patrons as an object of great value. This may have contributed to the very few surviving copies of some editions, including the only known copy of the first English edition published in 1601, and now in the collections at Worcester College in an imperfect copy.

The module was a route to another meaning for Jones, however, that went beyond the problems of the *cantiere*. In Scamozzi Jones had found a more complex discussion of module and how it related to proportion. Jones noted Scamozzi's definition of the module as an organic model which co-ordinates each part of the building to the whole: "Perche nell'architettura il Modulo, ò grossezza della colonna, e misura con la quale si viene in cognitione delle proportioni, e corrispondenza delle parti di tutto il corpo dell'edificio."⁹⁷ Difference between these modular systems and Jones's architecture is that Jones conceived of the orders as

⁹⁵E. Harris 1990, 23. Also see Barbara Schildt-Specker, "Hans Blum", in *Deutsche Architekturtheorie zwischen Gotik und Renaissance*, ed. Hubertus Günther, (Darmstadt: Wissenschaftliche Buchgesellschaft, 1988), 140-45.

⁹⁶E. Harris 1990, 121.

⁹⁷Scamozzi 1615, I, 47.

requiring a knowledge of the entire system in order to compose from within the language itself. Further, the orders were the symbolic manifestation of an entire cultural matrix that valued classical antiquity and learning.

The significance of Scamozzi's concept of the module was that the whole could be envisioned through an understanding of the smallest part. Vitruvius stated that the "module establishes 'correspondence' between each 'of the separate members even the smallest details to the whole body' of the genus."⁹⁸ It was an idea that in Italian architectural theory extended beyond the system of the orders per se to a whole concept of architectural generation in design. All architectural composition based on number as the source could proceed from an abstracted representation to a more general use. The practice and theory of fortifications, one of the topics Jones seems to have studied most in the 1620's and 1630's, included complex descriptions of geometrically based design. Jones notes in the margin of the first book of Lorini's *Le fortificatione* (1609) that "the plante consist of lineamente and devisions of circelles the knowlidge of on of thes plante or boddy of a bulwarke gives ye knowlidge of all the rest increasing or diminishing according to the sceate." (Lib. I, Cap. I, 7)

Orders vs. Columns

It is important at this stage to be clearer about this distinction in the literature and in Jones's reading between columns and the orders. What do we mean when we talk about the system of the orders? Very broadly stated, England in the sixteenth century, classicism was understood in two ways: as the vocabulary of the orders, and as division of the building into parts. Using terms adopted by Alexander Tzonis and Liane LeFaivre, these two separate aspects of classicism could be termed the taxis and the genera of classicism.⁹⁹ Critical attention has tended to focus, as with most classical architecture, on Jones's use of the vocabulary of classicism, his formation of a classical repertoire of forms and their relationship to continental

⁹⁸Vitruvius, *De Architectura*, III/I; quoted in Tzonis/Lefaivre 1986, 88-9.

⁹⁹Tzonis/Lefaivre 1986. Tzonis and Lefaivre's treatment of classicism is extremely useful in presenting the formal concerns and the implications for further interpretation. In particular, their distinction between "taxis, the orderly arrangement of parts," (9); and genera, the "elements [which] always appear in well-determined sets governed by particular fixed relations." (35)

sources.¹⁰⁰ Jones's emphasis on the reading of details reflected his growing interest in the way architectural elements contain the germ of the architectural style as a whole.

The effect of the two dimensional woodcut illustration in the book could not have prepared Jones for Palladio's idiosyncratic use of columns in his buildings. The effect of Venetian architecture as built was the stimulus behind Jones's use of columns on a building such as the Banqueting House (1619). (Figure 29) Jones's attitude to columns is always however essentially ambivalent, and designs for astylar versions of buildings are typical, as in his two designs for the Prince's Lodge at Newmarket. The impact of columns in Palladio's built architecture would not have had the impact on Jones until he had seen it in person - Palladio's use of the orders in his buildings was more idiosyncratic and visually striking than the buildings appear in Palladio's treatise. Even then it is not clear that Jones ever shifted from an ambivalent use of columns throughout his architectural career. It is appropriate that Jones should have sought to learn about the orders from Palladio, whose love of columns appears throughout his built architecture. Yet there are few comments by Jones on the extravagant and often idiosyncratic use of columns by Palladio in his actual structures. Jones is more interested in the text and treatise as authority for study and the general effect of columns in the built structure.

The Palladio treatise is heavily annotated precisely because Jones was reading it early in his career. It is difficult not to dismiss these early annotations as merely translations of the text or images by Jones. The context of this reading must be examined more closely, however, for Jones is approaching his study of the orders against a background of widespread knowledge in England of the columns as highly charged and symbolic ornament. By translating the description of the orders into English, Jones transforms the language of continental classicism into the vernacular of English building practice.

Signs of Status: From Heraldry to the Orders

It is necessary to stop for a moment here to broaden our perspective, to look at Jones's use of the orders within the architectural tradition in which he was working. That this approach is so infrequently taken is a testimony to the unique

¹⁰⁰See Summerson 1966b.

architectural talent of Jones and his own ability to create a distance between his work and the work of his contemporaries. For Jones in his personal position within the court and eschewing of the vestiges of traditional English architectural ornament made sure that his work could be singled out from the great mass of building occurring at the period.¹⁰¹ That there was a vital architectural tradition in England that included the orders as part of that system meant however that Jones was working in a world where orders would have had significance as part of the visual culture of the period.

What was the status of the orders in England? Jones began to design architecture within a culture that had developed a complex and highly charged visual language that incorporated images of the orders. It is clear that treatises on the orders, as with classicizing plans and elevations, were known before Jones to English architects and patrons. John Thorpe's notebook, for example, contains plans for country houses based on the designs of Palladio.¹⁰² Printed texts had made the language of architectural classicism available to an ever expanding readership.¹⁰³ They were always incorporated, however, within a traditional English syntax. The designs of Robert Smythson for example show a knowledge of Palladian planning and Italianate use of the orders. At Worksop Manor Smythson used a classical arcade in place of a traditional English hall screen. (Figure 30) Playing on a preference for startling visual effects, the screen would have appeared innovative and surprising to a viewer raised on the traditional English type of composite ornament.¹⁰⁴ The sixteenth century did not think of classicism in terms of rules which must be followed to arrive at a stage of correctness. Classical ornament was prized for its newness, its symbolic content, and perhaps its flexibility and adaptability to different uses. Serlio and Palladio in the sixteenth century were not seen as authoritative but as one possible source among many. Equally popular among

¹⁰¹ W.G. Hoskins, "The Rebuilding of Rural England 1570-1640," *Past and Present* 4 (November 1953), 44-59.

¹⁰² Summerson 1966a.

¹⁰³ Lucian Febvre and Henri-Jean Martin, *The Coming of the Book. The Impact of Printing 1450-1800* (London: Verso Editions), 1976.

¹⁰⁴ Friedman 1989a, 105-9.

masons and patrons were Flemish pattern books and the available vernacular repertory of ornament in everyday use.¹⁰⁵

The usual places for columns to be located in English buildings were at concentrated areas such as doorways or window frames where their use had little effect on the disposition of the rest of the building. One way that the orders were used in building were for frontispieces to mark principal entrances. The most influential of these of the sixteenth century was the Strand entrance gate for Edward Seymour's Somerset House (1547-52), recorded by John Thorpe.¹⁰⁶ (Figure 31) This classical moment at mid-century, eclipsed by an Elizabethan turning away from such overt classical details, was hugely influential. A large number of related porches, door detailing, and window mouldings can be traced back to Somerset House. Its highly visible position in London and the evidence of Thorpe's drawing after it suggests its influence.

Facades were conceived as frontispieces in both the English descriptions and in the Italian treatises, such as Scamozzi praises the frontispiece for serving as the bearer of inscriptions, history and ornament on the facade of the building. Jones annotated this passage simply "why frontispieces wer maade."

Per maggiorornamento, e decoro de'tetti, e delle facciate de gli edifici furono da gli antichi introdotti i frontispici, i quali non solo si conuengono principalmente alle facciate de'Tempij, e massime s'hanno colonnati, ò portici all'intorno, ò dinanzi; come la Rotonda di Roma, e parimente quasi tutti i Tempij antichi gli haueuano; i quali si comprendono da'loro vestiggi, & anco dalle medaglie: e questa verita e dimostrata assai chiaramente da Liuio, Dione, Plinio, Plutarco, e da tanti altri Scrittori delle cose Romane, e parimente da pausania, e Srabone, e non pochi altri delle cose Greche: e gli vni, e gli altri per le qualit`a delle iscrizioni, e Storie, & ornamenti, che vi erano inserite."¹⁰⁷

Henry Peacham made the connection between architectural exterior and personal presentation explicit in *The Complete Gentleman*. He begins the chapter "On Reputation and Carriage in General":

There is no one thing that setteth a fairer stamp upon nobility than evenness of carriage and care of our reputation, without which our most graceful gifts

¹⁰⁵ Airs 1975.

¹⁰⁶ See the discussion Howard 1990, 201-2.

are dead and dull, as the diamond without his foil. For hereupon as on the frontispiece of a magnificent palace are fixed the eyes of all passengers and hereby the height of our judgements (even ourselves) is taken. According to that of the wise man, 'by gait, laughter, and apparel, a man is known what he is.'¹⁰⁸

What did the use of orders within the tradition of English building signify for the contemporary viewer and builder? At the end of the sixteenth century, one of the principal forms of ornamentation on houses was the use of heraldry, most often applied at entrances, but also included in stained glass or on tombs. The plain facades of English houses allowed a certain freedom for the owners in distributing personal, family ornament at will.¹⁰⁹ Orders were often included as part of a heraldic frontispiece to a building, framing coats of arms or at times the support for the arms themselves. The importance of heraldry both as ornament and symbol of family status meant that the use of the orders in those same places gave classical architectural detail the resonance of that traditional architectural ornament. The orders could then be read like heraldry on the front of buildings, signs of the owners education, status, travel and wealth in commissioning extravagant work. Edmund Bolton in his treatise *The Elements of Armories* (London 1610) provides a guide to use of heraldry as the distinguishing signs of noble men. In a dedicatory poem to the author H.C. wrote:

To the Gentleman Reader

If thou desire to knowe the reason why,
Thous doo'st in Sheild the Armes of honour bear,
This Booke will say that they by nature were
The HIEROGLYPHICS of Nobility.
It shewes beside, how Art doth beautifie
What Nature doth inspire, and how each-where
All Arts conion'd in this Art do appeare,
By structure of a choyce Phylosophie.
GEOMETRIE giues Lines in ordred Place,
Numbers ARITHMETICK, and thou may'st see,
How all in OPTICK Colours honour thee.
But since that Virtue which adorn'd the race

¹⁰⁷ Scamozzi 1615, II, 10.

¹⁰⁸ Peacham [1634] 1962, 144.

From whence thou didst descend was ground of al,
 Haue care to follow it, or all will fall.¹¹⁰

Armories were the foundation of heraldry, and fundamental to the representation of status and nobility for the user. Bolton describes the use and significance of heraldry, using language rich in architectural imagery.

Armories therefore occurring every-where, in seales, in frontes of buildings, in utensils, in all things; Monarcks using them, mighty Peeres, and in briefe, all the noble *tam maiorum, quam minorum gentium*, from Caesar to the simplest Gentleman, yet all of them (for the more part) most unknowingly, very few (even of the most studious) do sildome goe any farther then to fill up a wide Wardrobe with particular coates . . .

For in them (I may without racking the value affirme) are all the Themis, and Theorems of generous knowledges, from whence doth breath so sweet an aer of humanity as thy manners cannot but take, and mix thereby with true gentility, and noblesse.

The outward parts of her palace are beatified with infinit objects full of all variety & comelinesse: the walks, & mazes which she useth are those enwrapped circles of ingenuous sciences which the learned do entitle Cyclopaedie: her Presence, and most inward retirements have all the most Christian, Haerock, and Cardinall virtues, & for Handmaidens excellent affections, without which the arguments, & externall testimonies of noblesse are nothing worth.¹¹¹

There was a shift in architectural ornamentation from the use of heraldry to the use of the orders. The one system was based on the identification by the viewer of the associative value of the arms, and the other based on the humanist associations of the systematic use of the classical orders.

In his discussion of the orders, Henry Wotton directly relates their use to the traditional importance given in English buildings to the place of heraldry. Wotton adopts the language of heraldry in setting out the orders:

Pillars which we may likewise call Collumnes (for the word among Artificers is almost naturallized) I could distinguish into Simple & Compounded. But (to tread the beaten and plainest way) there are five Orders of Pillars, according to their dignity and perfection, thus marshalled:

¹⁰⁹ Mercer 1962, 72.

¹¹⁰ Bolton 1610, sig. A1v.

The Tuscan.
 The Dorique.
 The Ionique.
 The Corinthian.
 And the Compound Order, or as some call it the Roman, others more generally the Italian.¹¹²

Wotton describes the orders according to "their dignity and perfection, thus marshalled." This is the traditional language of description (called blazonry) used by heralds, those officials of the court responsible for the assigning and cataloguing of family arms and antiquity. To "marshall" the orders would have called to mind that activity of heralds in creating new coats of arms, when they would combine two or more arms in one escutcheon.¹¹³ Although Wotton had spent many years in Venice as ambassador and collected Palladio's drawings, he described the orders in terms of the patterns of architectural ornament he knew from English buildings. The classical orders, even for those well acquainted with continental theory, merged with the available vocabulary of description of heraldry.

In the architecture of Jones the use of the orders based on the authority of treatises allowed for invention only within prescribed rules. For some patrons, however, the use of one system did not preclude a simultaneous incorporation of traditional elements. The precedent in England for both an heraldic use of the orders and a compositional use of columns and classical details to order the space as a whole occurs at Kirby Hall, one of the most important and advanced country houses built at the end of the sixteenth and into the seventeenth century.¹¹⁴ The house was built in a number of stages from 1570, but from its earliest phases the house had two kinds of classical detail used. The house is, as were many of the major Elizabethan houses, built around a central courtyard. At the south end of the court was a three storied porch, symmetrically placed and the focus for the rectangular court entered on the north side. (Figure 32) The porch has a series of superimposed orders, the lower fluted ionic pilasters on pedestals and the upper attached columns and colonnettes on brackets. The colonnettes are of a smaller and completely

¹¹¹ Bolton 1610, sig. A4r.

¹¹² Wotton, Henry. [1624] 1903, 23.

¹¹³ S.v. "marshall," OED.

¹¹⁴ On Kirby Hall, see G.H. Chettle, *Kirby Hall, Northamptonshire*, revised by Peter Leach (London: English Heritage, 1986 ed); Summerson 1977, 47-9.

different scale from the two lower orders; and are placed against a screen of ornament and topped by a round headed pediment. The porch projects into the courtyard and the columns and pilasters continue around the sides for one columnation. The effect is to appear that the columns and other details are layered across the facade of the porch and recede toward the main facade of the court. This trope of superimposed orders for the important entrance of a house appears through Elizabethan and Jacobean buildings, and ranged in complexity depending on the sophistication of the patron and builder, money available for this expensive carving and the tradition of building in the region. Building in Northamptonshire, the location of Kirby, was particularly active in the sixteenth century, and buildings often address a recent renovation to a neighboring house. In the case of Kirby, the porch is similar, though far more grand, to the houses at Dingley and Deene.

Concurrent with this traditional use of superimposed orders within a restricted location is the use of a giant order throughout the inner courtyard. (Figure 33) One of the earliest appearances of the giant order in Europe, the builder and patron may have seen a similar use in Paris or extrapolated the idea from treatises. In either case, the ionic pilasters apply to the whole of the inner courtyard, varying their spacing to correspond to the narrower bays of the north loggia and the wider window arrangements against the west and east walls. In contrast to the orders at the porch, the builder thought the ionic giant pilasters flexible enough to vary them for use in a large and varied architectural composition; and to have the highly ornamented and traditional porch operate simultaneously.

Jones' criticism of the orders as interpreted by Northern European architects was also a slight against architectural practice as it stood in England. While Jones owed much to English architects, he could not have helped but learn from the major buildings in England, his position at court required that he distinguish himself from the average mason in the King's Works of the time. But perhaps more than this it was the powerful position of the architects employed at the court of Prince Henry, Constantino de' Servi and Isaac de Caus, that would have urged Jones to emulate a continental form of classical restraint.

The use of the term proportion by Jones indicates that by the time he owned his copy of Alberti, certainly soon after his 1613 trip with Arundel, he thought of the orders as a complex architectural system that affected the whole distribution of the building. But this is not where Jones started in his understanding of the orders. His earlier annotations and drawings had shown that well after he was established as

a court architect, Jones approached the orders as a system of ornamentation with complex and varied meanings. The careful and laborious work that Jones put into his reading of Palladio show that the ideas were new to him early in his career. Each detail of the orders is carefully marked out by Jones, including the foreign terminology and approximate translations into English. An early annotation describes the method for establishing the relationship of the parts of the Tuscan order. In Book I of Palladio Jones writes: "This capitell is heygh ye halfe of ye thickness of ye Pillor below and Is devided into 3 partes on is given to ye Abbaco Caled Plinth marked A . . ." ¹¹⁵ Jones deciphers the illustration into text, noting in the margin his understanding of the illustration and how the details of the orders relate to the whole. As an architect trained in English building techniques and approaches to design, Jones's approach is, as it only could be, English. Jones's first series of annotations are attempts at understanding a difficult technical manual with foreign terminology and technical diagrams that assumed a high level of architectural understanding. Palladio, for an Italian reader, assumes a level of architectural expectation that Jones would not have had. Jones's architectural experience was as a painter and scene designer. Understanding the grammar of the orders would have been something altogether different.

Columns and the Monarchy

The column as a symbol of power also could mean political stability, and would have been an apt sign for political power that was meant to appear inevitable and stable. George Puttenham includes the pillar as a shape appropriate for poetry to praise established political powers. "The Pillor is a figure among all the rest of the Geometricall most beautifull, in respect that he is tall and vpriht and of one bignesse from the bottom to the toppe. In Architecture he is considered with two accesserie parts, a pedestall or base, and a chapter or head, the body is the shaft. By this figure is signified stay, support, rest, state, magnificence . . ." ¹¹⁶ (Figure 34)

The first descriptions of the orders in English was a move toward equating an English nationalist style with the tradition of Rome. Shute's description of the orders was intended as a nationalist act, intended to raise the standard of building in

¹¹⁵Palladio 1601, I, 20.

¹¹⁶Puttenham, George. [1589] 1970, 110.

England and bring greater glory to the crown.¹¹⁷ It is not surprising, therefore, that Jones should have used columns on his architectural projects for King James who consciously sought to adopt a Roman aura for his court.¹¹⁸ Charles continued the theme of his father, but with Catholic and European implications loaded onto the scholarly ideals of his father's building program. The final scene of the masque, *Salmacidia Spolia* (21 January 1640), is the most Roman of Jones's theater designs. (Figure 35) In it the King and his court descend from the heavens to touch the top of the classical buildings.¹¹⁹

In England, and indeed throughout Northern Europe, the position of the monarch was symbolized by columns. Columns were especially associated with the rule of James I. Each aspect of James I's rule in England was associated with columns. His triumphal entry into London featured arches presented by the leading groups of foreigners and merchants in the city. The Banqueting House, the cultural center of his court, was covered with columns. His funerary catafalque was a variation on a tempietto with doric columns. None of this use of columns to denote power and majesty was new to James. It was a tradition throughout Europe, with the twin columns in the Piazza San Marco in Venice, the Roman imperial columns of Trajan, and the more recent use of columns by Charles V as examples were known in England.

To use the orders according to a system that could be based on an external authority made a distinction between those only using the orders according to other systems of regulation and Jones's use of the orders regulated the ornamentation of building in a way that was new. He ordered the exterior, making the appearance "sollid, proporsionable according to the rules, masculine and unaffected." When the Banqueting House was finished, contemporary observers noted how strange the building appeared, white, covered with classical ornament, in the middle of the wooden-built city of Westminster. That certainly was to be its effect: surprising, grand, the setting for court pageantry. The shocking appearance of the Banqueting

¹¹⁷For the political implications of translation see J.G. Ebel, "Translation and Cultural Nationalism in the Reign of Elizabeth," *Journal of the History of Ideas* 30 (October -December 1969), 593-602; Gillian Brennan, "Patriotism, Language and Power: English Translations of the Bible, 1520-80," *History Workshop* 27 (Spring 1989), 18-36.

¹¹⁸See the discussion of James's Roman aspirations in Goldberg 1983, esp. chapter 4 "The Roman Actor."

¹¹⁹Harris 1973, 184.

House must certainly have had the corollary effect of making all the other building in the city appear disordered by comparison, randomly designed, with no proportion of its members. That James I avoided the public world of London and Westminster is not surprising given how much his major building of the court distanced itself from the surrounding structure.

The designs for buildings during the reign of Charles I are on the whole more purely classical, although occasionally incorporating French sources in response to the taste of Queen Henrietta Maria. The masque designs in particular use imagery of the orders to support Charles' belief in the divine right of kings and as a more direct nod toward Catholic Europe.

The importance of Scamozzi for Jones was that his system of the orders combined a rigorous and highly defined system of the orders with a hierarchical interpretation of their status. Each of these orders are appropriate to a different class of society, not only in their use but in their relationship to the building as a whole. The presentation of the orders in Scamozzi's treatise allows each order to rule an entire architectural composition.¹²⁰ Because of this his treatise, as well as his architecture, is focussed around a discreet architectural pediment out of which the rest of the architecture is generated. Scamozzi criticizes the interlocking pediments of Palladio's architecture, and Michelangelo's preference for overlaying facades and architectural systems. This breaking of the rules, in 'modern' architecture of Italy as well as in the architecture of Flanders, was not condemned for its own sake, but because it muddled the clear distinction between the classes of ornamentation.

This then marks the change and the significance of Jones's use of the orders for the architecture of the Stuart court. For in discussing the use of classical architecture as indicative of royal status and nationalist urges, I have eschewed the intervening years of the reign of Elizabeth where classical details were incorporated within the continuing Gothic and northern European building tradition. For England did have its own classicism in the architecture of Robert Smythson, for example, and a pattern of patronage that interleaved the traditional building practice and planning with foreign ornament. The classicism that Jones advocated in response to the needs of his patrons, was one of gravity and masculinity, the same ideals advocated for the training of young gentlemen. The history of Jones's ultimate success makes the alternative look the lesser choice by the choice of a

¹²⁰Hersey 1976, 122.

style with the voice of cultural authority and mathematical theory. Samuel Daniel's *Defense of Rhyme*, written in the flurry of native English nationalism in the last decades of the sixteenth century, warns against the overthrow of native traditions. "All our understandings are not to be built by the square of Greece and Rome. . . . The Goths, Vandals, and Longobards, whose coming down like an inundation overwhelms, as they say, all the learning in Europe, have yet left us their law and customs . . . which well considered with their other courses of government may serve to clear them from this imputation of ignorance. . . . Let us go no further but look upon the wonderful architecture of this state of England and see whether they were deformed times that could give it such a form."¹²¹

Craftsmanship of the orders

What is left to us in the marginalia of Jones is the record of his careful study and scholarship of the precepts of architectural classicism. Occasionally, however, in the annotations written while he was abroad, there is the intimation of a more personal sense of wonder at the wealth of classical columns remaining from the ancient world. He praised the capitals at the Temple of Castor and Pollux in Naples that 'inded thes capitels are Exelent.'¹²² Much as Jones took on the guise and manner of the scholar-witness the systematic annotations, adoption of an italic handwriting, and certainly collection of books—the marvellous remains of the classical past must have colored his ideas of classical architecture in a way no treatise ever could. Certainly the scale and use of the orders at the Banqueting House, built in the years soon after his return from Italy in 1614, encapsulate the impact of his travels and visits to study ancient architecture first-hand. That Jones was also affected by his travels in a similar way is evident in his annotations. As he traveled Jones was able to study the buildings and details he had so carefully transcribed to memory. He could see the examples of antiquity, the details unable to be reproduced in treatises or drawings.

Jones was certainly not the first traveller to be awed by the ancient sites in Rome, and the seemingly endless number and size of columns lying about the city of

¹²¹ Samuel Daniel, *Poems and A Defense of Rhyme*, ed. Arthur Colby Sprague (1930; reprint, Chicago: University of Chicago Press, 1965), 139-40, 145; quoted in Helgerson 1988, 286.

¹²² Palladio 1601, IV, 97.

Rome. The orders had been perceived in England as objects of wealth, status, and marvelous relics of the ancient world. In the mid-sixteenth century, in an early period of interest in classical architecture, columns (as opposed to the orders) were seen as wondrous and extravagant displays; and divided along broad visual criteria. In William Thomas's *The Historye of Italye* (1561), columns are able to evoke the glory of past Rome through the active imagination of the viewer.

It shalbe necessary to declare, that there be, iii. kinde of pyllers, rounde, square, and striped.

These are alwaies of one peece, and the chaipter of the pillar called in latine Epistylum, is the stone that sta[n]deth on the toppe of the pyller, like as the base called Basis in Latine, is the stone that the pyller standeth on.

Of which bases therebe. iiii. sundry facions, Ionici, Dorici, Italici, & Corinthici, or Tuscani, as Vitruvius writeth. . . . So that to consider the infinite number of these pyllers that were in Rome, and that yet amongstest the olde ruines are to bee seene, it seemeth a wonder where they should be had, and what a treasure they cost. For I have seene dyvers almost two fathome aboute, and above. 40. foote hyghe. And nothyng more earnestly desyred I, than to see some of those wonderfull temples or edifices upon pyllers in theyr olde facion, with the presence of some of those au[n]cie[n]t Romaines, that with their naked maiestee durst passes through the power of theyr victorious enemies, as Livie writeth, that Caius Fabius dyd, when the frenchemen had gotten Rome, and beseiged the Capitol.¹²³

Columns are categorized by their appearance, but for Thomas it is only the base that is identified as belonging to a particular order. Thomas's interest is not in the systematic use of the orders according to Italian architectural theory, but in their evocative power as symbols of the ancient world. Thomas's comments on the marvellous appearance of the classical orders are representative of the English delight in the startling visual effect, the 'curious device.' Like buildings designed in the shape of letters in John Thorpe's collection of drawings or Thomas Tresham's Triangular lodge (Figure 36), the orders appealed to a taste for the clever product of an inventive designer; and as an encoded key to an ancient civilization, by definition quasi-magical in their power on the viewer.

¹²³ [William Thomas], *The Historye of Italye. A Book exceding profitable to be red: because it intreateth of the astate of many and dyvers common weales, and how they have bene, and now to be governed* (London: Thomas Marshe, 1561), 32v-33r.

The orders could then be seen in the most general terms, and equally applicable to language or music. In the Italian dictionary by John Florio, *A Worlde of Wordes* (1598) *Dorica* is defined as "one of the fower Greeke toongs that were commonly spoken in Greece. Also a kinde of grave solemne muicke. Also a kinde of architecture, called dorike worke."¹²⁴ For Florio 'doric' is linguistically based, a mode or genre, but only generally defined as an architectural form of carved ornament. In his travel description of the amphitheater of Verona, Thomas Coryat categorized the ornament on the arches as one of three "distinct formes of workmanship, namely the Corinthian, Ionicke and the Doricke."¹²⁵ These are not the orders as we now think of them. Coryat, as he does throughout his account of his walk across Europe, is describing the miraculous, the learned and the noble, those things he thought would be of interest to his circle of readers back home. It is the quality and invention of the carvers, able to transform stone into amazing forms, and in the case of antiquities, to have been preserved into his own time. Jones, like Coryat, saw the orders as embodying the highest levels of craftsmanship. As columns would have been the responsibility of the masons, their quality of work would have been a direct reflection of the skill of the workers, as well as the 'giudizio' of the designer in architectural composition. Therefore, when Jones visits Vicenza he records the masons' praise of Palladio's skill in carving a capital himself on the Palazzo Thiene. "This capitell was carved by Palladio his owne hands as ye masons at Vicensa tould mee."¹²⁶

Gateways and Frontispieces

From the 1620's on, Jones's interpretation of the orders emphasized the reduction of mouldings and the simplification of the elements necessary to compose. In the many designs for gateways for example the chosen order is often made broader in its proportions, as in the Doric gateway for Beaufort House (now at Chiswick House). (Figure 37) In their analysis of the design and resulting gate John

¹²⁴John Florio, *A Worlde of Wordes, Or a Most copious, and exact Dictionarie in Italian and English* (London: Arnold Hatfield, 1598). Inigo Jones owned the 1598 edition of the Florio's dictionary, as his definitions in the margins of his books match those in this edition.

¹²⁵Coryat [1611] 1905, II, 22.

¹²⁶Palladio 1601, II, 14.

Harris and Gordon Higgott have shown how Jones transformed Palladio's doric order as used at the Palazzo Chiericati by increasing the module by 1/12 and eliminating the plinth in the abacus of the capital. This allowed Jones to make each of the elements slightly larger, a change accentuated in the gate as built.¹²⁷ The simplified details corresponds to Jones's desire for an architecture that would not be the "composed ornamentes" he criticized in the architecture of Michelangelo.

The large number of designs by Jones for gates was most likely due to their relative small scale in comparison with other building projects. The gate found a new life in the classical idiom. It was a place that could both recall some of the most grand and modern architecture for private patrons, as in the gateways to villas which lined the Via Pia in Rome; and be easily incorporated into English architectural idioms.¹²⁸ It had immediate classical connotations, recalling the triumphal arches of ancient Roman architecture. A patron with limited funds could add a gate to a garden wall without incurring extraordinary expense or renovation. It was ornamental and an updating in the latest style. Jones could turn out these designs relatively quickly, and he had a variety of sources available to him: Serlio's *Libro Extraordinario*, Montano's book of gateways, and those he had seen on his travels. As Gordon Higgott has discussed in detail, designs for gateways, being discrete and small scale compositions, were ripe for Jones to embark on a display of his knowledge of the classical orders.

Jones knew of the elaborate gateways in a rusticated order in Verona and Mantua, as well as the ancient models such as the Porta Maggiore in Rome. The simple basic form of the gateway was also the standard form for architectural title-pages, most often an arched opening with attached columns. This was a form of architectural classicism seen by all who had studied or seen the many books printed in England and abroad which used this increasingly popular frontispiece.

Columns of Learning

The connection of classical architecture, and the image of the orders and columns, was uniquely tied to the world of books and printing. The language of the

¹²⁷Harris/Higgott 1989, cat. 41, 128-31.

¹²⁸On the gateways that line the Via Pia see Elizabeth MacDougall, "Michelangelo and the Porta Pia," *Journal of the Society of Architectural Historians* 19 (1960), 97-108.

orders overlapped with the terminology used in printing and book design. It is not only that the use of number characterizes a variety of art forms during this period throughout Europe. The buildings were conceived like books-and vice versa-with frontispieces that hinted at the contents within. Complex architectural compositions based on the orders were called "frontispieces" in contemporary descriptions, and similar compositions were increasingly popular for title pages to humanist books published in England from the mid-sixteenth century.¹²⁹ The language of architectural description was common for printers, and continues down to the present. Capitals were "chapters", and column was both the architectural elements and the organization of print on the page.¹³⁰

The dedication page of a book could stand for the inscription on a building, praising the patron in the name of ornament. The author, as architect, structured his work as a lasting monument to his own talent and the generosity of others. George Wither in the Writ of Prevention to his *Collection of Emblems* adopts the language of architecture.

I have not often us'd, with Epigrammes,
 Or, with Inscriptions unto many Names,
 To charge my Bookes: Nor, had I done it, now
 If I, to pay the Duties which I owe,
 Had other meanes; Or, any better Wayes
 To honour them, whose Vertue merits praise.
 In Architect, it giveth good content,
 (And passeth for a praisefull Ornament)
 If, to adorne the Fore-Fronts, Builders reare
 The Statues of their Sovereigne-Princes, there;
 And, trimme the Outsides, of the other Squares
 With Portraitures of some Heroicke Peeres.
 If, therefore, I (the more to beautifie
 This Portion of my Muses Gallerie)
 Doe, here, presume to place, the Names of those
 To whose Deserts, my Love remembrance owes,
 I hope'twill none offend. For, most, who see
 Their worthy mention, in this Booke, to bee,
 Will thinke them honor'd: And, perhaps, it may
 (To their high praise) be found, another day,

¹²⁹ Corbett/Lightbown 1979.

¹³⁰ S.v. "column," OED.

That, in these Leaves their Names wil stand unrac'd,
When many fairer Structures, are def'd.¹³¹

In referring to buildings with "Portraits of some Heroicke Peeres" Wither calls up the image of houses such as Wollaton Hall, with portrait busts as medallions in the facade; or the Holbein Gate, in Whitehall adjoining the new Banqueting House. Wither's emblems placed small scenes with a verse beneath. Wither uses distinctly English building types as symbols for the permanence of his structure of words, "my Muses Gallerie." Books and buildings share both internal structure and external ornament.

The frontispiece of a book like the door to a building signaled the contents and presented a composed facade to the outside. The architectural titlepage became increasingly popular and responded to the varieties of architectural imagery available from the end of the sixteenth century. The style of the titlepage depended as much on the nationality of the engraver as the choice of architectural models; and not surprisingly Flemish engravers tended to follow the architectural models they knew best. The use of columns and Italianate architecture took many forms: the pillars of Hercules at the edge of the known world, as in the titlepage to Francis Bacon's *Sylva Sylvarum* (1627);¹³² or the triumphal gateway of ancient Rome, in *The Workes of Beniamin Jonson* (1616).¹³³ (Figures 38, 39)

Columns were used as symbols of classical learning in the decoration of book titlepages, as in their incorporation in gates at Oxford and Cambridge Colleges. In the titlepage to Sir Walter Raleigh's *The History of the World*, four Corinthian columns bear emblems taken from Cicero's *de Oratore* (II.xl.36) and describe the historian's enterprise.¹³⁴ (Figure 40) The columns support a book on which stand the

¹³¹ Wither 1635. I am grateful to Deborah Howard for this reference.

¹³² Titlepage by Thomas Cecill. London: W. Rawley, 1627.

Charles V adopted the device of the pillars of Hercules. See *The Heroicall Devices of M. Claudius Paradin* (London, 1591), 32; and a discussion of this in Huston Diehl, *An Index of Icons in English Emblem Books 1500-1700* (Norman: University of Oklahoma Press, 1986), 164.

¹³³ Titlepage by William Hole. London: W. Stansby, 1616. See the discussion of the titlepages to Bacon and Jonson's works in Corbett/Lightbown 1979, 184-89, 144-50.

¹³⁴ Titlepage by Renold Elstrack. London: Walter Bvrre. The first edition was published anonymously, a minor response to Raleigh's criticism of monarchs. See the discussion of the titlepage by Charles Firth, "Sir Walter Raleigh and the History of the World," *Proceedings*

figures of *Fama bona* and *Fama mala*. To the far left the columns labelled *testis temporum* is covered with books. The next, *nuncia vetustatis*, has hieroglyphs. The third, *lux veritatis*, is a Solomonic column, a reference to the Temple of Solomon and wisdom. The last, *vita memoriae*, is wrapped in vines. Columns were not only a symbol of learning, but the vehicle for them as well. The tradition of using columns as the background, the support, for emblems of learning was well established since the fifteenth century. In *The Mirrour of the world* (1481) William Caxton set out that "in these grete colompnes or pylers . . . were graven the VII scyences."¹³⁵

Columns continued to have an association with learning and particularly with the study of ancient authors in the first half of the seventeenth century. When Henry Wotton became Provost of Eton College, he erected a double row of wooden columns in the Lower School, using them for the setting of pictures of Ancient Roman and Greek orators, poets and historians.¹³⁶ The columns, still in place at Eton, may have been intended as a structural support for the floor of the Long Chamber above, but Wotton intended to make the most of this improvement to the structure. "He was a constant cherisher of those youths in that school, in whom he found either diligence, or a genius for learning. For their encouragement, he was (beside many other things) at the charge of setting up in it two rows of pillars, on which he caused to be drawn the pictures of divers of the most famous Greek and Latin historians, poets and orators; persuading them not to neglect rhetoric, because almighty God has left mankind affections to be wrought upon."¹³⁷ Wotton's association of architecture and education appears in the final pages of his architectural treatise as well, where he promises a further study, "a Philosophicall

of the *British Academy* 8 (1918), 427-46; Woolf 1990, 45-55; and especially in Corbett/Lightbown 1979, 128-35.

¹³⁵ William Caxton, *The Mirrour of the World* (London, translated 1481), III, xi, 158. Also see the engraved title-page by Georg Celer from Tycho Brahe's *Tabulae Rudolphinae* (Ulm: Typis J. Saurii, 1627), where astrolabes are suspended from columns and a printing press is depicted on the base. Illustration no. 106 in Philip Hofer, *Baroque Book Illustration* (Cambridge: Harvard University Press, 1951).

¹³⁶ Logan Pearsall Smith, *The Life and Letters of Sir Henry Wotton*, Volume 1 (Oxford: The Clarendon Press, 1907), 204.

¹³⁷ Isaak Walton, *Life of Sir Henry Wotton*, quoted in John Willis Clark, *The Architectural History of the University of Cambridge, and of the Colleges of Cambridge and Eton* 1886 (Cambridge: Cambridge University Press, 1988), I, 462.

Survey of Education, which is indeed, a second Building, or repairing of Nature, and as I may tearme it, a kinde of Morall Architecture."¹³⁸

Towers of the orders became popular for academic buildings in particular throughout the Tudor and early Stuart period. The most famous of these is the tower built to honor James I in the Schools Quadrangle at Oxford (1625). (Figure 41) The tower progresses from Tuscan through Composite, crowned with a statue of King James VI/I. Each order, however, is interpreted as the vehicle for typical English ornament of the period.¹³⁹ Placed across from the entrance to the recently created Duke Humphrey Library, the tower confirmed the ideals of classical learning and sought continued support through praise of the monarch toward the university as a whole.¹⁴⁰

At times book could even be the very substance of columns. The tomb of the Sir Thomas Bodley (d. 1612), the founder of the Bodleian Library, in Merton College Chapel, includes pilasters made of books on either side of the portrait bust. (Figure 42) Nicholas Stone designed the tomb, and it was completed in 1615.¹⁴¹ In a preliminary drawing for the tomb, as well as in the monument itself, books laid flat with their foreedges pointing outward comprise the pilaster, with thinner and thicker volumes used for the capital and base. As the inscription on the monument makes clear, Bodley's life was directly connected with books and the founding of his library: "Memoriae Thomae. Bodley. Militis. Pvblicae. Bibliothecae. Fvndatoris. Sarv."

¹³⁸Wotton, Henry. [1624] 1903, 98. Henry Wotton, *A Philosophical Survey of Education, or Moral Architecture and the Aphorisms of Education*, ed. H.S. Kermode (Liverpool: University of Liverpool Press, 1938).

¹³⁹The tower was built by English craftsmen. Summerson, *Architecture in Britain*, 176-77.

¹⁴⁰See also the towers of the orders at Wadham College, Oxford (1610-13); entrance tower at Bramshill, Wilts (1605-12); the Gates of Virtue (after 1565) and Honor (1573-5), Gonville and Caius College, Cambridge. See Marcus Whiffen, *An Introduction to Elizabethan and Jacobean Architecture* (London: Art and Technics, 1952), 84; the discussion of architectural ornament in Eric Mercer, *English Art 1553-1625* (Oxford: Clarendon Press, 1962), 60-83.

There is evidence that the idea for a sequence of the orders came from the Bramante stair in the Vatican, perhaps known through Serlio's publication *Tutte l'opere d'architettura ey prospettiva* (Venice 1619), VII, 168; as in the sequence of orders used in the stairwell at Heriot's Hospital in Edinburgh (begun 1628). I am grateful to Deborah Howard for this reference.

¹⁴¹On the Bodley tomb see Blair, 1976, 22-4; Whinney 1988,71; White 1987, 51-3; Woodward 1954, 69.

The title-page to the universal history by Henry Isaacson, *Saturni Ephemerides*, (1633) is flanked by obelisks built up from folios laid flat, as in the Bodley tomb.¹⁴² (Figure 43) As the universal history was a compilation of the mass of learning available in printed books, the obelisks represent the learned foundation of the book that follows the title-page.

While the fashion for towers with classical ornament inspired one college to build in a like manner, as it did encourage the taste for classical entrances to houses, the gothic continued to be used alongside the Italianate classicism. It is possible that designers and patrons were able to incorporate the new style by using it in a limited fashion, and perhaps that those "classical" parts of the building were seen as sufficient to indicate an interest in the most recent architectural fashions. It would have been possible to add a classical doorway to an existing structure without changing the entire exterior, a much more costly and involved project.

"proporsionable according to the ruelles"

A year after Inigo Jones returned from Italy, in January of 1614 (old style), he wrote an extended comment in his notebook about the character of buildings and their appropriate ornament.¹⁴³

friday ye 20 January 1614

In all inuencions of C[a]ppresious ornament on must first designe ye Ground, or ye thing plaine, as yt is for youse, and on that, varry yt, adorne yt wth deccorum according to the youse, and ye order yt is of, as in the Cartouses I have of Tarquino ligustri of Vitterbo.

and to saie trew all thes Composed ornamentes the wch Proceed out of ye aboundance of dessignes, and wear brought in by Mihill Angell and his followers, in my oppignion do not well in sollid architecture and ye facciati of houses, but in garden loggis, stucco or ornamentes of chimnie piecces, or the innerparts of hoases thes compositiones ar of necesety to be youced, for as outwardly euery wyse ma[n] carrieth a grauiti in Publicke Places, whear ther is nothing els looked for, & yt inwardly hath his Immaginacy set free, and sumetimes licenciously flying out, as nature hirself doeth often tymes Strauagantly, to dellight, amase us sumtimes moufe us to laughter, Sumtimes

¹⁴² Illustrated and discussed in Corbett 1964, 48.

¹⁴³ As Gordon Higgott has pointed out, Jones returned from Italy in September 1614, but reverted to the 'Old Style' of dating once back in England. Therefore, the annotations dated from January and February of 1614 were written a year after his return. See Gordon

to Contemplatio[n] and horror, So in architecture ye outward ornamentes oft to be Sollid, proporsionable according to the ruelles, masculine and unaffected

whers within the Cimeras yoused by the ansientes the[y] varried and Composed ornamentes both of the house yt Sealf and the mouables within yt ar most commendable.¹⁴⁴

The stimulus for this observation on architecture was set in the mind of Jones much earlier than this, however. For here in this passage Jones elaborates on a passage in Giorgio Vasari's life of Baccio D'Agnolo. Vasari praises the architectural style and ingenuity of Baccio D'Agnolo's son Guiliano in replacing the windows of a palace. ...dell'antica e moderna, ver e buona e nel very le cose d'architettura vogiono essere maschie, sode, et semplici, & arricchite poi dalla grazia del disegno & da un sugetto vario nella composizione . . .¹⁴⁵ (Jones's underlining)

Against the passage in Vasari Jones wrote in an early hand "Architecture must be masculine, Sollid, Simpull, and Inriched with ye grace of desine and of a varried subiect in the Compositio[n] that wch nether too littell nor to much alterithe ye Order of Architecture nor ye sight of ye judicious." In the Roman notebook Jones has expanded upon his reading, removing it from the specific context of Vasari's biography and making it appropriate for the architectural culture of the early Stuart court.¹⁴⁶

Reformulated from Vasari, the passage written out in the Roman notebook contains the essence of Jones's theory of the orders, and of his architectural design method in general. Jones makes a distinction among the various kinds of architecture, noting how the "abundance of dessignes" of Michelangelo and others are more appropriate for garden architecture and the interior of buildings, but not

Higgott, "The Making of an Architect: Inigo Jones's Second Tour of Italy, 1613-14," in Harris/Higgott 1989, 57 n. 6.

¹⁴⁴Roman Sketchbook, Chatsworth, fol. 76r. See the discussion of this passage by Higgott, "Making of an English Architect," 55-6.

¹⁴⁵Vasari 1568, 282.

¹⁴⁶The annotation in Vasari is in a hand that can be dated to before 1610, and the Notebook entry is dated 1614, indicating a typical trend in Jones's reading: he returned to texts read earlier, transforming his readings for their usefulness for his architectural practice. The dating of the annotations is based on the work of Gordon Higgott and John Newman, who have studied the various periods of Jones's handwriting. For this passage in particular see John Newman, "The Dating of Inigo Jones's Handwriting," in *Essays Presented to Peter Murray* (University of London, 1980, typescript), 12.

for the exterior of public buildings where a certain dignity is called for. He bases this distinction on man as a model, and the presentation of 'graviti' in the public world, "where there is nothing else looked for." In basing his architectural theory on a concept of the ideal man, Jones is following in the path of humanist writing on architecture, from those writers concerned with formulating the Vitruvian man as a justification for an idealized architectural schema.¹⁴⁷ The "man" evoked by Jones is not the ideal man inscribed within a geometrical diagram, as in the treatises of Cataneo or Francesco di Giorgio, but the man of the public world who knows how to present himself in ways appropriate to the situation. There, gravity and restraint is called for; in the private space of the mind, or the private space of the architectural interior, "inwardly hath his Imaginacy set free, and sometimes licentiously flying out." If man is required to modify his behaviour depending upon the situation then so too architecture. Jones's metaphorical man is not only the active man of the world, he is without doubt a man of Jones's world, negotiating his way in the world of the court in seventeenth century London. That Jones is able to transform his reading of Vasari in combination with architectural theory of the preceding generations and make it relevant to his own architectural practice gives us some hint at Jones's architectural and political finesse.

Nobility and distinctions between classes

In English architectural writing of the seventeenth century, Henry Wotton described the orders as communities, with their own proprieties, and those communities are ranked: "there are five Orders of Pillers, according to their dignity and perfection, thus marshalled."¹⁴⁸ Like a military procession, the orders corresponded to a hierarchy of social order. The Vitruvian idea of decorum, what Wotton called "the keeping of a due Respect betweene the Inhabitant, and the Habitation," was displayed in the detailing of the orders.¹⁴⁹ In Wotton's discussion of the five orders he uses the language of costume and dress to explain their difference.

¹⁴⁷ See the discussion by Wittkower 1971, 1-19; and more recently, Diana I. Agrest, "Architecture from Within and Without: Body, Logic and Sex," *Assemblage* 7 (1988), 27-43.

¹⁴⁸ Wotton, [1624] 1903, 23.

¹⁴⁹ Wotton, [1624] 1903, 95.

First, therefore the Tuscan is a plain, massie, rurall Pillar, resembling some sturdy well-limmed Labourer, homely clad, in which kinde of comparisons Vitruvius himselfe seemeth to take pleasure . . .

The Ionique Order doth represent a kinde of Feminine slendernesse, yet saith Vitruvius, not like a light Housewife, but in a decent dressing, hath much of the Matrone. . . . Best knowne by his trimmings, for the bodie of this Columne is perpetually chaneled, like a thicke plighted Gowne. . . .

The Corinthian, is a Columne, laciviously decked like a Curtezane, and therein much participating (as all Inventions does) of the place where they were first borne: Corinthe having been without controversie one of the wantonest Townes in the world.¹⁵⁰

The idea of the dress of the orders was implicit in the theory of the orders in Serlio, but in the English treatises it becomes explicit. The analogy of dress may have had a particular resonance for Inigo Jones as much of his professional life was devoted to the creation of costumes for the court masques. He used, as with his other designing work, printed treatises, most often Jean Jacques Boissard, *Habitus Variarum Gentium* (Maline: Caspar Rutz, 1581) and Cesare Vecellio, *De gli Habiti antichi et Moderni di Diverse Parti del Mondo* (Venice: Damian Zenaro, 1591).¹⁵¹ Treatises provided examples of exotic costume as in Jones's design for the costume of a Polish knight, for example, where Jones used a design from Vecellio. (Figure 44, 45) And certainly for the English public at large the use of elaborate classical details in building, attended to with great care by both patron and mason, must have seen remarkably similar to the adoption of foreign styles of dress. The preference for foreign styles over the native traditions, and foreign craftsmanship over English work, was seen as a particular fault of the English character, according to some authors.

Now although (God be thanked) our own countrey is replensihed with as manie, and as profound learned men, as anie region in christendome besides, yet there is no man but will graunt that heere is not all the learning in the world. No no, the Lord God in his great, and wonderfull providence, as hee hath given ech countrey his commoditie: so hath he placed learned men in everie part of the world, as starres, or precious stones, of whome (such is our nature especially us English) that, as we admire and entertaine strange artificers before our owne, so wee wonder at, and more willingly intreate of

¹⁵⁰Wotton, [1624] 1903, 27-9.

¹⁵¹Harris 1973, 77-8; Strong 1967-68, Introduction, n.p. On Jones's costumes designs in general see Peacock 1990b, esp. 165-79.

learning with the learned forrainer, then with our own native
 countreyman.¹⁵²

Whether praised or condemned, the use of fashion as an analogy for the orders gave their use both an *au courant* appeal and a tenuous position as a passing trend promoted by a small group at court. Yet this was the rather limited role of the purer classicism as promoted by Inigo Jones and his patrons. In contrast to the more widespread and vernacular use of the orders as one form of ornament amongst many, the highly scholarly and rule-based classicism of Jones had a much more narrow appeal and audience.

In the end the correct use of the orders as interpreted by Jones and as he hoped understood by the viewer was to make a distinction between those who lived in houses so ordered and those who did not. The orders could be one part of the royal iconography, but that was supported by other aspects of court protocol and pageantry. Jones found in Vitruvius an attitude toward the classical language that distinguished between ranks and classes. Of all the general ideas surrounding architecture proposed by Vitruvius, such as symmetry or eurythmia, it was decorum that addressed the response of the house to its inhabitants. If eurythmia addresses the effect of proportion on the viewer, decorum was the quality of the building that ensures the exterior of the building is commensurate with the owner according to Wotton.¹⁵³ Jones annotated Barbaro's commentary that "things doon withe authoriti is Decorum."¹⁵⁴ Jones annotated that section in the sixth book treating of private house where Barbaro develops the relationship of distribution and decorum, "this chapter belongs to Decorum to ye dignitie of persons."¹⁵⁵ Barbaro makes the implication of Vitruvius's text more explicit:

¹⁵²A *direction for travailers* 1592, sig. B2r. The sentiment was echoed by Henry Peacham: "I have much wondered why our English above other nations should so much dote upon new fashions, but more I wonder at our want of wit that we cannot invent them ourselves, but when one is grown stale, run presently over to France to seek a new, making that noble and flourishing kingdom the magazine of our fooleries. Henry Peacham, *The Truth of Our Times. Reveled out of One Man's Experience by Way of Essay*, [1638] (Reprint: Ithaca: Cornell University Press for the Folger Shakespeare Library, 1962), 201-2.

¹⁵³Wotton, [1624] 1903, 95.

¹⁵⁴Vitruvius 1567, I, 27. That annotation is in an early hand.

¹⁵⁵Vitruvius 1567, VI, 296; later handwriting.

Espedita la parte, che apparenea alla Distributione, Vitruvio nel presente capo ci dimostra quauto conuiene al Decoro, che altro non è, che un rispetto alla dignità, & allo stato delle persone. Fatta adunque la distinctione delle persone bisogna a ciascuna secondo il grado suo fabricare, & però altro compartimento hauera la casa d'un Signore, altro quella del nobile, altro quella del populo. La parti delle case similmente. siano ò comuni, ò proprie, deono riguardare alla qualità delle persone.¹⁵⁶

The sixteenth century idea of decorum, and Alberti's discussion of it in particular, emerged from the theory of rhetoric and the orator's responsibility to choose from among the available range of styles. Different styles were necessary according to Cicero because no one kind of oratory suited every audience, speaker, occasion or cause.¹⁵⁷

Scamozzi discusses the principle of decorum in broader procedural terms, consistent with his approach to architecture as deeply imbedded in humanist philosophy. In general as Jones notes in his copy of Scamozzi, "a ma[n] judged by his howse."¹⁵⁸ In Scamozzi, the appearance of the house is like the face of a man, and has a direct affect on the viewer. "L'aspetto dell'edificio, s'intende propriamente quella maestà, che si rappresenta à gli occhi nostri della sua figura; come l'aspetto della faccia dell'houmo, ò di qualche altro corpo individuale, e la bellezza dell'aspetto procede dal compartimento de'Moduli."¹⁵⁹ This is a subtle, but crucial, shift in the meaning of Vitruvius. Here the facade of the house has an active role in representing to the viewer the quality and status of the inhabitant. It is not just as Barbaro suggests that the house reflects the owner; the design of the building takes an active role in establishing to the outside world the impression of the inhabitants. That understanding of decorum is for Scamozzi based in the study of humanist educational ideals, "il Decoro, anch'egli riguarda il fine dell'edificio; essendo proprio vn'aspetto ornato, e senza difetto; di modo, che rende maestà, e bellezza . . .

¹⁵⁶Vitruvius 1567, VI, 296. See the discussion of this passage in Tzonis/Lefaivre 1986, 38.

¹⁵⁷Cicero, *De Oratore* III. lv. 210; cited in Smith 1991, 117.

¹⁵⁸Against this text of Scamozzi: "E però non è punto spiacevole quel detto di Cassiodoro, che tale si crede esser il Padrone, quale noi vediamo esser costituita, & ordinata la sua casa: e certo non è cosa, che trà tutte le cure, ò pubbliche, ò private trapassi di giocondita, e piacere à quella del fabricare, e godere una bella, e comoda casa, essendoche è cosa da prudente, e da huomini grandi, e di grosse facultà." Scamozzi 1615, I, 225.

¹⁵⁹Scamozzi 1615, I, 225; annotated by Jones "what Aspecte is."

la onde si vede chiarissimamente quanto l'Architettura in tutte queste parti tenghi della Filosofia morale, e naturale."¹⁶⁰ The distinction between levels of buildings extended for Scamozzi down to the level of the building materials themselves. Certain stones are noble, and therefore of a more beautiful physical form.¹⁶¹

In his note in the Roman notebook, however, Jones has transformed the Vitruvian idea of decorum, even as it was re-formulated in Italian classical theory. Perhaps always implicit in the Palladian theory, Jones gives the exterior of a house an active role in the public presentation of the inhabitants character. The facade does not just reflect the owner, it is able to impress ideas on the viewer; and those ideas may, or even should, differ from the internal substance of both man and house. Through the use of a regularized classicism, "proporsionable according to the rules, masculine and unaffected," architecture can fashion the image of its owner, educated and with "a grauiti in Publicke Places."

¹⁶⁰Scamozzi 1615, I, 9; annotated by Jones "in this part architectur houlds much of Philosofo morall & natural."

¹⁶¹Scamozzi 1615, II, 140. See Hersey 1976, 120-21.

ANTIQUITY AND ANCESTRY

ut in honore cum dignitate vivamus

—Henry Peacham, *The Complete Gentleman*, 1634.

Introduction

At the beginning of Andrea Palladio's fourth book on Antiquities, Inigo Jones wrote and signed the following testimony "In the name of God Amen, The 2 of January 1614 new stille I being in Roome Compared thes desines following with the ruines themselves".¹ (Figure 17) Below this he lists the antiquities presented by Palladio in Book IV and provides an index of page numbers where they could be found. This statement, unusual among Jones's annotations in its formality and accompanied by the sworn oath, serves as a record of Jones's intention to carefully study antiquities based on texts and travel. He notes the date, in the new Gregorian calendar; and that his study, a comparison of the designs of Palladio with the thing itself, that is the ruins, takes place in Rome. This emphasis on his actual presence in Rome could only have served to distinguish him from those students of antiquity and architects who did not have the opportunity to travel. Written in the book itself, this statement also points out the distinction Jones made between Palladio's imaginative redrawing of antiquities, as they appeared in his treatise, and the often contradictory evidence to be seen from the ruins.² It is not known for whom this was written, perhaps for the Earl of Arundel Jones's patron on this trip, but certainly as a more public statement by Jones of his personal scholarship. In the oath-like nature of the annotation, Jones indicates that his reading is a public one, related to the needs of patrons; and that his knowledge of ancient architecture was to be put to use in his architectural practice and production of masques. Jones's study of antiquities

¹ Palladio 1601, IV, 10.

² Jones was aware of Palladio's particular form of visual presentation and page layout, for he wrote in Book IV that he had seen a drawing of the plan of the Temple of Fortuna Virilis "withe vpprites follouinge donn on vppon the other as he often youssed." Palladio 1601, IV, 49.

had a public effect. The use of forms known to be connected with the ancient classical past connected Jones with contemporary antiquarian interests in England, and the search for England's own antiquity.

Unlike the masons and patrons who did not travel, Jones was able to study antiquities first hand. Jones studied ancient monuments after he learned the lessons of the orders from sixteenth century architectural treatises. Antiquity was the historical exemplar and exegesis of the language of classicism as presented in the vocabulary of the classical orders. The study of the antique was inextricably connected with 'modern' architecture, the use of classical details and ornamentation. The treatises of Palladio and Serlio compared with the buildings they cite as precedent could only further illuminate the differences between the text and the building as it stood.

Jones's study of the antique was central in his architectural and intellectual self-education. He returned often to his central reference on the antique, the fourth book of Palladio's *I quattro libri dell'architettura*. That book served for Jones as a guide book during his 1613-14 travel to continental Europe and perhaps on his earlier trips as well. Some of the annotations in the Palladio can be dated before his trip in 1613 on the basis of handwriting; and from the note on the flyleaf as to the cost of the book in ducats, it suggests that Jones purchased the book on one of his earlier trips abroad. Annotations by Jones, such as the one cited above, make clear that he had the book with him while he traveled and noted his observations in the margins.

Jones studied antiquities in Italy and France, comparing monument against text, conferring with local experts, and training himself in the details of architectural classicism. His models were the experts themselves: the advice given in the treatises he owned by Palladio, Serlio and the commentary by Daniele Barbaro in his translation of the ancient architect, Vitruvius. He followed the method of antiquarian research advised by Palladio and praised by early writers on travel. For architects, that process of study was particularly helpful in understanding the ambiguities of architectural terminology and description in Vitruvius. Alberti praised the study of buildings as a form of education, and saw the best training as the combination of the study of texts and antiquities.³ Serlio had advised the judicious

³ Alberti, Book VI,I; cited in Richard Krautheimer, "Alberti and Vitruvius," *The Renaissance and Mannerism. Studies in Western Art*. Acts of the Twentieth International Congress of the History of Art. Vol. II (Princeton: Princeton University Press, 1963), 44.

architect to gauge the monument against the text in order to find a solution suited to the design problem at hand.

For Jones, however, the relationship of book to monument put the textual description and printed illustration first. Jones read about antiquities before he traveled, and the particulars of the textual layout as well as the words themselves affected his understanding of the haphazard and unruly antiquities he saw abroad. Jones's study of antiquities came first from texts, an important distinction. As for Palladio, the antiquities of Rome were a distant source, recorded in drawings and referred to later. In lieu of antiquities in Rome, Palladio turned to local examples in Verona, with their rich and distinctive ornament and strong regional importance for contemporary antiquarians, such as Torellus Sarayna. In an analogous way, Jones turned to the methods and interests of those antiquarians back in England, who had turned to the project of writing a history of England based on her own ancient remains.

It is my intention in this chapter to lay out Jones's reading of the antique by tracing his response to the varied sources available in England and abroad; and further to describe the context of antiquarian studies and concerns of which Jones was a part. One aspect of Jones's architectural method was his reliance on the precedence of antiquity to justify his architectural creations. In this Jones adopts a fundamental precept of classicism in Italy and France. Antique monuments and their interpretation by modern architects served as authorities for Jones's own designs. The effect and significance of this use of the classical past in England, however, was the way it paralleled changing ideas of family antiquity and conservative ideas of family nobility based on ancestral history. An architecture based on classical models, with all the associative value of humanist education, would have been seen at the time as mirroring this genealogical enterprise. Architecture based on precedent and authority, supported the interests of Jones's patrons in describing the antiquity of their own family, and tracing a heritage that stretched back to ancient Britons. The antiquarian interests of one of Jones's patrons, Thomas Howard, the Earl of Arundel serves as an example of this connection between patron and architect. Jones accompanied Arundel on his trip to Italy in 1613-14, a major turning point in Jones's architectural education. Upon their return Jones went on to work for Arundel, designing renovations to his London house, including a vaulted sculpture gallery and italianate details for the existing

structure.⁴ (Figure 46) The most Roman of Jones's building projects was the classical portico added to the west front of (old) St. Paul's Cathedral, a final collaboration between Jones and Arundel. It is fitting that the most Roman of Jones's buildings should also be the most public, for Jones and Arundel shared a belief in the efficacy of the antique in the presentation of the self in public life. For Arundel, the desire to own the antique through collecting supported a campaign of political entrenchment based on family status. As artistic advisor and architectural expert, Jones's knowledge of Roman antiquities supported Arundel's interests and gave them lasting form.

King James's self-styled Age of Augustus served as a model for courtiers and nobility to seek their own ancient past in the fashion of the king. Jones noted in his copy of Vasari that one of the main functions of architecture is to preserve the memory of great rulers into posterity, "Rich Princes shuld leave behynd the[m] a fame by building Richly," and later on the same page "nothing Left of ye Romains But Ruines."⁵ Jones advocated, and certainly found support from James I, for the idea that rulers build in order to preserve their reputation. James seems to have been particularly concerned to control as best he could his image into posterity by sponsoring lasting and monumental cultural projects. As a far reaching and monumental project of scholarship and publishing, the authorized version of the Bible remains a standard version and profoundly influenced the development of the English language. Similarly James's building projects were grandiose, if often unrealizable. The Banqueting House for example was to have been part of a vast palace complex at Whitehall.⁶ James's patronage, centralized in the monarchy, reversed the pattern of Elizabethan cultural patronage which required her nobles and courtiers to both initiate and fund their own projects. While Elizabeth was the ultimate focus for large houses, for example, built for her progresses, she herself did not initiate major building projects.⁷ Jones recognized in Vasari's text a justification

⁴ See Howarth 1985, 97-118.

⁵ Jones's copy of Vasari, "Vita D'Antonio Da Sangallo," 313.

⁶ Margaret Whinney, "John Webb's Drawings for Whitehall Palace," *Walpole Society* 31 (1946).

⁷ See Malcolm Smuts, "The Political Failure of Stuart Cultural Patronage," in *Patronage in the Renaissance*, eds. Guy Fitch Lytle and Stephen Orgel (Princeton: Princeton University Press, 1981), 165-87.

for royal patronage of architects, and a powerful argument for a new King so eager to leave a cultural legacy.

By choosing limited examples of Jones's antiquarian study in Italy, his method of analysis, and his sources I present a schema of how Jones approached the antique. Jones's method was not new, and had parallels in English antiquarian activity. Finally, I return to Arundel's personal devotion to the antique, a point of departure for future studies on the manifestation of the passion for the antique.⁸

Jones's antiquarian assignments

The most obvious connection of Jones's activities to those interests of the English antiquarians was his research into the origins of Stonehenge and his project to record English castles. The research on Stonehenge was published after Jones's death by Webb; and how much of the conclusions that Stonehenge was a Roman ruin are Jones's, is not certain. Like Camden, writing chorographies of the counties of Britain, Jones too was involved in a "delving into sources" of the English antiquities. The book published by John Webb, *The most notable antiquity of Great Britain vulgarly called Stone-Heng on Salisbury Plain. Restored by Inigo Jones Esquire, Architect Generall to the late King*, in 1655 is certainly the work of John Webb and not of Inigo Jones. (Figure 47) Jones was however instructed by King James to investigate the monument, participating therefore in the current interest in investigating the ancient origins of English antiquities. The basis for the study of English antiquities was directly related to the study of ancient ruins abroad. In the voice of Jones the book begins

Being naturally inclined in my younger years to study the Arts of Designe, I passed into forrain parts to converse with the great Masters therof in Italy; where I applied my self to search out the ruines of those ancient Buildings, which in despite of Time it self, and violence of Barbarians are yet remaining. Having satisfied my selfe in these, and returning to my native Countrey, I applied my minde more particularly to the study of Architecture. Among the ancient monuments whereof, found here, I deemed none more

⁸ It should be noted that the *all'antica* was only one mode of working for Jones. From what we know of the personality of the architect, it also appears to have been a mode in which he was inherently comfortable. It was, however, not the only one. A parallel study could be done of Jones's use of French sources for other patrons, as at the Queens House for Henrietta

worthy the searching after, then this of Stoneheng; not only in regard of the Founders thereof, the Time when built, the Work it self, but also for the rarity of its Invention, being different in Forme from all I had seen before: likewise, of as beautifull Proportions, as elegant in Order, and as stately in Aspect, as any.⁹

The impetus for James's royal command of 1620 may have come, as Webb states, from the Marquis of Buckingham (made Duke in 1623), for whom Jones worked in 1619-20 at Whitehall.¹⁰ In that much, the work owes its origin to Jones. In the pattern of reasoning, though, the work is more closely connected to Webb's own treatise on the Chinese language. Nowhere is there evidence of Jones concerted metaphysical ideas evidenced in the Stonehenge treatise.¹¹ If Webb is correct that he was working from Jones's own notes, he must certainly have felt free to extrapolate freely, thereby creating a more scholarly and glorified fortuna of his mentor than Jones ever was able to create in his own lifetime. It is worth noting that the book was published soon after Jones's death, and contained the first extensive biography of Jones. The Stonehenge book in substance, rather than in intent, is more interesting as a testament of Webb's architectural reasoning and culture, and his desire to create a suitable reputation for Jones.

John Aubrey wrote that in the possession of Webb were drawings of English castles, none of which now survive. These may have been done like others of the time to record the decaying castles throughout Britain. James took little interest in keeping up his castles, and he had little money to take on such a project.

The nostalgia for a lost English past emerged during the sixteenth and seventeenth centuries as a result of the dissolution and destruction of monastic property. England did not only have the naturally occurring monuments of her

Maria. Jones's facility with transforming continental sources for English (even naturalized English) patrons broadened his scope and popularity as a court designer. See Harris 1961.

⁹ Webb 1655, 1.

¹⁰ Webb notes that Jones went to Stonehenge "when the Right Noble George, late Duke of Buckingham, out of his real Affection to Antiquity, was at the charge in King James his Days of sending and digging there." John Webb, *A Vindication of Stone-Heng Restored* (London, 1665), 123; cited in A.A. Tait, "Inigo Jones's 'Stone-Heng,'" *Burlington Magazine* 120 (1978), n. 8. See also Summerson 1966b, 40; Bold 1989, 48-51.

¹¹ Yates 1969.

ancient past, "in the sixteenth century England acquired a whole suite of ruins."¹² The nearly wholesale destruction of English monasteries aroused a sympathy even among those in favour of the dissolution for a lost segment of English history. But moreover it was this sudden break which inspired a widespread interest in the history and reconstruction of the antiquities of England. There are no notes, annotations, or surviving books in Jones's library that give direct evidence of his involvement in the antiquarian enterprise; although it is known that he moved in those circles that included such well-known antiquarians as Robert Cotton and John Selden. Jones certainly would have known of their activities in antiquarian research for important clients.

The interest in antiquarian learning was not isolated from ideas of service and practical knowledge. As part of study abroad it was seen to form the basis for the daily requirements of life of a noble class.¹³ In England as well as in Italy, the pattern of classical scholarship began with texts; but quickly expanded into the study of monuments and physical remains. Monuments supplied information missing from textual description, and gave a physical setting to the events of the past. The model for the combination of text and setting came from the ancient geographers themselves, Strabo and Pausanias.

In England, sixteenth century antiquarians followed the model of their Continental predecessors and their ancient models. From the first, the recording of ancient English antiquities was seen as the counterpart to the ancient geographers. Antiquarians such as John Leland in the mid sixteenth century were the continuation of an unbroken tradition. "You shall find him no less profitable to us, in his description of this particular nation, than were Strabo, Pliny, Ptolemy, and other Geographers to their perusers."¹⁴ The study of ancient writers was seen to provide a model for the writing of new English histories; and the reading of the one would invoke the appreciation of English ancestors: "And whereas Plinie commendeth the notable wit, pollicie, strength and memorie of dyvers Romaines: so might I in like case, of many of our owne countrey, whose notable pollicie, tried strength, sharpenesse of witte, and perfect memorie, unto us is well knowen, to be equal with those Romaines, of whom Plinie doth recite. But I omitte that for

¹² Aston 1973, 231.

¹³ Levine 1987, 74-75.

¹⁴ *The Laboryouse Journey & Serche of John Leylande for Englandes Antiquities . . . with declaracyons enlarged by Johan Bale* (London 1549, sig H; quoted in Levine 1987, 81.

proliritie, folowing mine authour. (neyther adding nor diminishing)"¹⁵ William Camden's *Britannia* also examined the physical remains of Britain, as well as the documentary evidence of chronicles. The incomplete remarks of the ancient authors on Britain however in Caesar, Tacitus, Strabo and Polibius among others, required the additional evidence of what had survived in Britain from its past. Coins, inscriptions and built remains gave additional information.¹⁶ (Figure 48)

In this Camden was like the readers of Vitruvius, for whom the text alone was insufficient. The reader of Vitruvius needed a variety of sources depending on the particular interest in the antique. Coins, other texts, manuscript corrections, and primarily the monuments themselves all aided the interested antiquarian. This tradition of contrasting sources is crucial in understanding not only Jones's approach to the antique, but also how he fits in with a larger category of readers of the antique. Jones was not an antiquarian at the level of Camden in England. His interest in the antique was directed at a particular, practical end: the creation of architectural setting, whether in stone or masques, that had the authority of ancient precedent. Jones's antiquarian interest was serious, but meant to be incorporated within his professional practice. But Jones also knew how highly valued this enterprise was, the authority and seriousness associated with those who studied antiquities, how the tradition itself had ancient roots, and the value placed on the study of the antique by his patrons.

Antique and antic

Jones's interest in the antique began early in his architectural career as we know it. Architectural scenery based on a study of prints and treatises appears in his masque designs from 1610. In addition, annotations in his treatises from those early dates indicates a similar awareness and interest in ancient architecture. It is clear that Jones was well versed in the literature and sources for the study of the antique. However, it is misleading to see these suggestions of the classical Jones in the wing, the pre-emergent Neo-classicist, for Jones was using classical details at this time in

¹⁵ Plinius Secundus, *A Summarie of the Antiquities, and wonders of the worlde, abstracted out of the sixtene first bookes of the excellent historiographer Plinie, wherein may be seene the wonderfull workes of God in his creatures, translated out of French into Englishe, by I.A.* (London: Henry Denham for Thomas Hacket, [1566]), preface.

¹⁶ On the classical sources for Camden, see Stuart Piggott, "William Camden and the *Britannia*," *Proceedings of the British Academy* 37 (1951), 206-7.

conjunction with a wide range of ornament and sources based on an eclectic use of Northern European sources. The surviving elevation for the the New Exchange by Jones is a compilation of classical passages merged with strapwork and mannerist ornament. (Figure 7) The classical is incorporated within a larger schema of ornamental systems, none claiming pre-eminence or a visual hierarchy.

In the vernacular architecture of England classical details were used within a complex and seemingly random pattern of grotesque ornament, and remained a vital vernacular style throughout the seventeenth century. Columns, herms, rustication, and strapwork details were all combined as ornament on domestic architecture. The treatise of Wendel Dietterlin contains the most elaborate examples of this architectural system, an architectural style which depended on the ingenuity of the masons and the available patterns of design. In England this type of ornament was termed 'antic', pronounced in the same way as 'antique' though coming into the language from different sources. Antic was used for anything incongruous or bizarre; and used as an equal to the Italian *grottesco* or *grotto*.¹⁷

Jones not only purified the use of classical architectural detailing in his architectural work during his designs after his return from travels with Arundel. He also capitalized on English historical studies into antiquity by paralleling antiquarian ideals with architectural vocabularies. Despite his attempts to distance himself and his architecture from the pattern of building in England by eliminating vernacular detailing and aligning his designs with a classical past, the fantastic quality in the antique remained in the architecture of Jones. His designs for gates with elaborate rustication derived from his study of Giulio Romano and Serlio remain equally based in an English architectural tradition of the bizarre and organic. (Figure 49) The closeness of the terms 'antic' and 'antique' in England, and their similarity in pronunciation would have created a mingling of the two ideas in conversation about buildings and the development of an architectural terminology of description.

The change in Jones's approach to the antique seems to have been prompted through his association with the court of Prince Henry. At Henry's court Jones had a minor position, behind Salomon de Caus (1576-1626) and Constantino de' Servi (c. 1554-1622). Both worked for Henry at Richmond Palace, one of the largest building projects of the years 1610-12, and their position and salary at court indicate the

¹⁷ OED, s.v. "antic". See Howard 1987, 55.

junior position Jones held.¹⁸ In any case, the court of prince Henry was a locus for the nobles who shared the Prince's interest in humanist learning as directed to aristocratic training. From Jones's earliest architectural experience in the court of prince Henry he would have been surrounded by continental artists trained in the study of ancient architecture and *all'antica* imagery, and the Prince's collection of ancient and continental art.¹⁹

Prince Henry created a court imagery based on antique models from both the classical world and England's own mythic past. Isaac Oliver's miniature of 1612 of Prince Henry, placed the Prince against a background of antique soldiers at their camp.²⁰ (Figure 50) The background, like the herm figures in the Prince's armour, are perhaps French in origin. Oliver creates an image of the Prince based on the Prince's expressed admiration for the court of Henri IV. Jones followed Oliver and the Prince Henry's interest in antique war literature, also reading and annotating Caesar's *I commentari di C. Giulio Cesare con le figure in rame de gli alloggiamenti, . . . fatte da Andrea Palladio . . . Venice, 1618.*²¹ The portraits of the young Prince give an indication of how he wished to be understood, as a young prince in the Continental tradition, very much mirrored on the image of the King of France, Henri IV.²²

In 1609 Jones collaborated with Ben Jonson on a masque to celebrate the Prince's military prowess as a prelude to his being named Prince of Wales in the following summer. The masque was a public statement of the Prince's court, presented through the Arthurian tradition interpreted by Jonson and the classical imagery of Inigo Jones.²³ Two scenes survive in Jones's hand, the House of Chivalry and St. George's Portico. (Figures 51, 52) In both there is the mixture of Gothic and Roman architecture. John Peacock's discussion of the masque design points out the

¹⁸ On Richmond Palace, see Strong 1986, *passim*.

¹⁹ See Timothy Wilks, "The Court Culture of Prince Henry and His Circle, 1603-1613," (D.Phil. Thesis, Oxford University, 1987).

²⁰ Strong 1986, 119; Jill Finsten, *Isaac Oliver at the Courts of Elizabeth I and James I* (New York: Garland, 1981), II, cat. 63, 98-100.

²¹ Hale 1977, 240-55; Isermeyer 1979.

²² See Strong 1986, 31, 72-3, 75. See also Hilary Ballon, *The Paris of Henri IV. Architecture and Urbanism* (Cambridge: The MIT Press, and the Architectural History Foundation, 1991).

²³ See the thorough discussion of Jonson and Jones's imagery in Peacock 1983.

tremendous sophistication of Jones in assimilating sources. Jones used a variety of visual sources that combined scholarly and picturesque views of Rome, particularly plates from Antonio Lafreri's *Speculum Romanae Magnificentiae*.²⁴ Jones used illustrations from Vincenzo Scamozzi's *Discorsi Sopra L'Antichita di Roma* in a masque of the 1630's, and it is likely that he knew of it by this time as well.²⁵ Scamozzi's approach, as in his architectural treatise *L'Idea dell'architettura*, is both highly scholarly and evocative, a mixture analogous to Jones's own use of sources in his masque designs and architectural projects. The conflation of the scenes is a hybrid intended by Jones to reflect the mingling of chivalric ideals and classical learning promoted in the court of Prince Henry.²⁶ For our purposes, the masque Prince Henry's Barriers is vital proof that Jones was well versed in the study of antiquities, and aware of a wide range of sources at an early stage in his career. As Jones continued to work with antique themes he would eschew the native antique imagery in favor of a purer classicism.

Sources for the study of the antique

Jones's interpretation of the antique was mediated and reinforced through printed books. Books served as a constant reference, and even when Jones was on site, the reconstructions by Palladio and others were the point of reference for Jones long after he had returned to England and continued to interpret his experiences abroad.

Throughout his study of antiquity, and particularly in his copy of Palladio, Jones used a method of cross-referencing to other sources. This can be seen directly in the later annotations from the wide range of references that Jones notes in the margin. Jones refers to (at least) ten other authors in his annotations in Palladio for example, including Vitruvius, Serlio, Scamozzi, Pirro Ligorio, Philibert de l'Orme, Xiphilinus (the commentator on Dio Cassius), Domenico Fontana, Labacco, and Viola Zanini.²⁷ The earliest books that we know Jones owned were Palladio, *I quattro*

²⁴ See Bates Lowry, "Notes on the *Speculum Romanae Magnificentiae* and Related Publications," *Art Bulletin* 34 (1952), 46-50.

²⁵ Peacock 1983, 176-77; Jannaco 1976, 97-100.

²⁶ Peacock 1983, 176-78.

²⁷ See the references to these authors on the following pages in Jones's copy of Palladio: Vitruvius: 7, 28, 40, 42, 43, 48, 49, 50, 55, 71, 90, 93, 94, 106, 115, 125; Gamucci: 11, 13, 42; Labacco: 15, 21, 22, 68, 129; Scamozzi: 22, 29, 45, 49, 50, 55, 69, 94, 105, 106, 115, 132;

libri; his two editions of Serlio; Barbaro's commentary on Vitruvius; and Vasari's *Vite*. Each of these books were read by Jones's for the information they could offer on ancient Roman antiquities.

Labacco as source

Jones used the reconstructions of Roman antiquities by Antonio Labacco as a comparative source against Palladio for the reconstruction of the capitals of the Temple of Mars Ultor; and decides that Palladio's design is more successful.²⁸ Jones notes that the details of the temple are similar to the plates in Palladio of the Temple of Nerva and in Labacco, fo. 8. Jones is critical of Labacco on his historical inaccuracy and less successful design inventions, but he does prefer the visual presentation of Labacco. "This bacce of the pillaster is most exactly donn in Abacco and the making of the under boulder and casement wth severall Centers, this hear hath only the measures but not the line nor garbe."²⁹ The engraved plates of Labacco could provide more detail and allow Jones to work directly from the plate, using his compass to measure off the book itself rather to have to rely on the printed measurements as in Palladio. His active way of redrawing the plates, whether through annotations, incised lines, trying the measures, or the use of separate drawings, required precise visual and descriptive information not available from any one source. While Serlio's text provided more description, Palladio gave fuller measurements, and Labacco's precise Roman engravings more accurate details.³⁰ Yet none of these sources that Jones may have seen before he traveled could provide him with the information available on site. As at the Pantheon Jones wrote "This

Xiphilinus: 25; Pirro Ligorio: 35; Serlio: 41, 42, 44, 80, 94; Viola Zanini: 49, 69; Philibert de l'Orme: 69; Fontana: 94.

²⁸ Jones's copy of Labacco does not survive; but from his folio references it is probable that he owned the edition reprinted in Venice in 1576: Antonio Labacco, *Libro d'Antonio Labacco appartenente a l'architettura nel quale si figurano alcune notabili antiquita` di Roma* (Venetia: Girolamo Porro, 1576). As Jones refers directly to folio numbers, he probably owned his own copy of Labacco. For the publishing information of Labacco, see Thomas Ashby, "Il libro d'Antonio Labacco appartenente all'Architettura," *La Bibliofilia* 16/7-8 (Ottobre-Novembre 1914), 289-307. See the further discussion in the Appendix of Additional books from Jones's library.

²⁹ Palladio 1601, IV, 22.

³⁰ Zerner 1988.

Tempell I Obserued exactly ye last of Maye 1614 and haue noated what I found more then is in Palladio."³¹

Vitruvius

A precept of humanist scholarship required that a classical source be at the ground level for architecture to be seen as an activity with ancient pedigree. For architecture Vitruvius was the ancient source, but as a building treatise Vitruvius's text was too difficult and too vague, to be easily usable without additional commentary and interpretation. By the late sixteenth century, many commentaries on Vitruvius were available throughout Europe. Each amplified different aspects of Vitruvius, and provided the reader with an interpretation of ancient architectural theory filtered through the architectural culture of the time. Jones owned Daniele Barbaro's commentary on Vitruvius, a book which he purchased early in his career and annotated heavily.³²

Vitruvius is referred to in English architectural treatises, either directly or indirectly, from the early sixteenth century. John Shute used Vitruvius in conjunction with Serlio and Philander, a combination repeated by Wotton and certainly by Jones. Shute writes:

I have for the first parte taken for my author chieflye to be followed the noble and excellent writer Vitruuius one of the most parfaictest of all the Antiques, and for that, neither anyone man in what arte so ever it be is absolute, and that other singular men of the Antiques and he in many pointes do disagree and differ (which Sebastianus Serlius, a mervelous conning artificer in our time in many places of his workes learnedly doth declare. I have added unto him upon what soever in any thing semed nedfull the opinion and meaning of the sayde experte writer Sebastianus, here and there also wher I thought meete I have ioyned the minde and iudgement of one Gulielmus Philander a notable man which about the yere of oure lorde. 1546. wrote unto the frenche king Anotacions upon Vitruuius, concerning this matter or suche like.³³

³¹ Palladio 1601, IV, 74.

³² See s.v. Vitruvius in the Annotated Bibliography.

³³ Shute 1563, sig. Aiii.

The number of copies of Vitruvius in surviving collections and book lists suggest that the audience was very wide, and that not all the readers saw it as primarily an architectural treatise. Vitruvius's treatise appears from all the evidence to have been widely known and used. Lucy Gent has identified sixteen different printed editions of Vitruvius in libraries of the period, with unknown number of copies of each in circulation.³⁴ A wide variety of editions were available in England in a number of vernacular languages, including Fra Giocondo, Cesariano, Rivius, Martin. The commentaries of Philander, Barbaro and Bernardino Baldi also appear. The importance of Vitruvius is suggested by its appearance in individual's libraries in more than one edition. John Dee owned four different editions,³⁵ Sir Thomas Tresham three,³⁶ Ben Jonson two.³⁷ In addition to the printed versions of Vitruvius, twelve manuscript copies were recorded in medieval libraries and Arundel and Wotton both owned Vitruvius manuscripts.³⁸ The remarkable aspect of Vitruvianism in England was not its appearance but the wide variety of uses it was put to. It was seen as mathematical treatise, theoretical support for neo-platonism and employed by Ben Jonson in his theoretical discourse on poetry.³⁹

Vitruvius's inherent authority as an ancient author, as well as his status as the only surviving ancient architectural text to survive, gave him special status within the Elizabethan intellectual community. In his Mathematical Preface to Henry Billingsley's 1570 translation of Euclid, John Dee made an appeal for architecture as a science based on his reading of Vitruvius.⁴⁰

Architecture, to many may seeme not worthy, or not mete, to be reckned among the Artes Mathematicall. To whom, I thinke good, to give some

³⁴ Gent 1981, 85-6.

³⁵ John Dee owned the following editions of Vitruvius: Fra Giocondo (Florence 1522); Gualterus Rivius (Strasbourg 1543); Philander (Paris 1545); Barbaro (Venice 1567); and another, perhaps Martin (Paris 1553). See Gent 1981, 85-6.

³⁶ Sir Thomas Tresham owned the following editions: Caporali (Perugia 1536); Martin (Paris, 1547); Barbaro (Venice, 1567). See Gent 1981, 85-6.

³⁷ Ben Jonson owned the Barbaro (Venice, 1567) and Philander (Lyons, 1586).

³⁸ See M. Howard 1988, 426; Kenneth Harrison, "Vitruvius and Acoustic Jars in England," *Transactions of the Ancient Monument Society*, n.s., 15 (1968), 49-57; Krinsky 1967.

³⁹ See Anthony Johnson, "'Angles, Squares, or Roundes': Ben Jonson and the Palladian Aesthetic," *CDEF 84. Papers from the Conference of Departments of English in Finland*, eds. Jorma Tommola and Keith Battarbee (Turku: Department of English, 1985), 77-101.

account of my so doynge. Not worthy, (will they say,) bycause it is but for building, of a house, Pallace, Church, Forte, or such like, grosse workes. And you, also, defined the Artes Mathematicall, to be such, as dealt with no Materiall or corruptible thing: and also did demonstratiuely procede in their faculty, by Number or Magnitude. . . . *Architectura (sayth Vitruvius) est Scientia pluribus disciplinis & variis eruditionibus ornata: cuius Iudicio probantur omnia, quae ab caeteris Artificibus perficiuntur opera.*⁴¹

As Frances Yates has discussed, Dee's interest in Vitruvius was his grounding of architecture in mathematical principles, a method that could be applied to more than one discipline.⁴² Dee wrote for an artisan class of readers, intending to raise the standard of practice in the arts which used mathematics.

Previously thought to have been read only by an isolated cultural elite, Dee's preface to Euclid was certainly read by a growing artisan class and cited by the growing body of technical architectural authors around 1600 in England. For the practicing builder, surveyor and mason, Vitruvius was most likely filtered through the practical exigencies of John Dee. The edition of Euclid was by all evidence widely popular. Richard More dedicated his *The Carpenter's Rule* (1602) to the translator of Euclid, Henry Billingsley, and "to the Companie of Carpenters of the Citie of London."⁴³ More apologizes for his own skill in writing, evidently thinking of the Dee preface, for "I am not a scholler but a carpenter, and therefore could not but write rudely," and directs the reader to further sources.⁴⁴ "There are many other kinds of plaines and sollids, but I may not stand to write of them. If any man, either for pleasure or profit, shall desire to know of them, or their measure, let him looke

⁴⁰ Dee 1570.

⁴¹ Dee 1570, sig. Ciiirecto; quoted in Yates 1969, Appendix A, 191-92.

⁴² Frances Yates, "John Dee and Vitruvius," in Yates 1969, 20-41.

That Vitruvius was considered a mathematical treatise in England is confirmed by the library lists of the period. For example, in the library list of books donated to Sidney Sussex College, Cambridge by Lucy, Countess of Bedford, Vitruvius (2 copies: Barbaro translation, 1567; Fra Giocondo, 1511) is listed under "Libri Mathemat: in Folio." (Sidney Sussex College, MS. 91, Donor's Book) Other architectural titles included in that grouping are: Palladio, *I quattro libri*, 1601; Pietro Cataneo, *I quattro primi libri dell'architettura*, 1554.

⁴³ Richard More, *The Carpenters Rule, Or, A Booke Shewing Many plaine waies, truly to measure ordinarie Timber, and other extraordinarie sollids, or Timber: With a Detection of Sundrie great errors, generally committed by Carpenters and others in measuring of Timber; tending much to the buyers great losse* (London: Felix Kynngston, 1602), sig. Aiiirecto.

⁴⁴ More 1602, sig. A111recto.

into Euclides Elements, Master Digs his Pantametria, Master Lucars Solace, and other good books of Geometrie, which are extant in English."⁴⁵ The interest of writers such as Dee to firmly establish architecture as a scientific discipline created a wide-spread changes in the theoretical literature of architecture at all levels, not just at the highest intellectual junction of classically educated patron and foreign trained mason. As architecture came to have more intellectual status, its acceptability as an activity for the nobility increased. Then architecture was not simply a manual skill but the activity of architecture—its design, patronage, practice—was seen in more complex cultural terms. The language of architecture could be the language of a cultured elite.

Henry Wotton begins his book on *The Elements of Architecture* with a praise of Vitruvius:

Our principall Master is Vitruvius and so I shall often call him; who had this felicitie, that he wrote when the Roman Empire was neere the pitch; Or at least, when Augustus (who favoured his endeavours) had some meaning (if he were not mistaken) to bound the Monarchie: This I say was his good happe; For in growing and enlarging times, Artes are commonly drowned in Action: But on the other side, it was in truth an unhappinesse, to expresse himselfe so ill, especially writing (as he did) in a season of the ablest Pennes; And his obscuritie had this strange fortune; that though he were best practised, and best followed by his owne Countrymen; yet after the reviving and repolishing of good Literature, (which the combustions and tumults of the Middle Age had uncivillized) he was best, or at least, first understood by strangers: For of the Italians that tooke him in hand, Those that were Gramarians seeme to have wanted Mathematicall knowledge; and the Mathematicians perhaps wanted Gramer: till both were sufficiently conioyned, in Leon-Batista Alberti the Florentine, whom I repute the first learned Architect, beyond the Alpes; But hee studied more indeede to make himselfe an Author, then to illustrate his Master. Therefore among his Commenters, I must (for my private conceite) yeild the chiefe praise unto the French, in Philander; and to the high Germans, in Gualterus Rivius: who besides his notes, hath likewise published the most elaborate translation, that I thinke is extant in any vulgar spech of the world.⁴⁶

⁴⁵ More 1602, 56.

⁴⁶ Wotton, [1624] 1903, preface.

Wotton's praise of Vitruvius is based on that writer's authority as an ancient source as well as his architectural ideas.⁴⁷ As Vitruvius was an ancient author his writings carried an authority and status associated with classical scholarship. This was particularly necessary because architecture as a discipline had only just been elevated to a position of intellectual distinction. Wotton admits the difficulty of understanding Vitruvius and the need for modern commentators, as for so many ancient authors.

Jones used the commentary of Philander and Bernardino Baldi's *De verborum Vitruvianorum significatione* (1612), as he notes in his copy of Serlio and Vitruvius.⁴⁸ Jones knew enough of the debate over the publication of Serlio to comment in the margin "Philander in the 4 book of Vitrus: fo 189 saith in the annotationes that he admomsihed serlio of his error tuching scima scalptura. but selio names him not." In the text of Serlio Jones had underlined where Serlio notes "io con piu maturo consiglio ho co[n]siderato quel passo di Vitruvio . . . e anco io l'ho conferito con alcuni greci."⁴⁹ In his copy of Vitruvius Jones refers to Bernardino Baldi's discussion of the orientation of rooms.⁵⁰ Jones may have known of Baldi through Henry Wotton, who refers to his treatise on Aristotle's mechanics in his *Elements of Architecture*.⁵¹ Jones also would have known of the Baldi through his study of the

⁴⁷ Perry 1968, 57 and passim.

⁴⁸ Noted by Newman 1988, 436.

⁴⁹ Serlio 1559-62, 21v. On the relationship of Philander and Serlio see Hans-Christoph Dittschied, "Serlio, Roma e Vitruvio," in Thoenes 1989, 132; 147, n. 6; Hubertus Günther, "Studien zum venezianischen Aufenthalt des Sebastiano Serlio," *Münchner Jahrbuch der bildenden Kunst* 32 (1981), 43, n. 27.

⁵⁰ Reference in Vitruvius 1567, VI, 295: "I Triclinij di primauera, & d'Autumno si drizzano all'Oriente, perche l'impeto del Sole opposto andando di lungo verso l'Occidente fa quelle stanze di lumi circondate piu temperate in quel tempo, che si fogliono adoperare. Ma quelli della state deono riguardare al Settentrione, perche quella parte, non come le altre, che nel sostitio per lo calore ardenti, per esser riuolta dal corso del Sole, sempre è fresca, & nell'uso porge sanità, & piacere. Et cosi que luoghi, doue si hanno a saluare scritte, & tauole, o pitture, detti Pinacotheci, oue si fanno le coltre, o piumacci cuciti con diuersi colori, & imbottiti, o doue si dipigni, bisogna che riguardano al Settentrione, acioche i colori di quelli per la fermezza, & egualità de lumi siano nelle opere impermutabili." Against this Jones wrote "the triclinii for the spring and autumbe tourdes the East | thos Triclinii for ye some[r] tourdes the north | And roomes to paint in &c tourdes ye north | Se Ber: Baldo./ This chapter belongs to distribution for youse."

⁵¹ Wotton [1624] 1903, 49-50. Bernardino Baldo, *Mechanica Aristotelica Problemata Exercitationes: Adiecta Succincta Narratione de auctoris vita e scriptis* (Mainz, 1621). See Perry 1968, 93.

works of mathematicians from the court of Urbino, including Guidobaldo del Monte's treatise on mechanics, which survives among Jones's books.⁵² While Jones referred to these other commentaries on Vitruvius, he remained loyal to the Barbaro edition. It was not entirely necessary for Jones to understand fully every subtle interpretation of Vitruvius. For instance, we have no indication that he read Vitruvius, as did Jonson, against a manuscript text in order to compare the accuracy of the printed version.⁵³

Through Vitruvius, as classical author and authority, architecture as a discipline came to take on more cultural significance, to be seen as a fertile metaphor for discussions on cultural, political, religious interests. Vitruvius is frequently invoked in English Renaissance culture. He could be rather transparent and take on a variety of functions. He was read as an ancient author, authority on Roman building technology, mathematician. His rather fluid interpretation in England is due in part to the distance to actual Roman buildings. As Serlio and other authors stressed, it was necessary to read Vitruvius in conjunction with studying buildings on the ground—reading was not sufficient. Few in England saw ancient Roman buildings.

Scamozzi and Ancient Authors

Of all the commentators on Vitruvius it was in the writings of Scamozzi that Jones found the fullest demonstration of a scholarly apparatus of classical architecture. Jones may have been highly critical of Scamozzi's treatise in terms of

⁵² See the entry in the Annotated Bibliography which follows.

⁵³ McPherson 1974, cat. 199, 97. This copy (now in Boston Public Library) was collated against Arundel's manuscript copy of Vitruvius (British Museum, Arundel 122) though not in Jonson's hand. Arundel purchased his manuscript of Vitruvius in Siena 14 June 1614, as he notes on fo. 1 of the manuscript. Krinsky 1967, 49.

Another copy of Barbaro's commentary on Vitruvius (Latin; Venice, 1567) this belonging to "Wolfgang Englebert, Graf von Auersperg 1565" and now at the Getty Center, Santa Monica, California is also corrected against a manuscript copy, as an annotation notes on the book's titlepage. That copy is bound in with fifty blank leaves, intended to be used for annotations and corrections to the text.

the presumptuous attitude of its author.⁵⁴ Scamozzi wrote in his *premissa* "A 'prudenti e benigni lettori" and encourages the study of antiquity as part of a complete cultural study, extending the Vitruvian ideal for the training of the architect. In impassioned terms Scamozzi urges the student of architecture to study both the ruins of antiquity and the ancient texts for the information they can provide of buildings about which little is known. The index to Scamozzi's treatise, unequaled in any comparable architectural work, and the printed marginal references, show the range of his learning and desire to cite precedent. Scamozzi compiled a series of notebooks on passages cited from ancient authors related to architecture for the training of architects.⁵⁵ There is no evidence that Jones knew of these notebooks, although he may have seen them or discussed such a project with Scamozzi when they met. Certainly however Jones knew of this approach through Scamozzi's treatise, personal meeting, and Scamozzi's library. For Jones owned one book (at least) from Scamozzi's library, Strabo's *Della geographia*, (1562).⁵⁶

The *Geographica* is the only work by Strabo to have survived, and was popular from the Middle Ages as a school text book in an epitomized form. Strabo described in Greek the physical geography of the Roman world, including information on the customs of the people, economic conditions, historical anecdotes, and description of plant and animal life if he thought it engaging enough to the reader.⁵⁷ Its popularity in England lies at the heart of the historical genre known as chorography, whose practitioners "combined descriptive geography and narrative history, built on the critical study of sources, firsthand observation, and the increasingly scientific knowledge of geographers, mapmakers and naturalists."⁵⁸ Strabo along with Varro were the ancient sources for this research, followed in

⁵⁴ Jones's comments on Scamozzi's "purblind" and arrogant appropriations of Palladio's ideas as his own have been often quoted. That was, I believe, a diversion devised by Jones against a writer whose personal manner had set him on edge when they had met in Venice. (Jones never had the opportunity to disagree face to face with Palladio, Serlio, or the other's whose treatises were far more abstract in a printed versions. The closest he could come was to have seen their buildings in person during his travels.)

⁵⁵ See Fabrizi 1976, 101-152.

⁵⁶ See the Appendix for a full description of this book. The annotations in Strabo not by Jones are certainly by Scamozzi, as they are identical to other books from his library now at the Avery Library (Philander) and the British Library (Philibert de L'Orme).

⁵⁷ S.v. "Strabo," in Harvey 1974, 408.

⁵⁸ Shapiro 1983, 122.

Tudor England by the antiquarian John Leland and historian William Camden.⁵⁹ As antiquarians in England became increasingly interested in writing accounts of the English Roman past, they turned to ancient geographers, including Ptolemy and Pliny, because their description of the details of the ancient world served English historical needs.⁶⁰

Scamozzi in his treatise recommended reading ancient authors in conjunction with a study of Vitruvius.

E se bene per la voracità del tempo (come si è mostrato) pare che nell'Architettura, oltre à Vitruvio, non vi siano se non pochi autori antichi, degni di qualche nome: tuttauia da Platone, e da Aristotele sommi Filosofi, da Plutarco, da Pausania, da Strabone, da Dione, Plinio, Liurio, e da tanti altri; cosi Greci, come Latini, noi habbiamo cauati molti precetti; e documenti di grandissimi importanza; come si vederà nel progresso di questa nostra opera.⁶¹

For Jones, Strabo would have had this double endorsement; a recommendation by Vincenzo Scamozzi through personal contact and his treatise; and the interest by England's antiquarians in reading Strabo as an ancient source. Inigo Jones's own interpretive method of descriptive visual analysis and historical reconstruction based on the critical study of sources was part of this same tradition.

Jones's comment on Scamozzi's approach to antiquity is revealing. Against the text "certissima cosa e, si come piu volte habbiamo detto, che gli Antichi, tanto nel publico, quanto nel privato fabricarono eccellentemente havendone; oltra il testimonio di degni Autori, nelle loro Storie, anco quello delle vestiggi de loro edifici" Jones wrote "All that we have in building of good and faier is by traditio[n] fro[m] the Ancients."⁶² He highlights Scamozzi's approach to antiquity, tied to the "tradition" of the historical narrative that must be read in conjunction with study at the site.

⁵⁹ Woolf 1990, 116. The English historians and antiquarians were, of course, following a more immediate source in the Italian historians such as Flavio Biondo and Leandro Alberti. See Cochrane 1981, 305-6, and *passim*.

⁶⁰ Woolf 1990, 13.

⁶¹ Scamozzi 1615, I, 66.

⁶² Scamozzi 1615, I, 226.

Jones's Travel

Jones, like John Shute before in the mid-sixteenth century, went into Italy through the generosity of patrons to study those things only available abroad. Books failed to give the impression of buildings in their setting, as Shute wrote: "I thought it good at this time to set fourth some part of the same for the profit of others, especially touching Architecture: wherin I do followe not onely the writings of learned men, but also do ground my selfe on my owne experience and practise, gathered by the sight of ye Monumentes in Italie."⁶³ Travel is the crucial link between text and practice in understanding Jones's method of approaching antiquities, for given his crucial study of the monuments through books before he left England, it was the process of comparing text to image that was to continue throughout Jones's career as a fundamental part of his design process.

Jones's approach to antiquities was that encouraged for young gentlemen abroad. Manuals that advised on techniques for travel stressed the need for scholarship: "for of all things in the world, I know nothing more available to the attaining of true wisdome and sound discretion, then the sight, consideration and knowledge of sundry rites, maners, pollycies amd governments, especialye if you make them diligentlie, compare them toghether perfectlie, and applie them to your purpose effectualle"⁶⁴ Travel provided particular skills for later service, achieved through the "sight, consideration and knowledge" acquired abroad.

Renowned as a great traveller, Jones studied antiquities on at least two of his trips abroad, a journey to France in 1609 and the well-known trip in 1613-1614 with the Earl of Arundel. On both these tours Jones studied antiquities in a thorough and scholarly way, drawing after the monuments, taking notes, and comparing the printed guide to the source. Jones reached the antiquities of Rome through his earlier study in Provence. That is, from the first Jones would have been aware not only of the difference between antiquities in England and those in Italy, but also of provincial Roman remains. Jones studied the Pont du Gard, correcting prints of the bridge based on his own observations in France in 1609.⁶⁵

Throughout his travels Jones purchased local guidebooks to antiquities. In Venice he purchased Torellus Sarayna, *De origine et amplitudine civitatis veronae*,

⁶³ Shute 1563, sig. Aij.

⁶⁴ *A direction for travaillers* 1592, sig. A3v.

⁶⁵ Higgott 1983.

(Verona, 1540); in Naples, Giovanni Antonio Summonte, *Historia della citta e regno di Napoli*, (Naples, 1601); and he used Poldo d'Albenas, *Discours historial de l'antique et illustre cité de Nismes* (Lyon 1560).⁶⁶ This genre of literature on the antique emphasized the regional differences of the antique, claiming for each city a local idiom of ancient ornament, and praising the local city's history through her monuments. Regional differences were an important concern of Jones's study of the antique. He was aware that ancient Rome extended throughout Europe and compared specific antiquities to examples he had seen earlier.⁶⁷ Against a detail of the entablature of the Temple of Antoninus and Faustina in Palladio Jones wrote "E grifons face to face houlding such Anticke kandelstike as ye yoused In sacrifice Of this kynd of freece I sawe att Arles in Province."⁶⁸ Jones could have seen any number of examples of this type of frieze in Provence.⁶⁹ These guides to regional antiquities served as a model for Jones's own studies into the surviving ruins of Stonehenge. Further, Jones's reading in the genre is evidence of his participation, albeit obliquely, of the larger enterprise of writing a history of England and Great Britain based on the study of native antiquities, reconciled with the classical past of the great ancient historians and geographers.

Early travel literature was the base of a broad awareness in England of the sites and monuments in continental Europe. While many were not able to travel widely, the printed and manuscript accounts of those who did travel served to pique interest. The armchair travelers were many, but for Jones and collectors nothing could replace the physical presence of the monuments themselves. Over thirteen times in the fourth book Jones comments on the difference between Palladio's images and descriptions and what he actually saw on site.⁷⁰ This process of comparison and correction was fundamental both to Jones's architectural method and his approach to Palladio in particular. Palladio's treatise appealed to the late sixteenth century architectural audience in Northern Europe, with its normative presentation of the classical vocabulary, clear page layout, and straight forward

⁶⁶ See Weiss 1988, 130. In general, Jones did not annotate these books, although there is evidence from his designs that he used the images in his own work.

⁶⁷ For a related discussion see Burns 1980, 103-17. Jones's awareness of the regional variety of Roman antiquity is discussed in Peacock 1983, 177-8.

⁶⁸ Palladio 1601, IV, 35.

⁶⁹ Higgott 1983, 28-30.

⁷⁰ Palladio 1601, IV, 10, 12, 53, 54, 73, 74, 77, 79, 80, 96, 98, 112, 115.

rules. This accessibility however was the result of Palladio's "designes", his reconstructions of ancient monuments in order to eliminate anomalies and idiosyncrasies of the remaining physical evidence on the ground and historical description.⁷¹

Jones's method

The importance of the study of antiquities for Jones can be seen in his concentrated method of reading and his continued interest in the topic throughout his career. Palladio's Book IV was, from the beginning of Jones's interest in it, read in conjunction with Book I on the orders. The two were read in tandem as a series of cross checks and search for the sources of authority. In early annotations, those that can be dated before 1613, Jones studied the orders with an intention to reconcile Vitruvius's description with the text of modern authors. In Serlio, for example in an extended series of annotations Jones compares Vitruvius's intention for the doric base with the illustration—ultimately coming to the resolution that the two could not be reconciled.⁷²

A more fruitful process, and one that was ongoing, was the comparison of antique precedent against sixteenth century theories of the orders. The annotations are often crossed out and revised as Jones's study suggested alternative sources and solutions. Against the plate of details from the ionic order Jones first wrote "thos squar modiliones ar taken fro[m] ye Tempell of Concordia Pall. fo. 127." Farther down the page Jones went on "and likwis this capitell is taken fro[m] ye tempell of Concordia but thear is a gola dritta unto which ye vollut reacheth & under is ye Astragall & simbia of the Pillar. fortuna & in the scroules but in this he Imitate Pall: owne Li: 1 fo 36. and te[m]pel of fortuna fo. 50 | but thear ye ar plaine with out ye scroule & leafe under them the rest of the cornish is taken from the Temple of fortune virile Se pall: fo: 50 Li: 4. but thear ye Dentell is carved."⁷³ Jones struck out the reference to the Temple of Concord, thinking at a later stage in his reading that the volutes are rather from the Temple of Fortuna Virilis. These comments on the relationship of orders to antique precedent are consistent with other of Jones's early readings on the nature of building materials or architectural building practice

⁷¹ See G. De Angelis d'Ossat, "Palladio e l'antichità" *Bolletino CISA* XV (1973), 29-42.

⁷² Serlio 1559-62, IV, 17.

⁷³ Scamozzi 1615, II, 101.

in general. Jones reads the text as an authority to be digested and categorized in a readily accessible form.

Jones refers to drawings that he did in front of antiquities, but none of his notebooks on this topic survive. Like the one notebook devoted to the study of drapery and proportion, it is likely that Jones had other notebooks devoted to ancient architectural details. In his copy of Vitruvius Jones specifically refers to his 'designs' of porticos done at the Roman theater at Orange.⁷⁴ This is valuable evidence that Jones drew in front of monuments, a particular kind of drawing after monuments intended, like annotations, to help record the image to memory. The term is also used by Jones in reference to "my dessigne of the Antike freese" of a marble in Arundel's collection;⁷⁵ and to the reconstructions of ancient monuments by Palladio. Designing was both a creative process and a skill for studying antiquities.⁷⁶

There is evidence that while Jones may have had a traveling library with him, he may have gone to the site with a notebook and then transferred drawings and annotations to the page. This method of note taking during travels was recommended by early guide books, including *La guida romana*, one of the most popular of the guides to Rome and owned by Jones. Written by a "Schakerlay Inglese" for "forestiere", he not only lists the major sites, popes, Emperors, but also includes a suggested method of proceeding for the serious traveler. "Hor questo giorno non voglio che cercate piu ma come sarete gionti a casa, notare bene quello che havete visto, & non restate come gli altri, quali vanno vedendo, & poi scordandosi restano balordi, & non fanno tener nulla a mente."⁷⁷ By taking notes the traveler could aid his memory, record his impressions and observations. The general impression of Jones's study of antiquities from his marginalia is his serious

⁷⁴ "thes porticos wear about ye walkes & behind the sceane as I saw it remaining bhind the Theater at Ornage ye rofe of which had binn of timber are gonn this I desined." Vitruvius 1567, 261; cited in Gordon Higgott, "Jones in Provence," 30.

⁷⁵ Vitruvius 1567, 261; quoted in Higgott, 1983, 34 n. 44.

⁷⁶ Jones's use of the term "design" is one of the first uses in the Italian sense, related to *disegno*, and meaning more precisely "drawing" rather than the native "scheme" or "draught". See Baxandall 1990.

⁷⁷ [Schakerlay Inglese], *La guida romana* (Roma: Antonio Blado, 1562), 7recto. See E.J. Baskerville, "The English Traveler to Italy, 1547-60" (Ph.D. diss., Columbia University, 1967) for a transcription of *La guida romana*. The copy of *La guida romana* in the British Library (Voyn. 36) is the only copy which contains the name of the author and autobiographical comments.

and scholarly work studying texts before he left, observations and analysis while in front of the monument, and reworking of both after his return to England. As his copy of Palladio testifies, Jones returned over and over again to the same page, re-reading and re-thinking passages he had seen before.

A very different kind of antiquarian analysis is preserved in a drawing of the Pont du Gard, made by Jones after his return in 1609, based on the treatise of Provençal antiquities by Polido d'Albenas and Jones's own careful observations.⁷⁸ (Figure 53, 54) Jacques Pineton, in the dedicatory poem to the author at the beginning of the treatises, praised d'Albenas for his treatment of the antiquities of Nîmes:

La belle ville, ie dis,
Non pas celle qui est ores,
Mais celle qui fut iadis,
Dont les reliques encores,
Le tours, & les vieux fragmens
Des murailles magnifiques,
De la grandeur des antiques,
Donnent certains argumens.⁷⁹

Jones based his drawing on d'Albenas, but corrected the print with his own observations at the site. The text on the drawing is a translation of the French caption to the wood engraving.

In July 1613 Jones left for Italy in the retinue of Lord and Lady Arundel. The itinerary of the travel can be followed in the notes in Jones's Palladio and the letters between Lord and Lady Arundel as they sometimes traveled separately. While Jones had studied Roman antiquities in Provence four years earlier, this trip marked a turning point in Jones's understanding and appreciation of ancient buildings. Jones reached Rome in January 1614, and spent time then examining the Temples of Vesta, Fortuna Virilis, Nerva Trajanus and Mars (Hadrian).⁸⁰ As in

⁷⁸ See the entry under D'Albenas in the bibliography of Additional Books.

⁷⁹ d'Albenas 1560, sig. *5r.

⁸⁰ Gordon Higgott, "Making of English Architect," in Harris/Higgott 1989, 52. Earlier discussions of Jones's travels appear in Gotch 1928, 71-83; and J. Alfred Gotch, "Inigo Jones's principal visit to Italy in 1614. The itinerary of his journeys," *RIBA Journal* 46 (1938), 85-6.

Jones's comment that he compared each building with the designs of Palladio, it is clear that he wished to proceed in a methodological fashion, and the annotations support this. Most of his comments on buildings on this first pass through Rome are observations of details, as at the Temple of Vesta "This tempel I saue ye 5 of January 1614 and from ye Capitls yt is couered with tilles."⁸¹ The opportunity to closely study the details brought out the changes Palladio had made in his treatise, as at the Temple of Vesta "This cornish is added by Palladio."⁸²

A major change occurred in Jones's annotations after March 1614 after he saw the antiquities in Naples for the first time. In particular Jones visited the remains of the Temple of Castor and Pollux (Dioscuri), incorporated into the Church of S. Paolo Maggiore (1581/3-1603) by Fra Francesco Grimaldi.⁸³ Jones had read Palladio's comments on the church before he had visited: "noat the clothing of the Cauliculi wth leaues whos branch beares vp the rosse a dilicatt inuention and sheaues thatt whi[ch] is ddon by reason and is gracious Though yt vary from the useua[ll] way is good and to be folloed."⁸⁴

Before the earthquake of 1658 the church still had its Corinthian portico, recorded by Giuliano da Sangallo and Francesco de Hollanda. Jones notes that the portico is not in its original condition: "The desine of this Base releuo is not as the originall is for thear is a flood and a Seagod on ye corners and on the on sid 2 figures standing sacrificising the middell is broken."⁸⁵ After Grimaldi's intervention, the church differed from Palladio's illustrations. Jones drew the new staircase to the entrance (Figure 12), and noted that: "Underneath this Portico is a Valte wch is volted a medza botte 3 of them and at the ends a Crochara and Pillasters [gros onns ?] this the friar tould mee was antike."⁸⁶ Jones visited the Temple twice, on 8 March and then later on 23 March 1614. Overall, Jones thought the detailing and

⁸¹ Palladio 1601, IV, 53.

⁸² Palladio 1601, IV, 54.

⁸³ On Grimaldi see Rudolf Wittkower, *Art and Architecture in Italy 1600-1750* (Harmondsworth: Penguin Books, 1980), 126-27. The discussion of Jones's trip to Naples owes much to Edward Chaney's research given as "Inigo Jones and Naples," Paper given to the Italo-British Society, Society of Antiquaries, London, 17 April 1991 (forthcoming in a *festschrift* for Kerry Downes). Also see Fusco 1985, 111-12; Marini 1985, 96.

⁸⁴ Palladio 1601, IV, 97.

⁸⁵ Palladio 1601, IV, 96.

⁸⁶ Palladio 1601, IV, 96.

craftsmanship of the temple excellent, and apparently returned the second time later in March to check his opinion of the capitals.⁸⁷

Jones's comments on the Temple of Castor and Pollux demonstrate his method of studying buildings while he traveled: it was a combination of reading, close observation, and analysis. There are some indications of his more immediate response to buildings, that is the excellence of the capitals in Naples. Jones's time in Naples, an extended stay of nearly two months, changed his approach to antiquities. After this, during his second time in Rome, his comments are broader observations on materials, overall symmetry and visual effect.⁸⁸

Pantheon

For Jones, his study of the stories and history of architecture began before his travels. His careful reading for example of the long textual passages in Serlio's *Tutte l'opere* (1600) on the Pantheon, annotated in an early hand certainly before his 1613 trip with the Earl of Arundel, prepared him to see that building as the apex of one moment of ancient building;⁸⁹ and yet to be critical in other ways of its design. He noted in Palladio, as had other architects of the Renaissance, the incongruity of the lower orders with the system used in the attic story. Jones thought the order used in the second story should rather have been an *opera bastarda*, using Serlio's term for an order which does not fit any distinct category. "Noat the ribes of this volte

⁸⁷ Against the plate of the capital Jones wrote "This I obsearved Sondag ye 23 March and indeed thes capitels are Exelent." Palladio 1601, IV, 97.

⁸⁸ See Higgott's analysis of this shift in Jones's appreciation of antiquity in his "Making of an English Architect," in Harris/Higgott 1989, 53.

⁸⁹ Serlio 1600, 50r-50v.

In the treatise on churches, *De Templis* written by the unknown T.R., Serlio was also used as a source for descriptions of the Pantheon: "Such was the ancient beauty of this Temple, that Pliny reckons it, inter pulcherima operum, amongst the most beautifull pieces in the whole World. And Sebastian Serly, a man very skilfull in Architecture, saith, it is the onely choice piece of perfect worke-man-ship his eyes ever beheld. It was equally as broad as high; In Trajans time it was fired by lightning, and reedified by M. Aurelius Antonius." *De Templis* 1638, 152.

answers wth nothing below yt not to be imitated/ The second order had in my opinion better have been an Opera bastarda, fo so yt is now in effecte."⁹⁰

The Pantheon had been described by travelers since the mid sixteenth century. Sir Thomas Hoby wrote in the mid-sixteenth century of the best things to be seen in Rome.

There be sundrie faire antiquities to be seene within Roome, as in the Campidoglio in the palaice of the Conservatori, and in Belvedere manie statures, stones and inscriptions. There is also Santa Maria Rotunda, called in the old time Pantheon, which is the fayrest and perfectest antiquitie abowt Roome. The Triumphall Arkes of Constantin, Vespasian and Septimus. The Coliseo, or Ampitheater. The beawtiffull pillar by St. Petre's church called la guccia di San Pietro. And the ruines abowt the seven hilles the whiche I passe over all: and the particularities therof I leave to the searchers owt of them by the instructions of Lucius Faunus, Martian, and Biondo, which all have written verie diligentlie of the antiquities of the citie of Roome.⁹¹

Hoby lists some of the highlights to be seen in Rome, but refers the reader to humanist descriptions of the antiquities of Rome, reading that would have been part of a humanist education at home.⁹² Thomas Hoby's travels were certainly inspiring, but they were overall professionally motivated. Travel prepared young men for service through their knowledge of languages and foreign customs. Hoby's

⁹⁰ Palladio 1601, IV, 81. Serlio, *Tutte l'opere d'architettura et prospettiva* (Venice, 1619), VII, 78-9; describes a "Dorico bastarda." Jones also uses the term *opera bastarda* in praising Bramante's Tempietto, which Jones said "I obcearued often being in Roome 1614": "+this Opera bastarda is the half of the colombs, corronis and ballester without this is a good rule to bee obserued." Palladio 1601, IV, 66.

An *opera bastarda* was used at Heriot's Hospital (Edinburgh) in 1628; where treatises were used for many of the details and in overall planning. See Deborah Howard, "Scottish Master Masons of the Renaissance," in *Les Chantiers de la Renaissance*, ed. Jean Guillaume (Paris: Picard, 1991), 284.

⁹¹ Sir Thomas Hoby, "The Travels and Life of Sir Thomas Hoby, Kt. of Bisham Abbey, Written by Himself, 1547-1564," ed. Edgar Powell, *The Camden Miscellany*, 10 (1902), 25.

⁹² Hoby is referring to the following: Flavio Biondo, *Roma ristaurata, et Italia illustrata di Bionda da Forli. Tradotte in buona lingua volgare per Lucio Fauno* (Venetia: Michele Tramezzino, 1542 and later eds); Lucio Fauno, *De antiquitatibus urbis Romae an antiquis novisque auctoribus exceptis, & summa brevitate ordineque dispositis per Lucium Faunum* (Venetijs: Michaellem Tramezinum, 1549 and later eds); Fra Mariano da Firenze, *Itinerarium Urbis Romae* [1518], ed. E. Bulletti (Roma, 1931). See *Le guide antiche di Roma nelle collezioni comunali 1500-1850*, exh. cat. (Roma: Edizioni Carte Segrete, 1991); and on Mariano da Firenze, see Weiss 1988, 86.

publication of his travels, and more importantly his later translation of Baldassare Castiglione's *Cortegiano*, all promoted his career and eventual appointment as Ambassador to France in 1566.⁹³

While early travelers from England ventured into Rome for diverse reasons—to escape religious prosecution, to study, to trade—the antiquity and splendor of the monuments themselves could inspire grandiloquent praise and description such as that for the Pantheon by William Thomas in his *The Historye of Italye* (London, 1561):

The temple of Pantheon is the perfectes of all the antiquities, and standeth whole unto thys daye. It is round, and hath but one gate to enter in at: the doores wherof are of brasse, very great and antike. The circuite within forth is very large, and the height proporcionable. The roofe is all vaulted like the halfe of an egge, of so greate compasse, that it is a wonder to beholde: and in the verie toppe is a greate rounde hole, through whiche the temple receiveth lyghte. For other wyndow it hath none, and yet is the light so much that if all the sides were made in wyndowes, it coulde geve no more: under the which in the middest of the floore is such holow provision made, that the raine passeth away wythout offendynge the eie or place. Finallye the walles are furnished round aboute with faire marble, and a nnumber of goodly pillers: so that the temple beyng old, is yet thought goodlier than any new building that can be found, and is now called Santa Maria Rotunda.⁹⁴

It was the Pantheon more than any other structure that was the focus for attention by English travelers for the excellent state of its preservation, unique design and richness of material. In this the English added to the general Renaissance appreciation of the Pantheon as a symbol of the Christian transformation of pagan temples, and only later as a wonder of ancient architectural design.⁹⁵ Thomas's comments also suggest the mathematical and geometrical terms of description used

⁹³ See the full discussion of Thomas Hoby and the effect of his travels on his professional career in Edward Chaney, "Quo Vadis? Travel as Education and the Impact of Italy in the Sixteenth Century," *International Currents in Educational Ideas and Practices. Proceedings of the 1987 Annual Conference of the History of Education Society of Great Britain*, eds. Peter Cunningham and Colin Brock (1988), 4-6, n. 22.

⁹⁴ Thomas 1561, 31v-32r.

⁹⁵ Tilman Buddensieg, "Criticism and Praise of the Pantheon in the Middle Ages and the Renaissance," in *Classical Influences on European Culture AD 500-1500*, ed. R.R. Bolgar (Cambridge: Cambridge University Press, 1971), 259.

to describe architecture common in England. He comments on its "proporcionable" height to breadth, and the roof "like the halfe of an egge." The richness of the marble, great number of columns and unique design all single the Pantheon out as a top attraction for the visitor to Rome. All of these characteristics, this language and terminology, are applied to the Pantheon because they were categories used to describe buildings in England. For example, buildings were seen as beautiful because of real or imagined excellence of proportion. Travellers compared buildings to what they were used to seeing. When Thomas Coryat writes of his experiences abroad he compares the buildings to the ones he knew best, Montacute and his own Odcombe Hall.

The use of inscriptions

In visiting the ancient monuments Jones followed an antiquarian approach currently popular in England, adapted from the continental methods and writers. When Thomas Coryat published his travel memoirs he included a great number of inscriptions: "for the short time that I was abroade I observed more solid matters than any other English man did in the like space this long time. For I copied out more inscriptions and epitaphes . . . that are written upon solid peeces of stone, then any judicious traveller would have done in many yeares. For which cause he branded me the note of a tombe-stone traveller."⁹⁶

Inscriptions could serve to identify the dedication of a temple, as when Jones notes that in his treatise Antonio Labacco identifies the Temple of Mars (Hadrian) as the Temple of Nerva, but that the inscription in the Temple of Nerva Traiano as published by Palladio refutes that. Against the Temple of Mars Revenger Jones wrote: "Anto:labacco fo:6. names this to bee the temple of Nerva but the inscription in ye Temple following sheaues his error."⁹⁷ On the Temple of Nerva, in a series of annotations on the history and fortuna of this temple, Jones wrote in a later hand "Anto. l'abaco fo. 6: setes doune the tempell before (wch Palladio cales) of Mars Vendicator to bee the temple of Nerva but this inscription + sheaues plainly this to bee the tempell of Nerva."⁹⁸ In the Temple of Antonino and Faustina, one of the best preserved temples Jones saw with inscriptions he notes that "In this Architrave

⁹⁶ Coryat [1611] 1905, 11.

⁹⁷ Palladio 1601, IV, 15.

⁹⁸ Palladio 1601, IV, 23.

was ye Letters carved/ note ye plaines and greatnes to hould ye inscription."⁹⁹ Jones's interest in inscription appears in his earliest annotations on the antiquities, and he took it that the architrave was oftentimes left plain precisely for inscriptions, as on the Temple of Jove (Temple of Serapis). "The freese playne on the fronte to place letters";¹⁰⁰ and the Temple of Concorde, "this architrave freese and Cornish being left all plaine for the inscription to be great; and to accompany the playneness of the pillors."¹⁰¹

The study of engraved stones and marbles was part of the study of the antique. The large acquisition by Arundel of engraved stones was published by Arundel's legal advisor, John Selden.¹⁰² Arundel incorporated the tablets with inscriptions into the fabric of his house. "You shall find all the walls of the house inlaid with them and speaking Greek and Latin to you. The garden especially will afford you the pleasure of a world of learned lectures in this kind."¹⁰³

In John Thorpe's collection of models for use in his architectural practice there is a ground plan and elevation for "A front or a garden syde for a noble man." Like the categories of houses in Serlio's unpublished seventh book, Thorpe presents a generic house that can be adapted for men of different rank. The noble house has attributes that would distinguish the rank of the owner: notably a tablet over the porch "Structum ad im/pensum Dni Sara/ Ao Dni 1600", and a statue of a Roman warrior on the pitched roof.¹⁰⁴

Jones's concern for the placement of inscriptions and how they were to be incorporated into a classical system of detailing was a more pressing issue for his architectural career. Some of the most classical buildings recently built in England

⁹⁹ Palladio 1601, IV, 35.

¹⁰⁰ Palladio 1601, IV, 41.

¹⁰¹ Palladio 1601, IV, 126.

¹⁰² John Selden, *Marmora Arundelliana* [1628]. For Selden's position as advisor to Arundel see Sharpe 1978, 236.

¹⁰³ Peacham [1634] 1962, 125.

A surviving example of inscriptions inset into the fabric of the building is at Huntly House (146 Canongate), Edinburgh (from 1515), known from the period as the "speaking house". There is a rusticated ground floor with a first story covered with plaques with greek and latin inscriptions. Similarly, Huntly Castle (Huntly, Scotland) was rebuilt by the 1st Marquis of Huntly with an elaborate heraldic panel over the main doorway and inscription across the principal upper floor.

¹⁰⁴ Summerson 1966a, T23/4, 48-9.

had inscriptions at their center. The buildings of Sir Thomas Tresham in Northamptonshire had extensive inscriptions as part of their complex symbolism and signage. One of Tresham's first building commissions was the Market House (begun 1578) at Rothwell, the nearby market town to his home at Rushton. (Figure 55) Like the covered market at Chipping Camden, Tresham's Market House was built to honor the town and establish his own position in it. He places his name directly over the central door, with the arms of leading Northamptonshire families on the story above. The inscription in the lower frieze includes Tresham's motivation for building:

Thome Tresami Militis. Fvit Hoc Opvs. In Gratiam. Dvlcis Patriae Fecit
Svae. Tribvsqve. Northamptoniae. Vel Maxime. Hviivsqve Vicini Sibi Pagi.
Nihil Praeter. Bonvm. Commvne Qvaesivit. Nihil. Praeter Decvs. Perenne
Amicorvm. Male Qvi. Interpretatvr. Dignvs. Havd Tanto Est Bono. Ao
Dimini Mil. Lesimo Qving. Entesimo Sep.¹⁰⁵

In the inscription Tresham praises the town of Rothwell and county of Northampton, though it is clear that there had been some question of his impropriety from building in such a prominent place in the town, and building so lavishly. Like other of Tresham buildings it was never finished, and so stood in the center of town as a monumental sculpture until it was roofed only in 1897. Tresham, a devout Catholic though loyal to Queen Elizabeth, was arrested in 1580; and the building stopped at Rothwell.

His later buildings incorporated overtly Catholic inscriptions and symbols. The elegant Roman letters in the frieze at Tresham's garden building at Lyveden spell out passages from the Vulgate. (Figure 56) Tresham rewrote passages so that "Jesus" and "Maria" appear to the left and right of each bay window, and each include the Tresham trefoil as a further symbol of the Trinity.¹⁰⁶ Tresham's overt Catholicism, made permanent and public in his buildings, brought him under

¹⁰⁵ J. Alfred Gotch translated this as follows: "This was the work of Sir Thomas Tresham, Knight. He erected it as a tribute to his sweet fatherland and county of Northampton, but chiefly to this towm his near neighbor. Nothing but the common weal did he seek; nothing but the perpetual honour of his friends. He who puts an ill construction on this act is scarcely worth so great a benefit. A.D. One thousand, Five Hundred & Sev." Gotch 1883, 17.

¹⁰⁶ Mark Girouard, *Lyveden New Bield, Northamptonshire* (London: The National Trust, 1990), 20-22.

constant suspicion and various forms of imprisonment on and off from 1580 until 1598.

That kind of elaborate and powerful use of inscriptions would have served for a self-taught, but worldly, architect in training as one way to make buildings speak and honor the patron.¹⁰⁷ Sir Henry Wotton notes how inscriptions can be used in buildings to express the beneficence and decorum of the patron if the building is too extravagant.

Whence Palladius did conclude that the principall Entrance was never to be regulated by any certaine Dimensions; but by the dignity of the Master; yet to exceede rather, in the more, than in the lesse, is a marke of Generosity, and may always be excused with some noble Embleme, or Inscription, as that of the Conte di Bevilacqua, over his large Gate at Verona, where perchance had been committed a little Disproportion.¹⁰⁸

Inscriptions were a direct response to ancient examples, seen by travelers abroad and known through treatises. Collections of inscription such as that owned by the Earl of Arundel, gave further direct examples of lettering styles and appropriate phrases. They were on the public facade of a private building the expression of classical learning; and further aligned the building with an ancient tradition of building, glorifying patron by association. As Wotton notes, emblems work as well as inscription, and coats of arms and heraldry were the usual architectural ornament. In the Rothwell Market House, Tresham uses both systems; coats of arms of the noble families of Northampton shire; and a classical inscription praising the town, the nobility of the gentry families, and his own generosity in building.

Preservation

Jones decried the destruction of the Pantheon and the Temple of Peace as modern day Popes stripped off the precious building materials for their own use. While Jones was in Rome Pope Paul V removed a column from the Temple of

¹⁰⁷ John Onians, "The Last Judgement of Renaissance Architecture," *Journal of the Royal Society of Arts* [] (October 1980), 701-18.

¹⁰⁸ Wotton 1624, 119-20.

Peace to use in front of St. Maria Maggiore.¹⁰⁹ "Wils I was in Roome on of the great Pillors was pulled doune to sett a figur on before St. Marie ma. Jan. anno 1614. yt was a erecting."¹¹⁰ (Figure 57) At the Pantheon Jones wrote of the roof that "This couering was of mettal and taken of by Clement 8 to maak ordeunce and civered with lead."¹¹¹ He had much earlier noted where Serlio had discussed the restoration of the Pantheon, and Jones annotated "Architecte that Restored ye Pantheo[n] commended."¹¹²

The re-use of building material would have been a familiar scenario in England as monastic property was stripped for use by the great and not so great in the great building boom of the latter sixteenth century.¹¹³ The destruction of ancient monuments was also a concern in England, and Jones would have been particularly sensitized to preservation issues. Ancient monuments in England were under threat from two points: the use of ancient building materials and the conversion of buildings formerly belonging to the church after the dissolution of the monasteries;¹¹⁴ and the destruction due to iconoclasm.¹¹⁵ Proclamations under

¹⁰⁹ See the discussion of this passage in Fusco 1985, 90.

¹¹⁰ Palladio 1601, IV, 13.

¹¹¹ Palladio 1601, IV, 77.

Other comments on the destruction of ancient monuments in Rome are: Temple of Mars Revenger, "Whilst I was in roome Ano 1614, That which remained of this rare temple was pulled doune by the pope Pau. burghese to haue the marble to make a pedistall to sett the collom on wch remaind at ye temple of pease and sett befor S. maria maior." (Palladio, IV, 23). Temple of Nerva Traiano, "January ye 5. 1614 whilst I was in Roome the Pillors then stood of this Tempell was pulled doune by Pau. V: to sett a figur on before St. Maria Maiore." (Palladio 1601, IV, 24).

Temple of Jove (Serapis): "June 13. 1639 Clemente Scultor Romano tould mee that the ruines of this temple is pulld all doune to have the marble by the connestable Collona by the popes permition Barbarinos this was the noblest thinge which was in roome in my time. So as all the good of the Ancientes will bee vtterly ruined ear longe questo Pape e poeta. Mo. he said moreover that thear wear hudge stone both of." (Palladio 1601, IV, 41).

See the discussion of Jones's comments on Paul V in Marini 1985, 92.

¹¹² Written against Serlio's text: "& in questo fu molto giudicioso l'Architetto che restaurò il Pantheon, perche ne' suoi ornamenti non ci si vede tal confusione." Serlio 1600, III, 99v. Jones also annoates in the description of the Pantheon "Lucio Settimo Severo and Marco aurelio antonio Restored yt." Serlio 1600, III, 50v.

¹¹³ Aston 1973, 239-43.

¹¹⁴ Aston 1973, 231-55.

¹¹⁵ Aston 1973; John Phillips, *The Reformation of Images: Destruction of Art in England, 1535-1660* (Berkeley: University of Los Angeles Press, 1973).

Elizabeth and James made punishable the breaking of ancient monuments. The vogue for writing local histories in England was in part a reaction to the destruction and disregard for the visible traces of English history. The theme was a general principle of urban renewal that Jones knew through his reading of Bordino's *De rebus praeclare gestis a Sixto V*, given to Jones by Edmund Bolton.¹¹⁶

Jones kept abreast of antiquarian activities in Rome as he was called on to renovate major buildings in London. A series of later annotations on the Temple of Peace were begun about the time Jones was designing a classical portico for the west front of St. Paul's Cathedral.¹¹⁷ (Figure 58) Jones had been involved fifteen years before on building projects at St. Pauls in designs for a steeple to replace one which had collapsed in the sixteenth century. For this project the theme is completely classical and decidedly Roman. Jones used an antique model, the portico at the Temple of Antoninus and Faustina, for example. He returned to the pages in Palladio that reconstructed the Temple of Peace, a reconstruction that he found suspect on historical and scenographic grounds.

Jones notes that recent excavations at the Temple of Peace (Basilica of Maxentius) had shown that there was a greater foundation that would not have been known to Palladio and Gamucci in their reconstructions. "The medales of Vespasian and Titus in Choule fo [left blank] are with a portico of high collomes as thos within the tempell and I do thinke that it was so for this portico of Paladio is not like the Romain Greatnes but it may bee as Palladio saith that this temple beinge burnt or ruind by an earthquake was restored in a time when architecture was not so well understoode and then this littell portico may haue binn made of which ye foundationes being discovered by digging Paladio and Gamuzzi made by coniecture this facciata, for I have tryde yt and yt may have had 10 collombs in the front as bigg as thos within and I thinke ye spases will bee near to eustilos, and ye portico in length on thirdpart of ye breadth of the temple."¹¹⁸ This annotation is typical of Jones's later interests in ancient architecture. The reconstruction of Palladio is criticized in general for not being "of Romain Greatnes," a concept based on Jones's idea of the scale of Roman building. Palladio and Gamucci's

¹¹⁶ "The ideal exemplar of how Renaissance classical architecture could achieve not just a revival of forms and styles but the total renewal of the urban environment was to be found in Sixtine Rome." Peacock 1987, 182.

¹¹⁷ Summerson 1965; Newman 1980b; Harris/Higgott 1989, 238-47.

¹¹⁸ Palladio 1601, IV, 13.

reconstruction placed a portico on the front of the temple with columns smaller than those of the interior. The greatness of Roman architecture was an idea that Jones may well have had from other sources, such as prints from the *Speculum Romanae Magnificentiae*, that Jones used for masques as well as in travel accounts of early visitors.¹¹⁹

Study of Coins

The change in Jones's later reading, however, is the new range of sources that Jones musters in defense of his criticism of the text. In the passage just quoted, Jones refers to the image of the temple as it appears on "the medales of Vespasian and Titus in Choule fo," with the folio reference left blank, a reference to Guillaume du Choul, *Discours de la religion des anciens romains* (Lyons 1556, Lyons 1581) and translated into Italian as *Discorso della religione antica de Romain, insieme un'altro & essercitij della Castramentatione, & disciplina militare, Bagni, & essercitij antichi di detti Romani. and illustrati di Medaglie & Figure, tirate de i marmi antichi, quali si trovano à Roma, & nella Francia* (Lyons, 1569). As is typical, Jones used a printed source, here a social history of Rome based on coins as evidence.¹²⁰ While the text provides historical information about the temple, Jones referred to the medals in Choule which show a temple with a portico of six columns.¹²¹ (Figure 59)

At the court of Prince Henry Jones would have had the opportunity to study coins first hand. Prince Henry made substantial acquisitions of coins during his brief

¹¹⁹ The *Speculum Romanae* was in many of the collections of those in the circle of Jones, if he did not own all of the prints himself. Arundel purchased a set while in Rome. Howarth 1985, [**].

¹²⁰ That Jones did not list a folio reference suggests that he did not own the book, or had only seen the plate in the book from another collection. Although Jones does not always include exact references, the citation to Choul appears infrequently in his annotations and a copy does not survive.

¹²¹ The accompanying text states: "Questo tempio di Pace, del quale tra l'altre cose piu eccellenti della Città di Roma Plinio hà fatto mentione nel XXXVI. libro dell'Historia naturale, abbrucchiò nel te[m]po di Commodo Imp. Si come scrive Herodiano, soggiugendo ch'egli era sopra ogn'altro richissimo & ornatissimo di stauè & altre cose belle così dentro, come fuora, si come anchora si puo conoscere per le medaglie de due sopradetti padre & figliuolo Imperatori." (p. 10).

On Choule see Richard Cooper, "Collectors of Coins and Numismatic Scholarship in Early Renaissance France," in *Medals and Coins from Budé to Mommsen*, ed. M.H. Crawford, C.R. Ligota, J.B. Trapp (London: The Warburg Institute, University of London, 1990), 5-22.

period collecting. After his death the collection went to his brother, who had less interest in antiquarian study or collecting.¹²²

Jones used his study of coins in architectural projects, as in his design for a triumphal gateway at Temple Bar (1636-38). (Figure 60) On the surviving drawing the figural roundels are based on prints of medals that Jones notes are from the King's collections.¹²³ The roundels are of Laetitia and Hilaritas, joyfulness and good humor, images of good will for political patrons. Two other drawings of roundels by Jones, perhaps alternate choices or designs for the other side of the gate, depict shipping and commerce. As the gate was to mark the boundary between the City of London and Westminster, the themes are appropriate to the financial and governmental activities of the two cities.

Later in his Royal career Jones would also be required to take care of other antiquarian interests for the King. With the royal librarian Patrick Young and the scholar William Boswell, King Charles ordered Jones to assist in cataloging the collection of coins.¹²⁴ Jones may have been included because of his knowledge of coins, general classical learning, or because he had been employed at the court of Charles's brother Prince Henry, the previous owner of the collection.¹²⁵ Jones used coins as one kind of evidence, but no independent drawings of coins survive, as for example the many examples by Pirro Ligorio.¹²⁶

In the historian Edmund Bolton Jones had an immediate model for the use of coins. In his gift inscription on a copy of Bordino's *De rebus praeclare gestis a Sixto V Pon. Max.* (Roma, 1588), Bolton had praised Jones as the harbinger of a new artistic

¹²² Prince Henry paid out £2200 for 'antiquities of medals & coins' to Abraham van Hutton between 10 May and 10 August 1611. He also bought the collection of Abraham Gorlaeus (1549-1609). John Evelyn wrote in 1689 that the collection was 10,000 medals, but clearly the collection was important. Roy Strong proposes that Arundel, Sir Henry Fanshawe, Sir Thomas Chaloner and Inigo Jones acquired medals after Henry's death, with the remainder passing to Charles I. See the discussion of the Prince's collection in Strong 1986, 197-200.

¹²³ RIBA Jones & Webb 52. The inscriptions on the verso of the roundels are difficult to decipher, but may be inscribed by Jones and read on the verso of the left one: "medal fro[m] y Ki[ngs] Printes." See the Harris/Higgott 1989, cat. 82, pp. 251-53.

¹²⁴ SP Dom. Chas I, 183, 1; cited in Gotch 1928, 160-61.

¹²⁵ For Prince Henry's coin collection see Strong 1986, 197-200.

¹²⁶ See Burns 1988, esp. 27-31.

classicism to England based on serious study.¹²⁷ In 1624 Bolton published a justification of Nero's rule in *Nero Caesar, or Monarchie Depraved*, combining in an innovative manner textual and physical evidence.¹²⁸ Bolton wrote: 'Coigns are so vital to memorie . . . I may wonder why sovreign princes (who doe hold of glory in chiefe) make either very little, or no historicall use at all, no not of their copper moneyes."¹²⁹ The study of coins had been used by antiquarians in the sixteenth century, most notably William Camden in his *Britannia*. By the early decades of the seventeenth century, however, the study of coins was widespread and encouraged by Henry Peacham as part of general historical education. "For books and histories and the like are but copies of antiquity, be they never so truly descended unto us, but coins are the very antiquities themselves."¹³⁰ The study of coins, through their inherent combination of image and text, fueled an antiquarian interest in the relationship of visual and verbal evidence.

Imitation and the Paralleling of England and Rome

Jones's study of antiquity was central to his sense of discernment required by the architect in choosing among those models to be imitated. Two of the terms which repeatedly appear in Jones's annotations are "imitation" and "invention" with the former outnumbering the latter nearly 2 to 1 in Palladio. In one of the most telling of these passages Jones praises Palladio's interpretation of the antique and derives his own principles of composition:

Noat that ~~most~~ some of thes Cimatioes of ye Pedistals uarry from thear baace more then Palladio makes them in his orders and ~~in my Oppinion yt should~~ may be so for the Cimatio being as a Cornish yt should may uarry from ye Baace although ye members be of on nature ether in streangth or slendernes for hearin Concistes ye art of Composing thes mouldings | But in my opinio Palladio Immitates ye Best Bacmentes of thes antiquities as ye Tempels of Pola, of Nerua, of Fortune, of Scicci, but allwaes the libberty of

¹²⁷ See the discussion of Bolton's inscription in Bordino's *De rebus praeclare gestis a Sixto V* in Peacock 1990a; and in the chapter following on Jones's library; and the annotated bibliography s.v. Bordino.

¹²⁸ My discussion of Bolton's text and sources is based on Woolf 1990, 193-95.

¹²⁹ (6, 14-15); quoted in Woolf 1990, 194.

¹³⁰ Peacham [1634] 1962, 126.

composing wt reason is not taken awaye but who follwoes ye best of ye ansientes cannot much earr."¹³¹

The choice of what to imitate is determined by the architect to "compose with reason." Imitation could be the source used for the composition of the orders.¹³² Imitation was a way of judging sources, and Jones makes notes against those elements of the antique not to be used in designs.¹³³ Jones uses the term, I believe, not only in the specific sense of copy, to appropriate those elements from the antique that he thought to be visually pleasing but he also implies that to imitate elements from the antique, whether through the study of the original or textual reconstruction is to assume the aspect or semblance of the antique itself, to make the antique live again in his architecture and therefore in England.¹³⁴

Jones's interest in the "imitation" of antiquity is directly analogous to those others interested in the study of ancient Rome and its appropriate use in England. Educational reform based on the study of the classics, promoted by Ascham, encouraged the imitation of classical models in writing and speech. More generally, however, the study of antiquities was by the beginning of the seventeenth century integrated into the school curriculum through standard texts such as Thomas Godwin's *Romanae Historiae Anthologia Recognita et Aucta. An English Exposition of the Roman Antiquities, wherein many Roman & English offices are paralleled and diverse obscure phrases explained*.¹³⁵ Written for the Abingdon School and reprinted in numerous editions up to the nineteenth century, Godwin used the topical headings of Varro, topography, religious and political institutions and warfare.¹³⁶ Godwin's textbook was not taken from direct observation, but like Robert Burton's *The Anatomy of Melancholy*, was the compilation of many complex works, here provided in an easily assimilated form. The relationship of Roman antiquities and the

¹³¹ Palladio 1601, IV, 98.

¹³² Jones wrote against the plate for the Temple of Nerva Traiano "Palladio Imitates this Bacment in his Ionicke moulding on ye Leaft syde." Palladio 1601, IV, 28.

¹³³ Against the Temple of Constantine Jones wrote "This cornish is to low and members of on nature together is not to be Immitated." Palladio 1601, IV, 63.

¹³⁴ OED s.v. "imitate," 3.

¹³⁵ Godwin's book was published in 21 editions between 1614 and 1671. The first edition was published in 1614 in Oxford by Joseph Barnes. See Mendyk 1985, 334.

¹³⁶ Levine 1987, 82.

antiquarian activities in England is reflected in the title of Godwin's book, *An English Exposition of the Roman Antiquities, wherein many Roman & English offices are paralleled*. The two ancient pasts were seen in tandem, and it was through an understanding of the Roman past that the English antiquity was to be brought to light. In the preface to his *Britannia*, Camden wrote:

Abraham Ortelius the worthy restorer of Ancient Geographie arriving heere in England, above thirty foure yeares past, dealt earnestly with me that I would illustrate this Ile of Britaine, or (as he said) that I would restore antiquity to Britaine, and Britain to his antiquity; which was as I understood, that I would renew ancientrie, enlighten obscuritie, cleare doubts, and recall home Veritie by way of recovery, which the negligence of writers and credulitie of the common sort had in a manner proscribed and utterly banished from amongst us.¹³⁷

It is necessary now to shift to the other side of the equation, to understand how antiquities were perceived by the patrons and informed observers of classical architecture. By the early sixteenth century traveling had become a central form of education for young gentleman. Visiting abroad, studying with foreign scholars, sightseeing, learning about foreign governments: all came to be seen as appropriate in the training for service. It is significant that Jones adopted the techniques of travel recommended for those travelling as a training for public service. The study of the antique was directed to the further goal of building, and his training as an architect.

Through travelling the student could experience a form of education which would call upon all learning which went before, and provide experience unavailable in England. It was the image of the thing itself, the chance to see the monument, its setting, and then to fix that image in the mind against a backdrop of textual description and historical narrative. Advice for the young Earl of Bedford encourages travel as a vivid form of study for impressionable young men.

The second meanes for a scholler, yoong gentleman, or anie other to further, and increase his learning by perigrination, or travailing (I said was) by the eyes, which is either by reading those bookes beyond the sea, which

¹³⁷William Camden, *Britain, or a Chorographicall Description of the Most flourishing Kingdomes, England, Scotland, and Ireland, and the Ilands adioyning, out of the depth of Antiquitie: . . .* (London: George Bishop & Ioannis Norton, 1610), fo. 4r.

are not to bee had for anie monie on this side, or by being an eye witsnesse of the verie same things which he hath red in bookes, or hard of by others, for example: your honor is for Italie, that Queene of countries, famous for the wholesome temperature of the aire, for the great plentie of all the gifts of God, for the great civilitie, and wisdom of the people (albeit nowe somewhat degenerated with overmuch effeminacie) renowned in all histories, both old and newe, for their mightie warres, waged with the whole world, for their martial discipline in warre, and polliticke government in peace. In this countrey where shall you set your feet, or cast your eie: but you shall have occasion to call into remembrance, that which is set downe in Livie, Salust, Polibius, Plyny, Tacitus, Dion, and Dionisius, in whome who so hath read heeretofore sondrie matters of worth, and accidents of moment (whereof they are full) and shall in travailing see before hys eies the trueth of their discourses, and the demonstration of their descriptions: in trueth if he be not ravished with delight, I shall take him for some stocke, or stone: for the sight of the thing, which a man hath heard, doth set such a grace, and edge to the same, seemeth to me to be without all life that is not lively and feelingly affected, and moved therewith.¹³⁸

Traveling is the complement to reading. To see the monuments will impress the history, carefully studied before departure, into the mind's eye.

Arundel and the Antique

While Jones could perhaps never state that London was filled with the most noble intellects as Palladio wrote of Vicenza,¹³⁹ he did find and cultivate a lasting relationship with the Earl of Arundel. They most likely met within the court of Prince Henry, soon after Arundel's marriage in 1606 when he was 21. For the next six years until the Prince's death, Arundel is recorded in various chivalric events at court, and shared the Prince's interest in paintings and collecting.¹⁴⁰

¹³⁸ *A direction for travailers* 1592, sig. B4r-B4v. See also the paraphrase of the above in Coryat, *Crudities*, 9: "Likewise the places wherein divers famous battels have beene fought, so much celebrated partly by the ancient Roman historiographers, and partly by other neotericke authors (many of which I exactly observed in my short voyage) when they are surveyed by a curious traveller, doe seeme to present to the eyes of his mind a certaine Idea of the bloody skirmishes themselves."

¹³⁹ "Ma ancho in molti altri luoghi di minor nome, & massimamente in Vincenza Città non molto grande in circuito, ma piena di nobilissimi itelletti, & di ricchezze assai abbondante"; Palladio 1601, I, 5.

¹⁴⁰ For Arundel's connection with Prince Henry, and the Prince's cultural interests, see Strong 1986, 47-8 and *passim*.

Jones's idea of antique architecture was grounded in a culture that valued the antique as a model for the behaviour & education of gentlemen, the theory of kingship, and religious reform. It is impossible in this study to give a full description of all these different areas, and the bibliography on the English renaissance is filled with individual studies of these fields. What is important here is the context in which Jones went about his study of antiquities through travel and study, and the value placed on the antique by his patrons and colleagues.

In addition to his travels, Jones was able to study the details of classical sculpture and architecture through the collections available in London. In particular, Jones had access to the collections of the Earl of Arundel (Figure 61) and a drawing now included in the Larger Talman Volume at the Ashmolean is inscribed by Jones "from a pedistall or pilaster antike greek Arr Ho 1637."¹⁴¹ (Figure 62) This later use of the Arundel collection continued a practice that had been established some time earlier, when as John Peacock has shown, Jones used the collections in composing scenery for masques and designs for costumes, all with an eye to Arundel's personal association of family status with antiquity.¹⁴² The collections at Arundel's house in London and his country estate at Albury were moreover an alternative collection to that established by King James, Prince Henry or Queen Anne. While each member of the royal family had collected a group of scholars and artists, Arundel's powerful political position just outside the system and unequalled collections attracted the best from the defunct court of Henry after his death in 1612. Among others, Jones would have met there Henry Peacham, who praised Jones in his *Complete Gentleman*; Sir Robert Cotton, whose library Jones used; Franciscus Junius, author of the *Paintings of the Ancients*; and William Harvey, physician.¹⁴³

Arundel's trip to Europe with Jones was in large part an opportunity to purchase antiquities on site rather than having to rely on agents.¹⁴⁴ It was a

¹⁴¹ Larger Talman Volume, Ashmolean Museum, 89b verso.

¹⁴² John Peacock, "Inigo Jones and the Arundel Marbles," *The Journal of Medieval and Renaissance Studies* 16, no. 1 (1986), 75-90.

¹⁴³ Arundel's court at Albury is discussed in Howarth 1985, 118-26.

¹⁴⁴ Joseph M. Levine, *Humanism and History. Origins of Modern English Historiography* (Ithaca: Ithaca University Press, 1987), 84.

combination journey, combining the activities of merchants and humanists.¹⁴⁵ Arundel desired to collect immense monuments, including the obelisk from the Circus of Maxentius in Rome (now in the Piazza Navona); and the Vatican Meleager.¹⁴⁶ How much of Arundel's collecting and antiquarian activities influenced Jones's own approach to the antique is not known. Arundel was not known to be a discerning buyer of antiquities, and was at least on one occasion fooled by a fake. However it is perhaps more useful to see in general terms what their relationship might have been during their travels and back in England, and to see how the passion of Arundel for antiquities could have influenced Jones's own devotion to their study.

Arundel's patronage of Jones was crucial in not only providing the economic impetus for projects, but further an enthusiastic and informed supporter. The collecting of antiquities was for Arundel a personal quest, closely connected with his own definition of family status. When in 1617 he felt the urgent need for a will on accompanying King James to Ireland, Arundel took extra care to designate the bequest of his collections. He hoped that they would be kept together, and left the collection to his eldest son, so that he "maye succede me in my love and reverence to Antiquities & all thinges of Art."¹⁴⁷ While he regretted, should he have died on this journey, leaving his family in such a bad economic state, he clearly felt that the collections which he had built up with "soe much travaile and chardge" were a more important legacy than any monetary bequest. He goes on to write of his passion and conviction of the power of antiquities: "...They [my sons] should see I valewe them more then other gooddes, & that there is a knowledge in them, wch (if they can light upon it) opens a mans understanding to all other thinges."¹⁴⁸ That Arundel thought knowledge could be contained in the relics of the past was a

¹⁴⁵ "Lasciandosi guidare dello Scaligero in una sorta di tempo indefinito e fluttuante composto di memorie classiche e di episodi di vita contemporanea." Vittor Ivo Comparato, "Viaggiatori inglesi in Italia tra sei e settecento: La formazione di un modello interpretativo," *Nascita dell'opinione pubblica in Inghilterra. Quaderni Storici* 42 (settembre-dicembre 1979), 852.

¹⁴⁶ See Howarth 1985, 111-12, 136, 140; Philipp P. Fehl, "Franciscus Junius and the Defense of Art," *Artibus et Historiae* 3 (1981), 42 n. 20; Francis Haskell and Nicholas Penny, *Taste and the Antique. The Lure of Classical Sculpture, 1500-1900* (New Haven: Yale University Press, 1981), 264.

¹⁴⁷ Newman 1980a, 695.

¹⁴⁸ Newman 1980a, 695.

sentiment that Jones must have shared. Given Jones's own sense of personal stature, antiquity was a process as well as a product that he felt could be reproduced in the viewer and architect alike by means of architecture.

Within Arundel's circle of political acquaintances the competition to acquire antiquities was part of a more general rivalry for position at court. Arundel maintained a friendly competition with the Earl of Pembroke over antiquities, and it may be through that relationship that the more fierce rivalry developed between Arundel and the Duke of Buckingham which had at its core a debate over the status of and distribution of titles. In contrast to the parsimony in the granting of honors by Elizabeth, James increased the number of titles geometrically.¹⁴⁹ Throughout his political career Arundel fought against the selling of titles, part of the charges brought against Buckingham in the Commons in 1626.¹⁵⁰ Overall, Arundel protected the status and values of the old aristocracy against the meteoric rise of the new titled advisors around the King. It was during the 1620's that these concerns came to the forefront, reaching their climax in the break of Arundel with Buckingham. Buckingham was at the center of the sale of honors between 1615 to 1628, and it was on this count that the Commons impeached him in 1624 for "the trade and commerce of honor."¹⁵¹ After their political alliance collapsed in 1625, Arundel refused to co-operate with Buckingham in collecting. But overall, it was the study of the classical past, paralleled with their own family histories, that portrayed Arundel's values to the world and distinguished Arundel and Buckingham. Arundel's own family status had only, with the accession of James, been restored to a position it had late occupied during the reign of Henry VIII. For his service to his mother, Queen Mary of Scots, James restored the position of the Howard family. Thomas Howard's interest in classical learning, and the devotion with which he saw that his sons attained a humanist education, was connected to his commitment to firmly re-establishing the family's traditional status.

But it is more subtle than this, for Arundel was also creating the image of an historical inevitability by so closely associating his family with classical traditions and values.¹⁵² Arundel planned both to write a family history and a history of

¹⁴⁹ Stone 1965, 65-128.

¹⁵⁰ Sharpe 1978, 243.

¹⁵¹ Stone 1965, 113.

¹⁵² Eric Hobsbawm's notion of "invented tradition" is particularly applicable here. "Invented tradition" is taken to mean a set of practices, normally governed by overtly or

Roman Britain. The projects are related in seeking to establish through the writing of history the position of his family; and to connect the history of England with the classical past.¹⁵³ To have simply acquired the trappings of culture, as Buckingham had marketed through the sale of titles, would not have differentiated between those nobles whose ancestry could be traced to ancient roots and those whose position was more recently attained. Arundel's financial security had been guaranteed through his marriage in 1606 to Altheia Talbot, who brought to the marriage the wealth of the Shrewsbury estate. Arundel had good reason to present an image of his family imbued with inevitability and an antique heritage. His own status had only recently been restored, his lands had not been fully restored by James, and his position within the court was challenged by upstarts with recently acquired titles.

Arundel's invocation of ancient Rome as the authority for his family's status is only one example of the power of ancient Rome as a symbol in Jacobean England. The Roman plays of Shakespeare and Ben Jonson, the court masques, the political theory of Divine right espoused by James: all these employ the imagery and language of ancient Rome as support.¹⁵⁴ As Annabel Patterson has noted, the use of Roman history as a "context for interpreting contemporary events [was] a context that became ever more specifically applied."¹⁵⁵ The general use of antiquity in Tudor England became more precise in the next generation as the range of possible models increased.

Arundel was directly involved in controlling the accuracy of symbols of family honor through his position as the Earl Marshal, a crucial member of court as the head of the College of Heralds. The Heralds controlled the right to display arms, and the creation of new heraldry. Their position was central to any family's claims to antiquity for they were responsible for the relative social position of any family within a culture highly sensitive to the status conferred from the patina of

tacitly accepted rules and of a ritual or symbolic nature, which seek to inculcate certain values and norms of behaviour by repetition, which automatically implies continuity with the past. In fact, where possible, they normally attempt to establish continuity with a suitable historic past." Eric Hobsbawm, "Introduction: Inventing Traditions," in *The Invention of Tradition*, eds. Eric Hobsbawm and Terence Ranger (New York: Cambridge University Press, 1983), 1.

¹⁵³ Sharpe 1978, 239.

¹⁵⁴ See Goldberg 1983.

¹⁵⁵ Annabel Patterson, "'Roman-cast Similtude': Ben Jonson and the English Use of Roman History," *Rome in the Renaissance. The City and the Myth*, ed. P.A. Ramsey (Binghamton: Center for Medieval & Early Renaissance Studies, 1982), 382.

noble ancestry. Through visitations to country houses, heralds confirmed the accuracy of any arms and family's right to use them.

The great increase in the number of titles nobles after 1603 created a great need for new arms and a general glut in the use of heraldry in general. Each new titles family needed a set of arms to adorn their house or garden gate, and mark their change in status. The proliferation of arms, however, reduced their potency and power to separate the nobility from the recent upstarts. Henry Peacham still thought it important that all young men know the methods of blazonry, if only to ensure that arsm would be used correctly.

How should we give nobility her true value, respect, and title without notice of her merit? And how may we guess her merit without these outward ensigns and badges of virtue which have anciently been accounted sacred and precious, withal discern and know an intruding upstart, shot up with the last night's mushroom, from an ancient-descended and deserved gentleman whose grandsires have had their shares in every foughten field by the English since Edward the First, or myself a gentleman know mine own rank, there being at this instant the world over such a medlay (I had almost said motley) of coats, such intrusion by adding or diminishing into ancient families and houses, that had there not been within these few years a just and commendable course taken by the Right Honourable the Earl Marshals for the redress of this general and unsufferable abuse, we should, I fear me, within these few years see yeomen so rare in England as they are in France!¹⁵⁶

Recently published manuals on heraldry, such as those by Edmund Bolton and William Guillim, codified the once mysterious practices of blazonry, the textual description of arms, and marshalling, the combination of elements.¹⁵⁷

Arms were the clearest mark of a family's honor, and served as the principal language of antiquity for the adornment of buildings. John Guillim in his treatise *A Display of Heraldrie* (1610) unfolds the reciprocal process of heraldry for both its owner and the outside observer.

Armes then, as they are heere meant, may be thus defined: Armes are tokens or resemblances, signifying some act or quality of the bearer. How great the dignitie and estimation of Armes ever hath beene, and yet is, we may easily

¹⁵⁶ Peacham [1634] 1962, 131.

conceive by this, that as they doe delight the beholders, and greatly grace and beautifie the places wherein they are erected; so also they doe occasion their spectators to make serious inquisition whose they are, who is the owner of the house wherein they are set up, of what Familie their bearer is descended, and who were his next, and who his remote Parents or Ancestors.¹⁵⁸

The obsession with heraldry among the gentry and nobility was but the outward sign of a more deep-seated concern with genealogy and family history. The first great history of a family, John Smyth's *Lives of the Berkeleys* (1618) used economic and social history to trace the ancestry of the family, and set a pattern for writing the history of local nobility which continues in England through to the present.¹⁵⁹ Other families, including Arundel, commissioned genealogies based on family archives and often inventive historical research into ancient origins.

Architecture could hold the symbols of family antiquity, specific and limited, such as coats of arms over doorways that told the outside world the status and identity of the owner. But there architecture was a vehicle for a message and not the message itself. For Arundel and Jones architecture had the power and potential associated with the study of the past which could be expressed through artistic patronage and collecting. Arundel was not a major architectural patron. He updated his house in London, adding an "Italian" gate and a gallery for his collections, both certainly the work of Jones. Yet these were both limited changes to a medieval manor house that gave no outward hint to the breadth of his collection of antiquities inside. His real passion lay in collecting antiquities, all concealed within a conservative and sober facade. Arundel is representative at the highest level of a new class of patron for whom the language of architecture based on the study of ancient models, developed from continental treatises, could embody closely held ideals about the status of their own families and political positions.

The old aristocracy made their claim to power from the creation of real or imagined ties to English genealogical antiquity. Ancient and noble pasts made nations superior as well, and a late Tudor document claims for the rights of England over Spain based on England's greater antiquity. It asserts a dominance based on the

¹⁵⁷ Walzer 1965, 250.

¹⁵⁸ Guillim 1610, 2.

¹⁵⁹ Stone 1965, 26.

"presedence of England in respect of Antiquity of the Kingdome" and a description of seven other categories including the precedence of the nobility of blood, antiquity of religion, political and ecclesiastical authority. "To seeke before the decay of the Roman Empire, the antiquity of any kingdome, is mere vanity: when as the kingdomes of Christendome, now in being, had their rising from the fall thereof. At wch instant Vortigerne a native of this Isle first established here a free kingdome 450 yeares after Christ: And so leaft it to the Saxons, from whome her Math is in descent Lineal. And it is plaine, that as wee were later than Spayne reduced under the Roman yoke, so wee were sooner infreed."¹⁶⁰ The search for antiquity was a special interest for theologians in the period, concerned to establish the ancient roots of the reformed church. The authorized version of the bible sought to eliminate corruption by going back to a primitive version of the church.¹⁶¹ The search for a true antiquity in the church was a technique employed by both Protestants and Catholics in England, each of whom could claim to write an ancient history of their church. John Favour, a Catholic, defined antiquity in terms of its purity and claims to the primitive. "Wherefore we must not hold Antiquity to be that which is old, or is no older than these young Doctors; but that which is oldest, that is first and primitive, without any mixture, or derivations, or mingling, or medling with following ages, and after times. Water is best tried in the fountaine, before it hath passed by the many varieties of divers foiles. Truth must be searched in the Originall, before it hath bene strained through the multitude of mens wits."¹⁶²

Jones's study of ancient architecture and preference for models that displayed a restraint in ornament was analogous to Arundel's personal decorum in dress and manner. In his discussion of Arundel's opposition to Buckingham's sale of titles in the 1620's Kevin Sharpe notes how Arundel's sober appearance represented a political conservatism that reinforced the status of ancient noble families in

¹⁶⁰ Huntington Library, Ms Ellesmere 1596.

¹⁶¹ David Daniell, "The Authorised Version of the Bible," in *The Cambridge Guide to the Arts in Britain*, Vol. 4 *The Seventeenth Century*, ed. Boris Ford (New York: Cambridge University Press, 1989), 41-51.

¹⁶² John Favour, *Antiquitie triumphing over noveltie: whereby it is proved that Antiquitie is a true and certaine Note of the Christian Catholicke Church and verity, against all new and late upstart heresies, advancing themselves against the religious honour of Old Rome, whose ancient faith was so much commended by S. Pauls pen, and after sealed with the bloud of many Martyrs and worthy Bishops of that Sea* (London: Richard Field, 1619), 33.

England.¹⁶³ Arundel's behaviour was described by contemporaries as ordered and measured, *gravitas*, exactly those qualities lacking in Buckingham and a contribution to his fall from power as advisor at court. Throughout his political and personal dealings Arundel stressed the old forms, the rights of the nobility, the importance of self presentation. Rituals were not merely for show but an essential form of power. Elaborate rules were drawn up for his attendants during his 1632 embassy to Holland.¹⁶⁴

Arundel's belief in the power of the ancient world as symbol had important implications for Jones in the form and content of his antiquarian studies. On the one hand, Arundel's restrained personal appearance created a distance between him and Buckingham. Jones's preference for a simplified classical vocabulary is analogous to Arundel's personal style, and surely influenced by the patron with whom he traveled to Rome. In a larger sense, Jones shared with Arundel a more basic belief in the implications of personal honor, and by corollary, personal architectural style. As Jones annotated in his copy of Scamozzi, "a ma[n] [is] judged by his howse."¹⁶⁵ Arundel embodied the notion of restraint and nobility that Jones had noted in his notebook after their return from Italy. Jones's preference for an architecture with "a grauiti in Publicke Places" fits with the ideal that Arundel came to embody.

Conclusion

Jones appropriated the antiquarian methods of using literary and physical evidence in his interpretation of ancient architecture. This serious, scholarly approach gave a validity, a genealogy, to his own architectural work as it was based on antique sources and texts, sources known and respected by his patrons. The Earl of

¹⁶³ Sharpe 1978, 237-44.

¹⁶⁴ M.A. Tierney, *The History and Antiquities of the Castle and Town of Arundel*, 2 vols (** 1834), 457; cited in Sharpe 1978, 241.

¹⁶⁵ Scamozzi 1615, I, 225. Jones annotates against this passage in Scamozzi: "E pero non e punto spiacevole quel detto di Cassiodoro, che tale si crede esser il Padrone, quale noi vediamo esser costituita, & ordinata la sua casa: e certo non e cosa, che tra tutte le cure, o pubbliche, o private trapassi di giocondita, e piacere a quella del fabricare, e godere una bella, e comoda casa, essendoche e cosa da prudente, e da huomini grandi, e di grosse facolta."

Arundel can be taken as representative of this group, if not extraordinary in his personal and financial commitment to the antique.

Jones, like Serlio, saw the antique as one possible source for the modern architect, to be evaluated in the light of contemporary theory and the needs of the building program. Antique models could be the authority for independent decisions on the classical language of architecture. Jones's attitude, however, toward the antique was always rather academic and even detached. The ancient world, with its stories, and fantastic monuments, and near magical power gained through historical distance, could be used selectively. In his masque designs the antique, as interpreted from prints, is the setting for contemporary actions. There antiquity served as a great arena in which actions take place, and that evoked ideals of scholarship, learning, nobility.

The study of the antique was also connected to the study of the orders, the rules governing classical architecture of the nobility, as the rules of grammar govern the proper use of any language. It was the architect's choice to decide the boundaries between what to imitate. The ancient monuments were fertile ground for the creative architect to invent, within the rules already learned of the orders themselves. That these elements can no more be separated in the process of design than in the grouping of his library explains much of Jones's ideas about the efficacy and power of the antique.

CONCLUSION

This thesis began with a study of a unique archive, the library of the architect Inigo Jones. It was my intention to study the origins and significance of English classicism through the personal annotations of its main practitioner, a lively and self-consciously academic individual. In following Jones, however, I found myself in a world far different from that I had imagined, and one where architectural language and imagery evoked an unexpected power and vitality. The library, in its personal evidence of Jones's self-study, and public function through its use as a professional tool, served as a key to the broader implications of this change in architectural style.

In the first half of the thesis I presented some of the ways architectural imagery and thinking would have been understood by the informed architectural observer, and astutely manipulated by Jones through his methods of study. Of the many themes, two stood out as central: the use of the orders by Jones as a means to capitalize on the rich language of columns already in use in England; and the evocation of ancient Rome through the use of antique precedent, a potent theme for a culture concerned with the definition of family honor and ancient genealogy. Jones's use of the orders based on a careful study of their grammar and usage gave new life to the image of columns, a form of architectural ornament associated with learning and humanist ideas of education. In the hands of Jones that vocabulary was infused with a particular Vitruvian notion of architectural decorum adapted to the pressing concerns of the English nobility. In his understanding of the etymology of architectural classicism, Jones adopted the methods of English antiquarians, by using various forms of evidence and a comparative method of interpretation. Antiquarianism was an important concern for patrons such as Arundel intent on establishing the ancient sources of their family's nobility.

The use of the orders and the study of the antique are central concerns in the study of classicism generally, and were particularly powerful for England in the early seventeenth century. But further, as themes, they tie English classicism into the study of European classicism of the sixteenth century and later, and help to set the stylistic change in one country in broader geographical and cultural terms.

While antiquity and the orders are crucial, other topics would benefit from a similar cultural and intellectual analysis. Jones was particularly sensitive to the use of materials, making copious annotations on Palladio's use of stucco covered brick to save expense and achieve interesting visual effects. The elegant and varied stone

used throughout Europe received comment by travellers, and Robert Dallington went so far as to say that the Italian buildings excelled over those in England because of the beautiful Carrara marble.¹ Fifty years earlier the fashion for using exotic stone received harsh words from William Horman: "Some be so curyous and costlewe i[n] buyldi[n]ge: that they dysdane to have the stones of theyr owne cuntrey: but they wyll have strange & ferre fette stone: of great and outragious cost."² Classicism evoked the idea of the exotic and foreign, and took advantage of a taste for luxury goods.

As I have suggested throughout the thesis, the architectural ideas of Jones emerged from a rich intellectual and social culture that valued humanist learning and classical imagery. Ancient texts, and by association ancient architecture, were fundamental to the educational system and the imagery of the state, the maintenance of chivalry and the presentation of the self. However, for all its integration within the very fabric of English society, English classicism in the years before the Civil War remained an anachronistic style, used in only limited ways even by its greatest proponents. Even Arundel, the most important collector of classical antiquities, scholar, and advocate of Roman *gravitas*, added only modest Italian gates and windows to his London house. From the outside, the spectator would never have known that this medieval house contained an extensive group of ancient statues, or modern paintings. (Figure 63) Only at the highest level, for the royal court, were fully classical buildings planned or built. Why was there a resistance to build in a classical style?

The Banqueting House, as the purest symbol of a royal policy of the divine right of kings and the creation of a new Rome was a stylistic avant-garde reserved for the royal patron. Courtiers around James, and to a lesser extent at the Caroline court, may have felt it inappropriate to fully mimic a royal prerogative. The addition of a classical gateway or window design, by the Royal architect, connected them with the court through a solidarity of style without impinging upon the royal privilege.

The antagonism over style, classical versus vernacular, and the political implications of outward ostentation, may have constrained some to build modestly, adding only minor signs of the new style to an existing house, or placing them in a

¹Dallington 1596, 28.

²Horman 1530, sig. Viiiiv.

setting where it was more acceptable, in the garden, or inside as chimney overmantles, for example. Jones's himself had suggested this use of inventive details only in those places, for they "do not well in sollid Architecture and ye facciati of houses, but in garden loggis, stucco or ornamentes of chimnie piecces, or the innerparts of houses . . ." ³

A two-tiered system of architectural thinking and practice may well have existed: classicism in the immaterial level of intellectual metaphor and cultural symbol, co-existing with a pervasive architectural building practice. That the cultural language was not immediately put into practice would not have diminished its powerful hold on the imagination of patrons and its observers.

Jones's architectural classicism represented only one of the possible ways a patron could have incorporated humanist culture directly and visibly into a built form. Much more common, and in keeping with accepted values, was the use of inscriptions on the outside of a building, often in conjunction with heraldry. When the inscriptions appeared in Roman lettering, equivalent to the italic hand adopted for signatures, the awareness of ancient and modern continental architecture was immediately apparent. On the inside of buildings inscriptions in the form of *sententiae* could be used to adorn the long gallery. Nicholas Bacon (father of Francis) had *sententiae* taken from Seneca, Cicero and other classical authors, and texts were incorporated directly into the fabric of his house, Gorhambury. ⁴ While the painted inscriptions do not survive, a manuscript copy was made to record the passages used, and testify to the owner's learning and discretion in the choice of phrases. (Figure 64) There, reading is impressed in a visible and literal way into traditional vernacular architecture, and the building becomes a commonplace book of passages out of ancient authors.

Dividing the vernacular architecture of England and the classicism of the Stuart court, however, was the singular figure of Inigo Jones. His library and annotations attest to his persistent desire to embed architecture within the humanist cultural dialogue of his day. His profession depended on the intellectual status of the field and the selectivity of his clientele. As the efficacy of heraldry diminished from its over-use, architectural classicism retained its cachet. The significance of Jones's architecture for later generations of English classicists cannot be explained

³Roman Notebook, fol. 76r.

⁴*Sir Nicholas Bacon's Great House Sententiae*, edited and with an introduction by Elizabeth McCutcheon. *English Literary Renaissance Supplements* 3 (1977).

solely on the basis of a shifting paradigm from heraldry to classicism, however, or the desire for new symbols of family honor. Henry Wotton in his treatise dedicated to the education of the visual discernment of a generation of new and potential architectural patrons, urged the adoption of a new standard of judgement, 'the opticke rule.' The quality of Jones's architecture required certain skills in the viewer to ascertain what John Dee had described in 1570 as "The Immaterialitie of perfect Architecture," an understanding of the geometry in the composition of the facade and the building as a whole.

A PROFESSIONAL COLLECTION

Now I am on the last half-emptied case and it is way past midnight. Other thoughts fill me than the ones I am talking about—not thoughts but images, memories. Memories of the cities in which I found so many things: Riga, Naples, Munich, Danzig, Moscow, Florence, Basel, Paris . . . O bliss of the collector, bliss of the man of leisure! . . . For inside him there are spirits, or at least little genii, which have seen to it that for a collector—and I mean a real collector, a collector as he ought to be — ownership is the most intimate relationship that one can have to objects. Not that they come alive in him; it is he who lives in them. So I have erected one of his dwellings, with books as the building stones, before you, and now he is going to disappear inside, as is only fitting.

—Walter Benjamin, "Unpacking My Library"¹

On July 22, 1650, when he was seventy-seven, Inigo Jones made out his will; and died at Somerset House in London less than two years later. He left money to relatives and servants and a bequest for a monument to be erected at St. Benet's, Paul's Wharf. To his pupil and assistant John Webb, however, he left the tools of his trade: the collection of books, cuts, designs, instruments that he had carefully acquired during his career.² That legacy changed the course of architectural classicism in England, as Jones's collection of books recorded in their margins the comments of the architect to the text and images. Jones owned an important collections of architectural treatises. It was not the largest collection of the time, many masons and patrons had more titles³; and it was not a collection of particularly impressive editions or elaborately bound books. What marks these books

¹ Walter Benjamin, "Unpacking My Library," in his *Illuminations*, ed. Hannah Arendt (New York: Schocken Books, 1969), 67.

²Inigo Jones's will: PRO 227 Bowyer.

³See the "Appendix: Books on art, perspective and architecture in English Renaissance Libraries 1580-1630," in *Gent* 1981, 66-86.

was not only the subsequent fame of their owner, but his evidence in his handwritten marginalia of his reading. Few autograph Jones buildings survive: there was not the funding to build many, some have been heavily altered, others were destroyed in the fire of London in 1666. Drawings survive by Jones, over 200 architectural drawings and a large number of figural sketches and drawings for the masques.⁴ As important as these documents are of the thought and design processes of their owner, it is without question Jones's library, and particularly his copy of Andrea Palladio's *I quattro libri*, that has been seen as the best evidence of Inigo Jones's architectural ideas.⁵

The fame of Jones's annotated Palladio was already known by the early eighteenth century, as Giacomo Leoni promised on the title-page of his 1715 English translation of Palladio to include "several Notes and Observations made by Inigo Jones, never printed before."⁶ Leoni's promise was premature. Dr. George Clarke, amateur architect, Fellow of All Souls, and avid collector of architectural treatises, would not give Leoni permission to publish Jones's notes in his copy of Palladio. It was not until after Clarke's death that Leoni received permission to transcribe and publish the annotations in his third edition of the Palladio translation in 1742.⁷ By then Clarke had moved from All Souls to Worcester, and

⁴The recent catalogue by John Harris and Gordon Higgott (Harris/Higgott 1989) discusses the technique and projects related to the major architectural drawings. The extensive group of figural studies, mostly after printed sources, have never received the attention they deserve. Articles by John Peacock and Jeremy Wood have made important inroads on this material. Peacock 1982, 193-216; Wood 1992, 248-70. It is interesting however, that these drawings, being after printed sources have seemed less compelling to scholars. Rather it was precisely their format as printed that gave both books and prints that gave them an authority.

⁵Jones's copy of Palladio has been reprinted in a facsimile edition, *Inigo Jones on Palladio being the notes by Inigo Jones in the copy of I quattro Libri . . . 1601 in the Library of Worcester College*, ed. Bruce Allsop (Newcastle-upon-Tyne: Oriel Press, 1970). The printing technique of the facsimile does not allow the annotations to be read easily; and the accompanying volume of transcriptions is highly inaccurate. See Wittkower 1972.

⁶Andrea Palladio, *The Architecture of A. Palladio; In Four Books. . . . Revis'd Design'd, and Publish'd by Giacomo Leoni, a Venetian* (London: John Watts, 1715).

⁷On the Leoni edition, and the machinations to publish the Jones annotations, see *s.v.* "Andrea Palladio. I Quattro Libri, Giacomo Leoni," in E. Harris 1990, 355-59. As Harris points out, Leoni's interest in Jones and Palladio coincided with that by Colen Campbell and Lord Burlington, although Leoni did not follow them in this. Leoni would have had this idea from his mentor Matteo de' Alberti in the Palatine Court. (E. Harris 1990, 358)

left his new college Jones's Palladio and the rest of his large collection of books and drawings.

What is the importance now of Leoni's later, eighteenth century interest in Jones and Palladio? For the twentieth century scholar of Jones's library, Leoni's pairing of Jones and Palladio, his belief that there was an eager architectural audience in England interested in the early Stuart architect's commentary, and dogged pursuit for the rights to publish, have affected all subsequent research. Since Leoni, and the subsequent interest of Colen Campbell and Lord Burlington, Jones has been the pre-eminent Neo-Palladian, and therefore, in the historical re-creation of the eighteenth century, the true link for England with a noble architectural past.⁸ The story of Jones's creation as a Palladian at the hands of the eighteenth century classicists is another story, but even in outline form crucial to keep in mind here.⁹ For the readings of Jones in the architectural theorists of the sixteenth and early seventeenth century has undeservedly favoured his copy of Palladio to the exclusion of the other treatises in his library.¹⁰

In part, this is a story that Jones himself created. On a front flyleaf in his copy of Palladio Jones repeatedly wrote his name and that of Palladio. He inscribed the 1601 edition of the valuable treatise, difficult to acquire in England at the time, as his: it was not a borrowed book. But more importantly, he writes himself as Palladio, *architetto extraordinario*, as he put it. Jones respected Palladio, his designs, his position of status with his patrons, his evident learning and erudition, but mostly Jones admired his book. It was the thing in front of him that Jones found so compelling: the simple layout, the clear language, the regularity of the plans, the

⁸Jones represented for the 18th century "all regularity of Palladio with an Addition of Beauty and Majesty, in which our Architect is esteemed to have out-done all that went before." Colen Campbell, *Vitruvius Britannicus*, quoted in Bold 1988, 5.

⁹The powerful effect of Burlington and his circle on the historiography of Jones continues until today. In a recent article appeared "The true value of Jones's creativity is not realized until the eighteenth century, when Pope's and Burlington's articulate neoclassicism governs English thinking." Jordan 1991, 310.

¹⁰The way in which the later interpretation of Jones has influenced scholarship appears clearly in the study of Jones's drawings, where the urge to maintain a canonical Jones reigns supreme. See the review of the Inigo Jones drawing exhibition held in London at the Royal Academy in 1990, by Maurice Howard, "Review", *Renaissance Studies* 4, no. 3 (September 1990), 355-58.

clarity of the classical vocabulary, that was the Palladio Jones knew.¹¹ He never had the opportunity to meet Palladio, of course. It was the Palladio of the treatise and the Palladio of the drawings in the collection of Sir Henry Wotton that spoke directly to Jones.

The reputation of Jones as a serious and important architect has always relied on his study of treatises, knowledge of ancient architecture and ability to communicate to his patrons and learned public. That reputation has been ensured through the survival of his library, even in its partial survival.

This reputation of Jones as learned and scholarly was firmly enough in place so that by 1663, eleven years after his death, Walter Charleton could describe Jones as "worthily reckoned among the most excellent architects this nation ever bred and a general scholar."¹² That this appeared in Charleton's rebuttal to the treatise on the Roman origins of Stonehenge published by John Webb, Jones's assistant, after his death, indicates that Jones's legacy had been well established even during his lifetime.

Jones's learning was to have had a practical application in the academy proposed by Edmund Bolton. Bolton, perpetually in search for a patron, shifted careers in search for a permanent income and position. In 1617 he approached George Villiers (who was to become the duke of Buckingham) to support plans for an 'academ roial,' for the study of history, antiquities, heraldry and literature.¹³ Bolton's knowledge of heraldry and arms was used in his treatise *The Elements of Armories* (1610), and dedicated to the earl of Northampton. The academy was to contribute to the creation of a new history of England. Bolton's project to establish

¹¹See the discussion of the importance of the treatise as the format for Jones's study of Palladio in Bold 1988, 10.

¹²Walter Charleton, *Chora Gigantum, or the Most famous Antiquity of Great-Britain, vulgarly called Stone-Heng, standing on Salisbury Plain, restored to the Danes* (London: Henry Herringman, 1663).

¹³Woolf 1990, 191-92.

an academy in England included Jones as a member.¹⁴ It was in conjunction with those plans that Bolton gave a copy of Gianfrancesco Bordino's *De rebus praeclare gestis a Sixto V* (Rome 1588) to Jones and inscribed it on 30 December 1606:

Ignatio Jonesio suo per quem spes est, Statuarius, Plasticen, Architecturam, Picturam, Mimosim, omnemque veterum elegantiarum laudem trans Alpes, in Angliam nostram aliquando irrepturas. MERCURIUS IOVIS FILIUS.¹⁵

Bolton praises Jones's learning, invoking him as the god Mercury, and holding up the Rome of Sixtus V as a model for the cultural reforms possible for England. By writing his programme in Latin, Bolton connects his ideal to a tradition of "veterum elegantiae" that had its roots in the theory of Lorenza Valla's *Elegantiae linguae Latinae* (about 1440) and later in Erasmus's comparison of elegance and the visual arts.¹⁶ Bolton was crucial in encouraging Jones in a line of theoretical thinking, but even more, in a line of self-education that would directly serve the practice of architecture.

John Peacock sees Bolton as an advisor to Jones: "Bolton sees his relationship with Jones like those between the scholars and artists who joined together in the Italian academies, where the artists were absorbed into the humanist tradition, and

¹⁴E.M. Portal, "The Academ Roial of James I," *Proceedings of the British Academy* 7 (1915-16), 189-208; G.H. Turnbull, "Samuel Hartlib's Connection with Sir Francis Kynaston's Musaeum Minervae," *Notes & Queries* (19 January 1952), 33-37; I. Bignamini, "The 'Academy of Art' in Britain before the Foundation of the Royal Academy in 1768," in *Academies of Art between Renaissance and Romanticism*, ed. Anton W.A. Boschloo, *Leids Kunsthistorisch Jaarboek* 5-6 (1986-87), 434-50; P.M. Rattansi, "The Intellectual Origins of the Royal Society," *Notes and Records of the Royal Society of London* 23, no. 2 (December 1967), 129-43.

¹⁵Gotch 1928, 251. The following discussion of Bolton's dedication is based on Peacock 1990, 246-54. While Peacock gives a detailed and illuminating discussion of Jones's relationship to continental art theory and practice, his approach is that "as the first English artist to acquire a deep and inward knowledge of the whole Renaissance tradition, [Jones] was able to grasp just how marginal to that tradition was the visual culture of his own country: in spite of the impact of Holbein and numerous lesser continental artists, English art was still in outer darkness." (246) The evidence is to the contrary. England eschewed a continental classical style during Elizabeth's reign in order to promote a national style. That this art does not appear Italianate to 20th century eyes is a comment on our visual traditions and not those of the 16th and 17th centuries. See for example Svetlana Alpers, *The Art of Describing. Dutch Art in the Seventeenth Century* (Chicago: University of Chicago Press, 1983).

¹⁶Peacock 1990, 248-49.

seen not as craftsmen with manual tasks to discharge but intellectuals with knowledge to impart."¹⁷ Although Bolton puts forward this relationship as a possibility, Jones may have taken the suggestion but then acted on it in his own fashion. In many ways, the library was to serve as Jones's advisor, each source with its own point of view and agenda. From the evidence of the marginalia, it could be said that Jones kept up a dialogue with his books as artists in Italy might have discussed with scholar advisers.¹⁸

Jones left his library to his assistant John Webb, his follower and surrogate son. In this Jones was continuing a tradition held by masons who left their tools and books to the next in line. The importance of the masons books was such that they were often named in wills. As early as 1546 a mason John Multon specified the dispersal in his will of "all my portatures, plaates, books with all my other tooles and instruments."¹⁹ A mason's collection of books and drawings was a cumulative resource: the models collected by one generation would be preserved and passed onto the next. In his will Nicholas Stone, the mason and sculptor who had worked closely with Jones, left his collection to his sons: "I give unto my three sonnes Henry Stone Nicholas Stone and the sayd John Stone all my bookes manuscripts draughtes designes instrumentes and other thinges thereunto belonginge which nowe remayne in my studie in my nowe dwelling howse to bee equally divided amongst them share and share alike and then lotte to bee caste amongst them for those shares."²⁰ There is no evidence however, that while Jones left the nucleus of an important architectural reference collection to Webb that he had inherited any from his mentor of family. Indeed what is known of Jones's father, also named Inigo, is that he came from a modest clothworker family.²¹ Jones may have had as

¹⁷Peacock 1990, 248.

¹⁸See the discussion of advisors in Charles Hope, "Artists, Patrons, and Advisers in the Italian Renaissance," in Lytle 1981, 293-343.

¹⁹W. J. Williams, "Wills of Freemasons and Masons," *The Masonic Record* 16 (1936), 204; cited in Airs 1975, 39.

²⁰Published in Stone [1620-30] 1918-19, 145. See also the will of architect Francis Carter (d. 1630). In his bequest to his son William he left: "my cabinet in my closet with tabell dorins and bookes of Arkitekter that belong to me and those above in his chamber and study that belong to himself." (PCC 110 Scroope), cited in H.M. Colvin, *The History of the King's Works*, Part 1, 1485-1660 (London: Her Majesty's Stationary Office, 1975), 134. John Smythson, son of Robert Smythson, left his collection of "Library and Books" to his son Huntingdon. (PCC Seager 110) cited in Girouard 1983, 278.

²¹Harris 1973, 16.

professional start as a joiner at St. Paul's Churchyard. However, in terms of his library, Jones took great pains to form the collection himself.

The Books on the Shelf

The fifty books that survive from Jones's library are clearly only part of what he owned. Most of the volumes are now in the Library at Worcester College, part of the extensive collection of treatises left to the College by George Clarke.²² In the 1950's those books that could be ascribed to Jones through his signature on the titlepage or in some cases on the basis of annotations in his hand were separated out from the rest of the architectural library. No library list survives of Jones's collection, other than the broad category of "books" listed in his will. Without such a list it is impossible to know the full scope of the library during Jones's lifetime.

What survives is a product of the later history of the library. The professional resources Jones had so carefully collected passed to his assistant Webb, who stated in his will that they were always to be kept together.²³ Webb left the material to his son, William. Soon after his father's death, however, William Webb began to sell off the collection. Books were already on sale in 1675, before William's death.²⁴ This group of the Jones material went to John Oliver, city Surveyor, and was in succession purchased by William Talman.²⁵ His son, John Talman, added the material to his growing collection of drawings and antiquarian material.²⁶ In the 1720's Lord Burlington purchased part of the Talman collections, which is now divided between Chatsworth and the Royal Institute of British Architects.²⁷

A second part of the Jones/Webb collection went to Oxford. It is known that the Oxford engraver Michael Burghers owned two books, the *Palladio I quattro libri*

²²Wilkinson 1923, 305-8.

²³See the discussion of Webb's collections in Bold 1989, 8-9.

²⁴H.W. Robinson and W. Adams, eds, *The Diary of Robert Hooke 1672-1680* (London: Taylor & Francis, 1935), 156, 165; quoted in Bold 1989, 9.

²⁵John Aubrey notes that all of Inigo Jones's "papers and designes, not only of St. Paul's Cathedral etc, and the Banqueting House, but his designe of all Whitehall" were in John Oliver's possession. John Aubrey, *Brief Lives, Chiefly of Contemporaries*, ed. Andrew Clark (Oxford: Clarendon Press, 1898), II, 10.

²⁶See the forthcoming study of John Talman's collections by Hugh MacAndrew. I am grateful to Mr. MacAndrew for discussing his research with me.

²⁷John Harris and Gordon Higgott, "Provenance of Inigo Jones's Drawings," in their catalogue, Harris/Higgott 1989, 22-4.

(1601), which he inscribed as owner in 1694; and Sebastiano Serlio's *Libro primo [quinto] d'architettura* (1560-62). Most of these drawings and books, aside from the Serlio which was donated by Burghers to Queens College in Oxford, were acquired by George Clarke, and eventually left to Worcester College in 1736.²⁸ Clarke's collection of treatises and drawings increased as he took on the role of advising and supplying designs to University projects from 1705. It was during this period, in 1709, that he purchased the Jones Palladio; and in 1724, the major group of drawings by Jones and Webb, and the remainder of the library.²⁹

A few individual volumes are in other collections. Burlington evidently acquired books along with his purchase of the Jones masque and figural drawings, including one of the most important of the annotated Jones volumes, his copy of Daniele Barbaro's commentary on Vitruvius; as well as Giovanni Battista Cherubini's edition of *Le cose meravigliose dell'alma città di Roma*, 1609. Jones owned two editions of Serlio: *L'Architettura*, vols. 1-5, 1559-62 is now at Queen's College, Oxford; and *Tutte l'opere d'architettura et prospetiva*, 1600, at the Canadian Centre for Architecture, Montreal. Jones's copy of Gian Paolo Lomazzo, *Trattato dell'arte, della pittura, scoltura, et architettura* (1585), is in a private collection in London.

From the bibliography of books that we know to have belonged to Jones (see Appendix) certain facts stand out. All of the books save one is in Italian or French.³⁰ This certainly must be due to the later history of the library—the foreign titles selected out as they were progressively sold—rather than Jones's choice to have only foreign titles. It may be that Jones only signed the non-English language books as they were harder to come by, and it was more important to indicate his ownership in those cases.

²⁸In a letter of 1713 Clarke mentioned acquiring some of the material, but it is not known which part or from whom. Colvin, *Biographical Dictionary 1600-1840*, 217. An annotation in Clarke's 1569 copy of Serlio notes that Burghers gave the Serlio to Queens. Bean 1972, 55, n. 31.

²⁹John Harris, "Dr. George Clarke, in memoriam," *The Connoisseur* (August 1964), 264.

³⁰At the Huntington Library (San Marino) is a copy of George Chapman's *An Epicede or Funerall Song: On the Most Disastrous Death, of the High-Borne Prince of Men, Henry Prince of Wales, &c.* London, 1612, inscribed with a dedication to Jones from Chapman. As I discuss in the Descriptive Bibliography at the end of the thesis, I believe that the handwriting is that of Jones. L.A. Cummings does not think that it is the handwriting of Chapman. In any case, given their friendship, Chapman may well have at some point given Jones a copy of this book. Jones may well have designed the tomb for Chapman, now in St. Giles in the Fields, London. See White 1985, 27.

Jones's choice of titles would have satisfied both the training suggested for the architect, put forth by Vitruvius and followed in Renaissance treatises; and the reading suggested for young aristocratic men in popular works such as Peacham's *The Complete Gentleman*. Vitruvius urged the architect to study philosophy, history, music and medicine, among other disciplines, and Jones's interests followed these broad recommendations. In England, John Shute's treatise recommended a similar course of study.³¹ In the various chapters which discuss history, geography and mathematics, Peacham lists the ancient authors most useful to read. Jones's surviving books in these fields are all included in Peacham, and represent less any direct connection between the two—although they did know one another—then to the general nature of Jones's study.

From the marginalia it is possible to make additional lists of those books that Jones refers to as references to support or refute the argument on the page before him. For instance, he refers to the Roman history by Guillaume du Choul as evidence in questioning Palladio's reconstruction of the Temple of Peace.³² Jones does not place an exact folio reference here, though, a technique he often used when the book is in front of him. It is more likely that he had seen the book in some other collection, rather than that he owned the book himself, and remembered du Choul's plate of the Temple. It is important to make a distinction between those books that Jones owned and those he had access to in other collections.

A great deal of Jones's library and collections has yet to be found. Some of his most used books, such as his copy of Antonio Labacco's reconstruction of Roman antiquities, are lost.³³ A collection of books he would have used for masque and costume designs and prints, essential for his career at court no longer survive.³⁴

Most interesting would be to recover the notebooks he refers to in his annotations. Jones's method of reading, more fully discussed in a subsequent chapter, entailed taking notes from the printed books into personal notebooks. These were, by his own reference, more private than the library which would have been a reference source for his practice. One of these books survive, the Roman Notebook, now at Chatsworth. But Jones makes reference to other volumes, now missing. He

³¹Howard 1988, 429-30.

³²Guillaume du Choul, *Discours de la religion des anciens romains* (Lyons 1556, Lyons 1581).

³³A list of books missing from Jones's library appears in the Appendix.

³⁴See Peacock 1982.

refers to them by lettered title, as in "Notebook A."³⁵ This suggests a sequential ordering, a personal referencing system to his readings.

We have some idea of what these notebooks would have been like from the surviving example. Now known as the "Roman sketchbook," the collection of drawings, passages quoted from printed texts, and personal observations was begun in Rome but returned to by Jones later in his career. As Gordon Higgott and John Peacock have noted, Jones made drawings and notes while in Rome on the study of drapery and on the study of antique ships. He added commentary on architectural designing when back in London on the 19 and 20 January 1614 (old style). The final group of additions to the volume are from the 1630's, including passages taken from Lomazzo and drawings.³⁶ The thematic organization of the passages and use of various sources organized around topics suggests that this was one volume of an

³⁵Jones refers to "Notebook A" in his copy of Vitruvius:

1. Book I, chapter VI, "Della divisione delle opere," p.57. Against the text of Vitruvius: "Ma chi con maggiore diligenza hanno investigato, otto ne posero. & specialmente Andronico Cirreste, il quale ne fece lo essemplio, fabricando in Athene una Torre di marmo fatta in otto faccie, & in ciascuna scolpi la imagine d'un uento, che riguardava contra il soffio ciascuno del suo" (Jones's underlining). Against this Jones wrote: "Andronico Cereste | [hand] This ottangell toure yt standes and ye figures of ye windes hinge on each side but ye triton of brass is gon. see my noat booke A. fo - 2."

2. Book IV, Chapter VII, "Delle ragioni Toscane de i sacri Tempi," 199. Against the text of Vitruvius: "Egli si fa anche di altre maniere di Tempij ordinata da gli istesi compartimenti, ma in altro modo disposte. Come è il Tempio del gran Giove. & piu argutamente nel bosco di Diana aggiuntovi della destra, & della sinistra alle spalle dello antitempio le colonne. In questa maniera prima fu fatto il Tempio, come è quello di Castore, nel Circo: di Minerva in Athene nella rocca: & di Pallade nell'Attica Sunio." (Jones's underlining) Against this Jones wrote: "Minerva Athens nella rocaa se my noatbooke of Architect A."

Jones refers to Notebook A in Palladio, Book IV, p. 29 against an illustration of the Temple of Nerva Traiano (Minerva): "N This corona hath no cimatum but only a fillett but both it and ye waue are carved see my noat booke A."

More generally, Jones refers to his "notes" against the following passage in Vitruvius, Book III, Chapter II, "Di cinque specie de Tempij," p. 129: "[Vitruvius] Ma le maniere di que Tempij sono basse, larghe, humili, & nel latino barice, barricephalæ, hanno difficultà: [Barbaro commentary] benche quel barricephalæ si puo intendere l'auorio, che copriua le teste di que legni. perche gli Elefanti sono detti barri. ma quel barice ha difficile interpretatione" (Jones's underlining) Against this Jones wrote: "Barricephale is ye Civering of ye Timbers wth Iuory. this place not well rendered. se my notes."

A second notebook included references to machines, perhaps relating to scenery design. In his copy of Vitruvius Jones writes "See my Second noot booke fo: 55" against the chapter heading "D'un'altra sorte di machina da tirare" (Book X, Chapter V, p. 449).

³⁶See the discussion of the sketchbook by John Newman, "The Inigo Jones Centenary," *Burlington Magazine* 115 (1973), 558; and John Peacock, "Roman Sketchbook," in Harris/Higgott 1989, 288-90. Wood 1992 discusses this redating, 248 n. 9.

ongoing project. Further, the book is made of 89 unnumbered folios, but only 31 single sides contain drawings or notes by Jones. He did not begin at the front and then go through the sketchbook, moving on to a new notebook when that one was used up. This notebook, and most probably the other missing volumes, were like commonplace books for Jones, notes taken out of other sources as part of a process of self-education. The part these notebooks played in Jones's education is made clear by his use of his motto at the front: "Altro diletto che Imparar non trovo." This is the same motto that Jones placed on the titlepage of his copy of Vitruvius, and ties his reading, writing and drawing practices together.³⁷

Jones saw his library as part of a larger architectural laboratory filled with various kinds of evidence. Books were only one part of the collection Jones left to John Webb. The list includes a range of materials required for the practice of architecture. Jones's library was not a place of solitude and retreat from the world: it was an active, semi-public center for the study and practice of architecture. In a large part Jones's collections were directed toward his role as designer for masques, a task that involved large numbers of people. Jones's library was the focus for a designing workshop that was involved in all manner of creative visual activity. The large number of surviving drawings for the masques, a form of drawing not necessarily saved as precious once the masque was over, indicates just how large this production was. This sense of activity surrounding the books and Jones's reading is difficult to recreate with our modern sense of the library as a place of seclusion.

Cuts and Drawings

On the bottom of many pages of his copy of Palladio's *I quattro libri* Jones refers to drawings he has seen of the printed plates, six of the annotations associates the drawings with the collection of Henry Wotton. These annotations on the drawings of Palladio and their ownership at this point in their history, is complicated and far from certain. What can be determined is that eleven of the drawings Jones cites are now in the Burlington-Devonshire Collection at the RIBA, and that two of the six associated with Wotton are among that group.³⁸ Jones would

³⁷See the discussion of Jones's motto in Peacock 1990. Jones's return to his sketchbook later in his career may have indicated a desire to re-train himself in the techniques of *disegna*, inspired by the visit of Rubens to London in 1629-30. The effect of this visit and Ruben's method of drawing after the work of earlier masters in discussed in Wood 1992, esp. 264-66.

³⁸See Newman 1992.

have had access to Wotton's collection as he did to the collection of Arundel and the royal collection, particularly that of Prince Henry.³⁹ Three of Inigo Jones's own Palladio drawings survive at Worcester College: plan for the Villa Thiene; elevation for the Palazzo Chiericati, Vicenza; and a project elevation for the facade of San Petronio, Bologna.⁴⁰ Similarly, there are Jones drawings included amongst the Palladio drawings at the RIBA.

The drawings were particularly important throughout his career as Jones continued interest in disegno and the possibilities of drawing as a form of communication. Therefore, no matter the size of Jones's own collection of drawings, he would have access through patrons and those of his circle to many more drawings.

One of the great resources, now missing, would have been the large number of drawings by Scamozzi owned by the Earl of Arundel. Very few Scamozzi drawings survive, the majority were apparently purchased by Arundel and are listed in his inventory as filling two boxes.⁴¹

Jones's relationship to the page in front of him was physical and direct, and he often seems to have had a compass and pen in hand especially when he was working through technical and mathematical sections of his reading. Many of the pages show evidence of his having used a compass in the inscribed lines and pricks along the edge.⁴² Traveling was an excellent time to buy books as well as instruments, compasses and rules that could not be bought in England. Jones notes that he could check the relative measure of linear dimensions with his *passetto* that he bought in Rome.⁴³ A *passetto* was a unit of measurement common in central Italy, and equaled 2 Florentine *braccia*. In this case, however, Jones is referring to the rule, often made of wood and composed of detachable segments, used to measure

³⁹Strong 1986, *passim*.

⁴⁰Harris 1971; Burns 1975, 241-44.

⁴¹The inventory describes "12 and 2 forcieri: casse con disegne tra gli quali sono 2 forcieri con disegni d'Architettura de Vincenzo Scamozzi." See Lionel Cust, "Notes on the Collection formed by Thomas Howard, Earl of Arundel and Surrey," *Burlington Magazine* 19 (1911), 282; cited in A.A. Tait, "The Theoretical Drawings of John Webb," 59-93 in Harris/Tait 1979, 61 n. 2.

Also see Keith 1935, 525-35; Harris 1971, 34 n. 3.

⁴²See the chapter on Jones's reading method.

⁴³Palladio 1601, sig. RRRR4.

that length.⁴⁴ Instruments were particularly necessary for certain design problems, such as composing the volute of the ionic order.⁴⁵ That instruments were included in the list of books that Jones and other masons left indicates their value to the profession.

Instruments were often extremely expensive, and far exceeded the amount spent on books. After the death of Sir Walter Raleigh, his wife wrote to Lady Carew, attempting to recover his extensive and valuable library and related collections from Sir Thomas Wilson, and making particular mention of the instruments. "I beseech your ladyship that you will do me the favour to entreat him to surcease the pursuit of my husband's books or library . . . Sir Thomas Wilson hath already by virtue of the King's letter, fetched away all his mathematical instruments. One of them cost a £100 when it was made."⁴⁶ Vincenzo Scamozzi discussed the instruments available for architects, but warned against the architect thinking that design rested in the quality and expense of the tools themselves.⁴⁷

A crucial difference between Jones's architectural practice and the work of his contemporaries can be made in their collections of instruments. Jones, like Raleigh's general scientific interest in instruments, or Scamozzi's discussion of specialized tools for the architect, owned exotic tools, ones which could compute distances in foreign measures or assist in forming a complicated ionic volute. These instruments, like the treatises that they shared space with in Jones's library, were difficult to acquire but part of the scientific enterprise of architectural classicism. The portfolio of Robert Smythson, by contrast, the architect of the generation immediately preceding Jones, includes drawings for tools for use on the building site.⁴⁸ (Figure 65)

⁴⁴ S.v. "passetto," Salvatore Battaglia, *Grande dizionario della lingua italiana*, vol. XII (Torino: Unione Tipografico-Editrice Torinese, 1984).

⁴⁵ For example Giuseppe Salviati, *Regola di far perfettamente col compasso la voluta et del capitello ionico et d'ogn'altra sorte per Iosephe Salviati ritrovata* (Venetia: Per Farnescio Marcolini, 1552). See Burns 1975, 101.

⁴⁶ Quoted in Oakeshott 1968, 291.

⁴⁷ At the beginning of his chapter "De gli stromenti, che servono all'Architetto, e le materie per disegnare," Scamozzi wrote "Perche molti si sono dati à credere, che il disegnar bene consista più tosto nella bontà, e bellezza di stromenti, che in altra cosa; però si sono ingegnati à tutto lor potere d'hauer cotai stromenti . . . mà alla fine si sono di gran lunga ingannati: esendoche le belle inuentioni, la gratia delle forme, e le leggiadria del polso della mano assuefatta al disegnar bene preuale ad ogni altra cosa." Scamozzi 1615, I, 49.

⁴⁸ RIBA Smythson II 26/28.

Jones often used prints even if he had access to the original works. The prints were essential sources for that most important part of Jones's work, his designing for masques.⁴⁹ In contrast to his choice of architectural sources, in his masque designs Jones threw his net wide. As John Peacock has shown in his work on Jones's masque designs, Jones used sources from all over Europe, and sought inspiration for study and copying from all media.⁵⁰ He collected a large amount of prints, less expensive and easier to come by. The printed version, after a drawn or painted original, was to Jones like the Segni commentary on Aristotle or the Barbaro annotations to Vitruvius, an added authority on an obscure original.

Jones's library was a professional asset of reference material. The books had value only when used together, as he had used them. No one book could be read in isolation, as Jones's habit of reading comparatively testifies. This importance of the collective meaning of the library is even more apparent when his library is compared with that of Ben Jonson's for example. Jonson's library, now scattered, was dispersed even during the writer's own lifetime, as Jonson sold books when he needed the funds. Therefore, books with Jonson's signature may have been in his possession at any point during his career.⁵¹

That Jones's library contains exclusively foreign language books must certainly be a result of the library's later history. It is highly unlikely that he would not have owned English books, although he perhaps thought them less valuable and important than others. (Perhaps Jones did not inscribe them with his name, and they are now dispersed throughout various collections or amongst the books at Worcester College.) Clearly though the library must have been strong in foreign titles in those areas in which Jones read and collected.⁵²

Jones's reading of the classics was in translation, like that in humanist courses in the university or the inns of court.⁵³ Given how little is known about

⁴⁹Among other sources, Jones used the prints of Giulio Parigi, *Il giudizio di Paride* (1608); Panvinio, *De ludis Circensibus* (1581); and Callot. See the discussion in Orgel/Strong 1973, I, 41-2.

⁵⁰Peacock 1990, 255.

⁵¹McPherson 1974, 6.

⁵²Compare the collection from the library of Izaak Walton, which is thought to have contained no foreign titles. See Jonquil Bevan, "Some Books from Izaak Walton's Library," *The Library*, sixth series, 2, no. 3 (September 1980), 259-63; Lievsay 1969.

⁵³See Jardine 1975.

Jones's own early education, it is unlikely that this reading was the product of a formal course but rather a process of self-training encouraged by a strong belief in the pragmatic necessity for study. Jones's humanist training was always directed toward practical ends. In this he could stand for a typical 'student' at the end of the sixteenth century for whom classical scholarship aimed to produce effective participants in civic life.⁵⁴ That he saw classical education in terms of his own immediate needs and the envisioned needs for his patrons does not diminish the seriousness of his study. That Jones saw the architect as orator, a theme he adapted from Barbaro's commentary on Vitruvius, is one example of his joining his reading of Cicero with writings on the status and role of the architect.⁵⁵

A large portion of the books in Jones's library were technical treatises, books on mechanics (Guido Ubaldo), mathematics (Euclid), fortifications (Lorini) and surveying (Giovanni Scala); and directly reflects his conception of architecture as a scientific field of study. All of these subjects were easily available in printed editions throughout Europe by 1600. Jones had an interest in a variety of scientific areas, including medical treatises. His gift of the 1543 edition of Vesalius' *De fabrica corporis humani* to Charles I was a presentation of an elaborately illustrated book, appealing to the King's interests and representing the scope of Jones's learning.⁵⁶

The purest example of the union of classical learning and the active application was in the field of military studies. Jones's library is strong in the fields of fortification treatises and more generally, books on the art of war. The large number of military treatises by the end of the sixteenth century proved a pedagogical point that could not have been missed by Jones, the importance of printed books for the mastery of skills. In his copy of Vegetius Jones highlighted the passage "et quelle cose, che si facevano prima, si possono imparare con la pratica, & co[l] libri" with the annotation "booke and practise."⁵⁷ The importance of reading and discussion for training was also promoted in the 1600 English translation of

⁵⁴This shift in educational practice at the end of the 16th century and the influence of Ramus is discussed by Grafton/Jardine 1986, 196-99.

⁵⁵Vitruvius 1567, III, 115. Cited in Newman 1988, 440.

⁵⁶See O. Millar, "Abraham van der Doort's Catalogue of the Collections of Charles I," *Walpole Society* 37 (1960), 125; quoted in Wood 1992, 258 n. 58. On Vesalius see William A. Wallace, "Traditional Natural Philosophy," in Schmitt 1988, 208. For a related study see V. Nutton, "John Caius and the Eton Galen: medical philology in the Renaissance," *Medizin historisches Journal* 20 (1985), 227-52.

⁵⁷Vegetius, *Dell'arte della guerra* (Venice 1551), fo. 53r.

Caesar's commentaries: "Reading and Discourse are requisite to Make a Souldier perfect in the Arte militarie, how great soever his knowledge may be, which long experience and much practise of Armes hath gaynes."⁵⁸

War may have been the perfect model for skill in the arts, but there is little evidence that Jones would have needed to know these skills because he thought war was imminent. (He read military books throughout his career, not just as the civil war loomed large in the 1630's. It would be difficult to see Jones's political acumen fortelling the civil war.) The surge in military books from the last quarter of the sixteenth century indicates a group of readers who in lieu of battle, read about the latest in the changing technology.⁵⁹ The art of war was part of a broader training for young men in England, an ideal popularized by Prince Henry in his own chivalric pageants and education.⁶⁰ Jones's collection of treatises on fortification, ancient military practice, and the ancient practice of war is paralleled in many of the libraries of those attached, as was Jones, with the court of Prince Henry. Indirectly associated with the court, the library of Henry Percy, Ninth Earl of Northumberland, contained many of the same titles as Jones, also annotated heavily: Palladio's edition of Caesar's *Commentaries*; Patrizzi, *La militia romana*; and Lorini's *Delle fortificationi*.⁶¹ The interest in military matters could, with the increased number of titles available, be satisfied and learned by study.⁶²

James's reign in fact was marked by peace and avoidance of confrontation throughout Europe. The fortifications throughout England established and maintained under the Tudors were by the Civil War nearly in ruins.⁶³ Yet Jones

⁵⁸Edmunds 1600, 1.

⁵⁹J.R. Hale, "The Military Education of the Officer Class in Early Modern Europe," in his *Renaissance War Studies* (London: Hambledon Press, 1983), 233.

⁶⁰J.R. Mulryne, "'Here's Unfortunate Revels': War and Chivalry in Plays and Shows at the Time of Prince Henry Stuart," *War, Literature and the Arts in Sixteenth-Century Europe*, eds. J.R. Mulryne and Margaret Shewring (New York: St. Martin's Press, 1975), 165-89.

⁶¹Batho 1960, 246-61.

⁶²For the effect of books of war on literature see Paul H. Kocher, "Marlowe's Art of War," *Studies in Philology* 39, no. 2 (April 1942), 207-25.

⁶³The Venetian Ambassador to England, Antonio Foscarini, wrote back to the Doge and Senate "Fortresses are not needed for those within, who are perfectly loyal, and for those without all the ports are armed with a great number of ships, and these realms are masters of this part of the ocean. In the time of Queen Elizabeth, there was a guard of 800 foot and 200 horse at Berwick, the frontier of Scotlnd. Now the crowns being united in the king's obedience, this fortress remains unguarded and, it may be said, falling into ruin. It is of five

carefully annotated his treatises on fortifications, such as Buonaiuto Lorini's *Le fortificationi* (Venice, 1609). Without further evidence that Jones was involved with building fortifications I believe his interest in the field was due to a general interest in military culture, but also his understanding that knowledge of fortifications was essential in the classical training of an architect. From the treatises of Palladio, Scamozzi and Cataneo, Jones would have known of the Italian tradition where skill in fortifications was essential to architectural practice, as well as from his own travels abroad. Fortifications and military sites were a highlight of any travel abroad, much more so than the palaces and churches.

The greatest number of military books were published in Venice during the second half of the sixteenth century.⁶⁴ The large percentage of books with Venice imprints in Jones's library reflects a long standing book trade between England and Venice; and even more, a political alliance encouraged by James I. As English ambassador to Venice, Henry Wotton served as a vital channel for Venetian ideas to England, sending back books and architectural plans to clients. As an individual that Jones had direct contact with, Wotton would have been a powerful force in suggesting directly or indirectly to Jones a reading of the latest editions from Venice. Some of these Jones purchased while in Venice, others would have been available in England.

The effect of a taste for military imagery did make itself felt directly in buildings of the period, such as Smythson's Bolsover Castle and Lulworth Castle.⁶⁵ They, like the masque designs by Jones that employed chivalric imagery, were important representations of an alternative and simultaneous creation to a classical ancestry of the English past.

Jones certainly bought some of his books in England, and seemed able to find copies of even the most recently printed titles. He knew, for instance, when he was in Italy in 1614 that Scamozzi's treatise was forthcoming.⁶⁶ Scamozzi's *L'idea della architettura universale* was published in 1615, and Jones had a copy by March 25, 1617,

bulwarks on the land side, and on the side of the port of two platforms, an ancient wall but well banked up with earthworks." *Calendar of State Papers. Venetian*. Volume 13, 1613-15, 41.

⁶⁴Hale 1983, 429-70.

⁶⁵Girouard 1983, 205-32; Jean Manco, David Greenhalf and Mark Girouard, "Lulworth castle in the seventeenth century," *Architectural History* 33 (1990), 3-53.

⁶⁶"Scamozo utterly dislikes this desine of Paladio and hath maad on wch must comm fowrth in his book as far in my opignion from Vitruuious as this." Palladio 1601, II, 69.

as he notes on the titlepage. Jones noted the specific day of purchase when he bought a book abroad - the purchase date then stood as a marker for his time in that place; or when the very acquisition of a copy was a feat in itself, as with Scamozzi's compendium of architectural scholarship.

In this case Jones may have bought Scamozzi's treatise through the recently formalized Latin Stock, the arm of the Stationers Company intended to monopolize the trade in foreign titles.⁶⁷ Books from abroad had been sold unbound in England at country fairs. Increasing regulations in the sixteenth century sought to limit the rights of foreigners to trade titles in England. In 1534 retail rights were denied, and in 1616 the Stationers Company was formed to distribute imported books from a central London warehouse, and to regulate the reprinting of foreign language books for English sale.

Throughout this period, the interest in foreign titles increased, and by the 1630's booksellers who specialized in foreign titles were publishing catalogues of their particular specialties.⁶⁸ One of these booksellers, Robert Martin, dealt heavily in Italian books, including a large selection of architectural titles.⁶⁹ (See Appendix)

Jones owned some books second-hand. One of the most important examples of this is Jones's copy of Strabo's *La prima parte della geographia* (1562), previously owned by Vincenzo Scamozzi. Like other books scattered from his collection, Scamozzi signed the copy of Strabo "De' Libri di Vincenzo Scamozzi" on a front fly-leaf; and throughout the book are Scamozzi's distinctive marginal annotations of a small dot and attached line.⁷⁰ There is no indication that Scamozzi gave the book to

⁶⁷On the Latin Stock, see Graham Pollard, "The English Market for Printed Books," (Sandars Lecture, 1959), typescript at the Warburg Institute, University of London; Rhodes 1966.

⁶⁸Rossi 1989, 24.

⁶⁹By mid-century William London's *A Catalogue of the Most Vendible Books in England, Orderly and Alphabetically Digested* (London, 1657) contained under the category of "Books Mathematicall &c" architectural treatises by Vignola, Vitruvius, Serlio, Hans Bloom, Palladio, Durer.

⁷⁰Similar annotations are in Scamozzi's copy of Philander's commentary on Vitruvius, (Avery Library, Columbia University) and Philibert De L'Orme, *Le premier tome de l'architecture*, 1568 (British Library). In the volumes I have seen Scamozzi has annotated the volumes in a distinctive way: small vertical lines in the margin, often with a dot at the beginning of each line. In addition his handwriting can be easily compared to his drawings, such as the that for the perspective avenue of the Teatro Olimpico (Devonshire Collection, Chatsworth: Drawings Vol. IX, "Designs and Sketches by Inigo Jones," fol. 71,

Jones, as there is no evidence of a gift inscription on the books; and Jones signs it on the title-page as he did with other purchased volumes. More likely is that Scamozzi sold the book to Jones, perhaps along with the large number of his own drawings and those of Palladio acquired by the Earl of Arundel during that trip.⁷¹

One of Jones's books came from the dispersed library of Sir Walter Raleigh, who is known to have had over five hundred books in his rooms in the tower.⁷² At what time Jones purchased or was given his copy of Francesco Patrizi, *La militia romana di Polibio, di Tito Livio, e di Dionizi Alicarnaseo*, Ferrara, 1583 is not known.

Jones may have acquired books from English abroad, who often served as agents for patrons back home. Ambassadors in particular were in a position to find books, manuscripts, and other items difficult to lay claim to in England. Sir William Throckmorton (1557-1626) and Sir Thomas Smith, both ambassadors to Paris during the 1560's, were interested in architecture and sent architectural treatises back to interested nobles as gifts.⁷³ Throckmorton's gift of about 350 printed books to Magdalen College, Oxford, reflected his time abroad; many of the titles are in French or Italian.⁷⁴ Henry Wotton tried to procure books and a plan of the Emperor Maximilian II's Lustschloss at Schönbrunn for Lord Zouche but never succeeded.⁷⁵ Architectural books, like other kinds of printed material distributed abroad, helped to popularize a culture as part of a larger political agenda.⁷⁶ Wotton's

no. 108); Douglas Lewis, *The Drawings of Andrea Palladio* (Washington: International Exhibitions Foundation, 1981-1982), cat. 125, 211-12.

⁷¹For a similar situation of books sold out of collections see John Sparrow, "The Earlier Owners of Books in John Selden's Library," *Bodleian Library Quarterly* 6 (1931), 269.

⁷²Oakeshott 1988, 285.

⁷³Gent 1981, 67.

⁷⁴Sears Jayne, *Library Catalogues of the English Renaissance* (Godalming: St Paul's Bibliographies, 1983), 153.

⁷⁵See the letters of Henry Wotton to Lord Zouche in Logan Pearsall Smith, *The Life and Letters of Sir Henry Wotton* (Oxford: The Clarendon Press, 1907), especially Volume I, 246, 250-51, 261-62; Stone 1965, 710-11.

⁷⁶See Martin Lowry, "Diplomacy and the Spread of Printing," in *Bibliography and the Study of 15th-Century Civilisation*, ed. Lotte Hellinga and John Goldfinch (London: British Library, 1987), 124-46.

interest in architecture was not solely aesthetic, but part of his broader mission to ease relations between England and Venice.⁷⁷

Nicholas Stone's sons went abroad in 1638 to study with the masters of Italy and draw from the great collections. They also were instructed by their father, a collaborator with Jones on many projects, to acquire plaster casts and books and prints unavailable in England. Among the books requested by the elder Stone were Vignola, *Le due regole della prospettiva pratica* (1583); an edition of Vitruvius; Alberti; and Cartari, *Imagini dei dei*.⁷⁸ The sons were also directed "according to my father direction in his letter I bought the booke of Archyecture of Domenico Fontana to be sent for England for Mr Kinsman being uery scarsly to be found; cost} 25 iul 00bi 00bi."⁷⁹ (The copy of Fontana cost more than 2 crown, according to current exchange noted in the diary: twice the cost of Vitruvius or Vignola.)

Jones had a reputation as a traveller and a master of foreign languages.⁸⁰ There are records of four trips abroad: 1598 to 1601, France, Germany and Italy in the company of Lord Roos (later sixth Earl of Rutland); 1603, Denmark to the court of Christian IV with 5th Earl of Rutland; 1609, France as political envoy; 1613-14, France, Germany, Italy with Thomas Howard, Earl of Arundel.⁸¹ The travel had many advantages for Jones's career, including the opportunity to study buildings first hand and to prove his worth to his patrons in matters of art and architecture. In terms of his library, the travels were excellent opportunities to purchase books, one of the recommended activities for all travelers. In his guide for travelers, Robert Dallington, the translator of Francesco Colonna's *Hypnerotomachia Poliphili*, advised

⁷⁷William J. Bouwsma, *Venice and the Defense of Republican Liberty. Renaissance Values in the Age of the Counter Reformation* (Berkeley: University of California Press, 1968), 392-3, and passim.

⁷⁸Nicholas Stone, jnr., "Diary of Nicholas Stone, Junior," in Stone [1620-30] 1918-19, 197.

⁷⁹Stone, "Diary of Nicholas Stone, Jnr.," 193. Jones's copy of Strabo, *ex coll Scamozzi*, is inscribed on the title page "ffor Mr. " Was this for Jones? Or was Jones to have brought it back for someone else?

⁸⁰Jones's reputation as a traveler recommended him to patrons as one advanced in artistic taste. His work for masques in Oxford in 1605 was on the basis of this reputation. "They hired one Mr Jones, a great traveller, who undertook to further them much, and to furnish them with rare devices, but performed little to what was expected. He had for his pains as I have constantly heard 50 l." John Leland, *Collectanea*, Appendix, vol. VI, 647; quoted in Horace Walpole, *Anecdotes of Painting in England*, revised ed, vol. II (London: Henry G. Bohn, 1849), n. 1, 403.

⁸¹See Harris 1973, 8-13.

the serious scholar abroad "when he cometh to the place of his residence, let him furnish himselfe with the best bookes of that profession, to which he addicteth his studie, or other he shall finde, not to be got heere in England."⁸² Jones bought books in Italy that were impossible to find in England. Architectural books in particular were difficult to buy in England. Five of Jones's architectural treatises were perhaps purchased on Jones's first trip to Italy in 1597 to 1603, including his copy of Palladio's *I quattro libri*. John Newman proposes that Jones purchased his copy of the 1601 edition of Palladio in Venice the year that it was published.⁸³

In any case, Jones certainly assembled a library of books that he thought essential for his travels in 1613-14. Like travelers before him, he used an architectural treatise as a guide to the sites in the cities he visited. In this Jones was following a precedent set by humanist travelers before him of using what we would now consider as architectural treatises as travel guide books, as in Montaigne's use of Alberti as his guide book to Italy.⁸⁴

Like the modern traveler collecting the guidebooks to any given city, Jones bought the books published by local authorities. In Naples on the first of May 1614 Jones bought Giovanni Antonio Summonte's two volume *Historia della citta e regno di Napoli* (1601).⁸⁵ Jones was particularly interested in the varieties of regional antiquities, an interest he demonstrated in his drawings of the Pont du Gard in Niems during his trip to France in 1605.⁸⁶ In Verona during the later trip Jones purchased Torellus Sarayna's *De origine et amplitudine civitatis veronae* (1540).⁸⁷

Traveling library

While Jones had with him while he traveled the books he had bought abroad, he certainly also had books that he had brought from England. His copy of Palladio's *I quattro libri* is the most prominent example of his traveling library.

⁸²Dallington 1598, fo. C1v.

⁸³See the discussion in Newman 1992.

⁸⁴E.S. DeBeer, "The Development of the Guide-Book Until the Early Nineteenth Century," *Journal of the British Archaeological Association*, 3rd series, 15 (1952), 36-7.

⁸⁵On books Jones purchased abroad he often wrote the city in the vernacular language; and noted the price he paid on the title page. In this case Jones paid 14 carlini.

⁸⁶Higgott 1983, 24-34.

⁸⁷Jones recorded the price paid at 2 1/2 livres.

Travelers often carried a substantial collection with them. John Dee during his Continental travels of 1583-9 had approximately 800 books with him.⁸⁸ Some traveling libraries were specially compiled for travel with smaller format editions of necessary titles. The traveling library of Sir Thomas Egerton, Lord Ellesmere, formed around 1615—the same date as Jones's last trip abroad—was divided into the categories of theology, history and poetry.⁸⁹ (Figure 66) Jones, like Egerton, only brought with him a small number of volumes, perhaps 20 books from the ones that survive.⁹⁰

While what survives of Jones's library must have been only a small part of what he had in his possession, he still needed the resources of other collections. Within his circle of friends Jones had access to some of the most important collections in England. We know from the antiquarian Robert Cotton's lending lists that Jones borrowed books on sixteenth century festivals, most likely as source material for masques.⁹¹ Like many who borrowed books from Cotton, Jones may never have returned the borrowed books. Books with the distinctive Cotton motto on the title page are scattered throughout libraries in England.⁹²

Jones may also have used libraries while he traveled, particularly the Medici library in Florence. That famous collection of manuscripts was an attraction to many travelers. The staircase of the Laurentian Library was a popular attraction for travellers to Florence. A model of the staircase had been sent to England for one of Jones's early patrons, Prince Henry.⁹³ On his trip to Italy, Lord Arundel had stayed with Cosimo II in the Palazzo Vecchio in Florence. During his month stay in Florence Jones may have used the collections there. Jones may have used the library on a previous trip to Italy. A design of the House of Fame for *The Masque of Queens* (1609) and a year later for the masque Oberon are based in part on Filarete's *Trattato di Architectura*.⁹⁴

⁸⁸Sherman 1991, 57-8.

⁸⁹Now in the collection of the Huntington Library, San Marino, California.

⁹⁰See Harris 1973, 56.

⁹¹B.L. MS. Harl. 6018, fos. 149, 149v, 150, 175, cited in Sharpe 1979, 76.

⁹²See Tite 1991, 486-90.

⁹³Howarth 1985, 27.

⁹⁴John F. Moffitt, "Il Filarete and Inigo Jones: The House of Fame in Ben Jonson's 'The Masque of Queens,'" *Arte Lombarda* n.s. 90/91, no. 3-4 (1989), 61-66.

Patrons as well as architects shared library collections, seeing new books that they then tried to acquire for their own collections. In August 1568 William Cecil, Lord Burghley wrote to Sir Henry Norris, the ambassador to France, asking him to find a French architectural treatise, "a book concerning architecture, entitles according to a paper here included, which I saw at Sir Thomas Smith's; or if you think there is any better of a later making of that argument." The title of the book, most likely written down while Burghley was at Smith's library in Hill Hall, does not survive.

If we have some sense of what was in Jones's library, the books, instruments, prints and drawings that formed the core of his architectural laboratory, we know much less about where he read. The library must have moved with Jones from project to project as he records with some of his dated entries his location. While in Italy Jones made notes of when and where he read passages in Palladio's *I quattro libri*, especially when those readings were done in conjunction with a visit on site. Some of the most illuminating of these annotations are those connected with visits to Palladio's villas and palaces, for there Jones notes when the buildings do not appear as presented in the treatise. At the Palazzo Valmarana, for example, Jones wrote a note to accompany his sketch on the plate "This much is donn the rest is ould buildings."⁹⁵ In England, Jones occasionally notes where he is reading, such as Greenwich or Hampton Court, where he would have been in conjunction with building projects or for extended periods of residence.

Unlike John Dee's library at Mortlake, however, Jones's collection can never be associated with any one residence or court.⁹⁶ One phase of reading and study must have been in the shadow of the court of Prince Henry, Jones's first royal patron. Jones became attached to the Prince's court in 1610, but was a minor artistic presence below the more highly paid Salomon de Caus and Constantino de Servi. Prince Henry's court attracted the best artistic talent and ambitious young courtiers. The Earl of Arundel was among the Prince's courtiers, and would take Jones along with him on the important trip to Italy in 1613-14. But even more important was the court as a center for impressive artistic collections and literary activities. What books Jones lacked he would have found in the library of Lord Lumley that came to

⁹⁵Palladio 1601, II, 16.

⁹⁶For Dee's *Bibliotheca Mortaclensis* see Sherman 1991, 35-63.

the Prince after Lumley's death in 1609.⁹⁷ Lumley's library was one of the largest in England at the time and particularly strong in foreign language titles.

A great deal of his humanist reading must have been the result of associations with those at the Middle Temple, where Jones had rooms from the 21st February 1613.⁹⁸ Jones probably sought an association in the Middle Temple after the death of Prince Henry in 1612. Jones would have been then without a patron, and a regular source of income. Membership at the Middle Temple would have provided exactly the living situation Jones most needed: intellectual and social companionship, a residential base in London, and the opportunity to work for the regular masques and fetes held there. The Inns of Court experienced a rise in membership during the years 1580 to 1630, and many members of the intellectual and court circle had membership in one of the four Inns of Court. Like the expansion of Oxford and Cambridge during the same period, the Inns of Courts came to play an ever increasingly important role in the educational expansion of the late sixteenth and early seventeenth century.⁹⁹ The educational activity at the inns was not a formal system of instruction but a looser gathering of like-minded individuals. The inns can be most readily understood as a kind of residential club or hotel, with a fluid, heterogeneous membership. Jones, like many others whose field was not legal studies, would have found the inns a convenient place to reside with amiable company while searching for a future opportunity elsewhere.¹⁰⁰

The inns of court were also a center of artistic activity outside of the court. Revels were performed each Saturday night, and masques to honor special occasions and holidays during the year. In a period of general building activity throughout the

⁹⁷Strong 1986, 200-201; On the Lumley collections see L. Cust, "The Lumley Inventories," (*Walpole Society* 6 (1918), 15-35; E. Milner, *Records of the Lumleys of Lumley Castle* (London, 1904); D. Piper, "The 1590 Lumley Inventory," *Burlington Magazine* 90 (1957), 224-31; T.J. Browne and M. Scheele, *The Old Royal Library* (London 1957); Sears Jayne and Francis R. Johnson, eds, *The Lumley Library. The Catalogue of 1609* (London: Trustees of the British Museum, 1956).

⁹⁸*Calendar of Middle Temple Records*, ed. C.H. Hopwood, vol. II (London, 1903), 561; cited in Baird W. Whitlock, *John Hoskyns, Searjeant-at-Law* (Washington: University Press of America, 1982), 413-14.

⁹⁹On the Inns of Court as an important locus for education see Stone 1979, 687-92; Wilfrid Prest, "Legal Education of the Gentry at the Inns of Court, 1560-1640," *Past and Present* 38 (December 1967), 20-39; Prest 1972, passim; K. Charlton, "Liberal Education and the Inns of Court in the Sixteenth Century," *British Journal of Educational Studies* 9 (1960-61). Also see Hexter 1979, 45-70.

¹⁰⁰Prest 1972, 16, 158.

country and the capital, the inns were all involved in expanding their physical resources to meet their rising memberships. How much Jones participated in the architectural projects at the Middle Temple is unknown, although he was certainly involved in the production of the Middle Temple and Lincoln's Inn Masque with George Chapman, in the same month as his taking of rooms in the Middle Temple.¹⁰¹ The Middle Temple in particular was renowned for its hall, which served as a model for many later buildings including a new hall at Trinity College, Cambridge.¹⁰² While the architectural style of the new buildings at the inns was decidedly conservative, more importantly the construction materials for the Elizabethan and early Stuart buildings were brick and stone. Brick and stone conformed to Elizabethan building regulations designed to prevent fires in the city and resulted in more regular and permanent designs.¹⁰³

In the signing of his books to indicate ownership it is clear that Jones cherished his library and collections. He had acquired them with some difficulty, they were expensive, and he devoted much time to their study. As a collection they provided a theoretical support to his practice and a constant reference for ideas. While it was a personal library, it was not necessarily a private collection intended only for Jones's use.¹⁰⁴ John Webb certainly used the library by the 1630's; and his copy of Serlio now in the RIBA contains annotations transferred from Jones's copy.

Jones's library is so important as a resource because it was directly connected with his working practice. It was a constant reference that he could consult long after he had returned from travel, and it structured his impressions before he ever left England. As such it is an important record of how printed treatises helped to form a series of national classical styles throughout Europe. In England, as in Scotland, France and throughout Northern Europe, the vernacular architectural

¹⁰¹The Middle Temple and Lincoln's Inn Masque was held on the 15th February 1613, "supplied, applied, digested and written, by George Chapman." "Invented, and fashioned with the ground, and special structure of the whole work bu our kingdom's most artfull and ingenious architect Inigo Jones." Orgel/Strong 1973, 253-63.

¹⁰²Airs 1975, 39-42. Airs stresses the importance of existing buildings as models for new designs.

¹⁰³Prest 1972, 17-20; also see Summerson 1977, 183-86.

¹⁰⁴Robert Irwin discusses the "living library" in his *The English Library* (London: George Allen & Unwin, 1966), 173. See Sherman 1991, 39-41 for a discussion of this role in the library of John Dee.

style absorbed to a lesser or greater degree the classicism promoted in printed books.

The library also connected Jones to an educated class, the class of his patrons. The architectural treatise created a common bond from the architect or mason and the patron. Lawrence Stone may overstate this relationship, giving too much of the impetus for new building to the patrons whom he feels "had sufficient linguistic and mathematical education to understand [foreign language treatises]."¹⁰⁵ Jones's collection however is similar to that of the major patrons of his day, a reflection not only on the architectural interests of the patrons but the humanist aspirations of Jones.

As creative as Jones was in his designs, it is an overstatement to see the change in architectural style as emanating from his pen and the elevated taste of his select group of patrons.¹⁰⁶ Jones was particularly savvy and talented designer, able to maneuver within a circle whose ideals and aspirations he understood. That, combined with a professional knowledge of the technical aspects of architecture and design, and the ability to communicate those ideas through drawing, formed the basis of his success. The pressure for the change, the desire to build, the intellectual framework established to support the profession of architecture, the tensions within the social structure: all these elements were beyond the reach of one individual.

The books owned by Jones were part of what distinguished him from other masons, and through his collecting connected him with an elite group such as Smythson, with positions of status.¹⁰⁷ Jones's library was as much a personal statement as a professional one; and the two cannot be easily divided. Jones was from all accounts, a man of great *bravura* and with keen to cultivate great personal presence. The story of his affectations in front of paintings are evidence of self-assuredness and self-awareness. That this was a skill as much prized at the Stuart

¹⁰⁵Stone 1979, 710.

¹⁰⁶This approach reaches its apogee in the tradition of seeing Jones directly and exclusively connected to the Stuart court; or in exhibitions that seek to explain the architect's genius through a show of his drawings alone. That may explain 'Jones' but does little to explain his significance.

¹⁰⁷"The master mason of a major project was therefore a man who had achieved some stature because of personal qualities that clearly set him apart from the ordinary mason." Richard A. Goldthwaite, *The Building of Renaissance Florence* (Baltimore: The Johns Hopkins University Press, 1980), 351-52.

court is certain. The library, a sign of learning and skill, would have supported Jones as the authority for personal artistic judgements.

Books created a common culture between Jones and his patrons. The libraries of what can only be called a patronage class - those with the personal inclination, financial means and education - formed a loosely defined group with interests in architecture.¹⁰⁸ Yet their building from the middle of the sixteenth century into the middle of the seventeenth varied widely in style. Clearly those reading the same books interpreted them differently. The most extreme example of this is the library of Thomas Tresham. Tresham built widely in the last decades of the sixteenth century, often exceeding his financial ability to complete projects, such as the garden house Lyveden New Bield (Northamptonshire). His collection of architectural treatises was one of the most extensive of the time, including six copies of Vitruvius, Philibert De L'Orme, Serlio, Palladio, Labacco, Cataneo and Du Cerceau.¹⁰⁹ The resulting architecture is imaginative and scholarly but by no means exclusively classical. On the contrary, Tresham built in a variety of styles. His personal retreat at Lyveden was the most classical with a Roman lettered inscription celebrating the Trinity. In collaboration with his architect, Robert Stickells, or of his own suggestion, Tresham felt free to incorporate the classical language offered in the treatises into traditional building practices. Tresham's building suggest an attitude toward style inherently more liberal than that of Jones's restricted classicism two decades later.

A courtier's library

Jonson wrangles with Jones over their relative position at court, a professional dispute closely tied to Jones's emphasis on the visual aspects of the court masques. In Jonson's own copy of Martial's *Epigrams*, he writes "Inigo" against: "Oft are you wont to praise my poems, Augustus. See a jealous fellow denies it; are you wont to praise them the less for that? Have you not besides given me . . . gifts that none other could

¹⁰⁸Joan Thirsk presents an analogous picture of the gentry's interest in classical texts on agriculture, crucial "in arousing their zeal for farming as a satisfying and honourable occupation." "The Fashioning of the Tudor-Stuart Gentry," *Bulletin of the John Rylands University Library of Manchester* 72, no. 1 (Spring 1990), 69-85.

¹⁰⁹BL Additional MS. 39830; Gent 1981, 80.

give? See, the jealous fellow again knows his filthy nails! Give me, Caesar, all the more, that he may writhe!"¹¹⁰

Jonson may have been willing to accept Jones's intellectual support for the position and importance of architecture as an art. What could not be tolerated was Jones's own pretenses to intellectualism.

Master Surveyor, you that first began
 From thirty pound in pipkins, to the man
 You are; from them leapt forth an architect,
 Able to talk of Euclid, and correct
 Both him and Archimede; damn Architas,
 The noblest engineer that ever was!
 Control Ctesibius: overbearing us
 With mistook names out of Vitruvius!
 Drawn Aristotle on us! And thence shown
 How much architectonic is your own!¹¹¹

In his "Expostulation with Inigo Jones" Jonson chides Jones for correcting the text of Euclid, that is, annotating his copy of the text. (Correcting printed books against a manuscript copy was a common reading technique of scholars.) Jonson condemns Jones both as a reader and as a scholar, to say nothing of his low birth. It was not only the accuracy of Jones's scholarship that was at issue, but the posturing of Jones's scholarship. The fashion of scholarship for the new gentleman opened up the self-taught scholar to the charges of being a dilettante.

Even in the collecting of books Jones is holding himself up for the charge of being an intellectual dilettante. John Donne satirizes just such book collectors in his *The Courtier's Library, or Catalogus Liborum Anlicorum incomparabilium et non vendibilium*, a facetious listing of titles in the collection of courtiers that collected scholarship as part of a new ideal.

Our age is cast in an age in which open illiteracy is supremely disgraceful, full knowledge supremely rare; every one has a smattering of letters, no one a complete mastery of them. For the most part, then, men move along a middle way, and in their efforts to shun the disgrace of ignorance and to save

¹¹⁰Ben Jonson's copy of Marcus Valerius Martialis, *M. Val. Martialis Nova Editio ex Museo Petri Scriverii* (Leyden: Apud Ioannem Maire, 1619); quoted in McPherson 1974, 11; cat. no. 121, 68-70.

themselves the tedium of reading they all use one art that they may keep up the appearance of knowing the rest of the arts . . .¹¹²

Jonson might have seen Jones in this group, with no humanist training of any consequence and only the pretenses of learning. That architecture as a discipline was relatively new could only have strengthened Jonson's case, and made Jones seem even more the intellectual entrepreneur.

¹¹¹ Ben Jonson, "An Expostulation with Inigo Jones," in Jonson 1975, 345.

¹¹² John Donne, *The Courtier's Library, or Catalogus Liborum Anlicorum incomparabilium et non vendibilium*, ed. Evelyn Mary Simpson (London: Nonesuch Press, 1930), 39. Donne's catalogue remained in manuscript and was only published after his death by his son in 1650. It was probably written in the period 1603-11. As Evelyn Simpson discusses in her introduction, the genre of satirical book catalogue reworks 16th century models: Rabelais, *Pantagruel* II, vii; Johann Fischart, *Catalogue catalogorum perpetuo durabilis* (1590).

INIGO JONES'S LIBRARY: ANNOTATED BIBLIOGRAPHY

Introduction

Two bibliographies follow of books from the collection of Inigo Jones. The first lists surviving books from his collection, books with Jones's name on the title-page or clearly holographic marginalia which can be ascribed to his library with some certainty. The second lists books to which he had access or consulted based on evidence contained in the marginalia or from a further source. This includes titles for which there is some evidence that Jones referred to the book or the author named. This does not necessarily mean that he ever owned the book, as in the case of the books loaned from the library of Robert Cotton.

A third list could have been compiled based on the visual evidence of Jones's drawings or buildings. The attribution of sources from Jones's artistic production is obviously a more speculative matter, and in many cases a completely different exercise than trying to reconstruct an architect's library. Pinpointing the exact source is difficult, and he may have consulted any of a number of related editions, loose prints, collected folios, or drawings after the printed source. A further study could begin from these two lists for an investigation of all Jones's sources, prints, drawings, sketchbooks, etc. That, however, is beyond the scope of this dissertation.

The list of surviving books from Jones's library contains the fullest bibliographical records. Within my range of knowledge I have provided technical information about each book (binding, condition). Two lists of references are provided for each book. The first is a reference to descriptive bibliographies for the title (information on collation, paper, rarity, publishing information). The second set of references are to any previous literature on this specific copy from Jones's library. The most common references are given at the start of the bibliography.

Following the technical information about each book I have added comments on the nature of the annotations, if any; the importance for that title in England at the time; and related copies in other collections. The comments are not meant to contain a full account of the annotations; in many of the books a transcription of the annotations would run to several hundred pages. Taken in conjunction with the proceeding chapters which discuss Jones's formation of a classical architectural vocabulary, the bibliography provides evidence of his reading habits and textual exegesis.

The bibliography of additional books to Jones's library includes publishing information, if that can be determined with any accuracy. If not, a possible edition is listed. The evidence for the attribution is included, along with any general comments on the book.

Catalogue format:

Author. Title. Translator, if applicable. Place of publication: Printer, date.

Bibliographical format.

Provenance (owner signatures and location); present location.

Physical description. [binding, condition]

Marginal annotations and drawings. [all annotations are by Jones and in English, unless otherwise noted]

References. I: [To standard works which contain information on collation; printing and publishing history. Brackets around an entry indicate a different, but related, edition of the title.]

II: [Copy specific bibliography.]

Comments.

ABBREVIATIONS:

ADAMS 1967

Adams, H. M. *Catalogue of Books Printed on the Continent of Europe, 1501-1600 in Cambridge Libraries*. 2 vols. Cambridge: Cambridge University Press, 1967.

COCKLE 1957

Maurice J.D. Cockle. *A Bibliography of Military Books up to 1642*. London: Holland Press, 1957.

FOWLER 1961

Fowler, Laurence Hall and Elizabeth Baer, comps. *The Fowler Architectural Collection of the Johns Hopkins University. Catalogue*. Baltimore: The Evergreen Foundation, 1961.

MORTIMER 1974

Mortimer, Ruth, comp. 1974. *Harvard College Library. Department of Printing and Graphic Arts. Catalogue of Books and Manuscripts. Part II: Italian 16th Century Books*. 2 vols. Cambridge: Belknap Press of Harvard University Press.

HARRIS 1973

John Harris, Stephen Orgel and Roy Strong. *The King's Arcadia: Inigo Jones and the Stuart Court*. London: Arts Council of Great Britain, 1973.

KRUFT 1988

Kruft, Hanno-Walter. *Storia delle teorie architettoniche da Vitruvio al Settecento*. Roma-Vari: Laterza, 1988.

SCHLOSSER MAGNINO 1964

Schlosser Magnino, Julius. *La letteratura artistica*. 3rd edition. Florence, Vienna: La Nuova Italia, 1964.

STC

A.W. Pollard & G.R. Redgrave. *A Short-Title Catalogue of Books Printed in England, Scotland, & Ireland and of English Books Printed Abroad 1475-1640*. 2nd ed. London: The Bibliographical Society, 1986.

STC ITALIAN

Short-Title Catalogue of Books Printed in Italy and of Italian Books Printed in Other Countries from 1465 to 1600 Now in the British Museum. London: Trustees of the British Museum, 1958.

WIEBENSON 1983

Dora Wiebenson, ed. *Architectural Theory and Practice from Alberti to Ledoux*. n.p., Architectural Publications, 1983.

WILKINSON 1923

C.H. Wilkinson. "Worcester College Library." *Transactions of the Oxford Bibliographical Society* (1923), 263-320.

Alberti, Leandro. *Descrittione di tutta italia*. Venice: presso Altobello Salicato, 1588. 4to.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford.

Signed: Title page: "Inigo Jones" (scratched out). George Clarke monogram on binding spine.

Binding: Contemporary limp vellum. "A" in ink on front edge of binding.

I: Adams 1967, no. 477.

II: Harris 1973; Wilkinson 1923, no. 27.

Whereas Guicciardini wrote a history of Italy intended to rival the ancient historians he emulated, Leandro Alberti took a different route in adhering "strictly to a form that had been sanctioned by Strabo and Pomponius Mela in antiquity and by Biondo-in the *Italia Illustrata*-in modern times. This form permitted him to include ancient as well as recent history, description as well as narrative, and such subjects excluded from the Livian-Brunian model as institutions (the libraries of Florence), buildings, arts and letters, 'famous men, . . . customs, conditions, mountains, lakes, and fountains' (the subtitle)."¹

In his *Survey of the Great Dukes State of Tuscany* (1605), Robert Dallington recommends "Leandro Alberti the latest and exactest Surveyour of Italie [who did] reconcile the authorities of Strabo, Plynny and Ptolemy."² Alberti appealed to English historians and travelers seeking a full description of the wonders of Italy, in the style of the ancient historians. Jones, however, did not annotate his copy, except for one note to the town of Caravaggio (p. 406v). That Jones generally ignored Leandro Alberti's discussion of art and architecture, or at least, did not annotate those sections, is not unusual. The book did not contain the technical information that Jones wanted as comparative material to his reading of Palladio and other architectural treatises.³

¹Cochrane 1981, 306.

²Robert Dallington, *A Survey of the Great Dukes State of Tuscany. In the yeare of our Lord 1596* (London: for Edward Blount, 1605), 1.

³See Gent 1981, 75-6 for her discussion of the English readership of Leandro Alberti.

Alberti, Leon Battista. *L'architettura*. Translated by Cosimo Bartoli. Bound with Alberti's *La pittura* translated by Lodovico Domenichi. Monte Regale: Lionardo Torrentino, 1565.

Folio.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Not signed. Binding: Calf over boards. George Clarke binding. Clarke monogram on front cover.

Extensive marginal annotations on limited number of pages in Jones's hand.

I: Fowler 1961, no. 8; Mortimer 1974 I, pp. 13-16, cat. 12; Krufft 1988, 33-45;

Wiebenson 1983, I-15.

II: Harris 1973; Wilkinson 1923, no. 14; Peacock 1989, 285.

Jones had his copy of Alberti by 16 February 1615, for there is a note of that date discussing the formation of a right angle and the calculation of a hypotenuse (Book IX, p. 263). The earliest readings and annotations are principally from Book IX on geometry. Later readings are in concentrated sections of Alberti's treatise, particularly on theaters (228-31) and the construction of towers (215). Against Alberti's discussion of villas, Jones made a series of annotations on the siting of gardens and their salutary effects. (251-52) "Garden houses must have digniti and delight: as mixt buildings ye of contry and Cytty."⁴

One of the chapters most carefully annotated by Jones is that dealing with the restoration of buildings. The annotations are in a late hand, and may have been studied in conjunction with Jones's work on the restoration of St. Paul's or his role as surveyor of buildings for London. Jones had noted the excellent condition of many of Palladio's villas and palaces when he visited Vicenza in 1614; and the more dismal state of ancient monuments in Rome as they were mined for building materials by the Popes.

Knowledge of Alberti was widespread in England, more as a learned commentary on the intellectual tradition and perhaps only secondarily as an

⁴Against the text of Alberti: "Ecci ancora una sorte di edifitii privati, nella quale si ricerca insieme la dignita delle case della citta, & i diletti, & i piaceri delle case dellaqual sorte di edifitii non trattamo ne passati libri, come riserbatici per trattarne in questo luogo, & questi sono, i Giardini intorno alla citta, de quali non penso però sia da tenerne poco conto, sforzerommi di esser'breve, delche quanto piu posso m'ingegno." (p. 251)

architectural author.⁵ The only book of Alberti's to be translated into English at this time was *Hecantofilia, The Arte of Love*, in 1598.⁶ Henry Wotton wrote of Alberti in his treatise "For of the Italians that tooke [Vitruvius] in hand, Those that were Grammarians seeme to have wanted Mathematicall knowledge; and the mathematicians perhaps wanted Gramer: til both were sufficiently conioyned, in Leon-Batista Alberti the Florentine, whom I repute the first learned Architect, beyond the Alpes; But hee studied more indeede to make himselfe an Author, then to illustrate his Master."⁷

Copies of the treatise are known in libraries, the intellectual John Dee had three copies which he used in his "Mathematical Preface" to Euclid (1570).⁸ Cyprian Lucar in his *A Treatise Called Lucarsolace* (1592) cited Alberti as well, but there for specific technical information on the transportation of water.⁹ Edmund Spenser's interest in architecture included Colonna's *Hypnerotomachia Poliphili* and Alberti's ideas on human proportion as the basis for building.¹⁰

At least two manuscripts of Alberti were in England by the early seventeenth century. A manuscript now in Eton College Library (Ms 128) was most likely brought back to England by Sir Henry Wotton, who probably purchased the manuscript in Venice while he was Ambassador there.¹¹ This is the only surviving Alberti manuscript with corrections by the author himself. Wotton became Master of Eton College when he returned from foreign service and left his manuscript collection to the college. As Jones certainly had access to Wotton's other collections, as Jones notes that he has seen his Palladio drawings, it is not unlikely

⁵There is an interesting copy of this same edition in the British Library (559.c.7) annotated by a Spanish reader, and checked for heretical passages. A note on p. 3 reads "este libro esta visto & expurgado, en m l.x.de octubre 1565 / El doctor Joandellano". The marginalia, in Latin for the most part, includes further references to Vitruvius (p. 366, reference to "Vitruvius lib. 8 / cap 1º di aqua/ inventi onibus"; p. 235 to Philander "Philand. as lib 4 / cap. 3").

⁶Leon Battista Alberti, *Hecantophila. The Arte of Love. Or, Love discovered in an hundred severall kindes* (London: Printed by P.S. for William Leake, 1598).

⁷Wotton [1624] 1903, viii.

⁸Dee 1570, sig. diiiiir.

⁹Lucar 1590, Book IV, 161.

¹⁰Leslie 1990.

¹¹See the discussion of the Alberti manuscript by H. Burns in Chambers/Martineau 1981, 127-28.

that Jones would also have had the opportunity to study the Alberti manuscript. Another Italian manuscript of Alberti's architecture treatise is among the Finch-Hatton Manuscripts in Northamptonshire.¹²

¹²Gent 1981, 81. I have not yet seen the Alberti manuscript (Northamptonshire Record Office, Finch-Hatton 4025; cited in Gent 1981, 80 n. 65).

Appian of Alexandria. *Delle guerre civili et esterne de romani con diligentia corretto & con nuova tradottione di molti inoghi migliorato . . .* Translated by Lodovico Dolce. Venice: in casa de' Figliuoli di Aldo, 1551.

8vo.

[Italian owner?]; Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: First Title page: "Inigo Jones" (scratched out); Third Title page: "Inigo Jones".

Binding: calf over boards; ridges on spine with gold banding, small decorative edge embossed on front and back covers.

Few marginal annotations in Italian, not in Jones's hand.

I: Adams 1967, no. 1359.

II: Harris 1973; Wilkinson 1923, no. 8.

The Italian translations of authors such as Appian appealed to the increased market for vernacular editions of ancient authors who discussed military affairs.¹³

The few notes in Italian and the more elaborate binding than most of Jones's books suggests that Jones purchased this volume, like many others, secondhand and perhaps in Italy.

¹³Hale 1983, 439-40.

Aristotle. *L'ethica*. Translated by Bernardo Segni. Vinegia: appresso Bartholomeo detto l'Imperadore, & Francesco suo genero, 1551.

8vo.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: p2v: "Inigo Jones" (scratched out).

Binding: Contemporary limp vellum.

Extensive marginal annotations.

I: Adams 1967, no. 1837; Cranz 1971, 57.

II: Higgott 1992; Harris 1973; Wilkinson 1923, no. 9.

The *Nichomachean Ethics* in the Segni translation of 1550 had a profound effect on the art theory of the seventeenth century, following on a more widespread Aristotelian interests in the *Poetics* in the sixteenth century treatises of Benedetto Varchi, Lodovico Dolce and others.¹⁴ Whether or not Jones knew of the popularity of the *Ethics* through Italian sources, he would have been aware of Aristotle's crucial place in humanist education.¹⁵ In humanist art theory as well, Aristotle stood as the crucial classical source for the various theories of imitation and as the foundation for naturalism, including the ideal copying praised by Boccaccio in the work of Giotto, and Bellori's definition of painting as the representation of human action.¹⁶ Jones's annotations demonstrate a general interest in imitation and an equal reluctance to ever define the practice too precisely. The conscious use of classical sources as model gave his work an authority with an audience for whom the continental sources were highly respected, and aligned his art with a broader European tradition. Jones's frequent references in his copy of Palladio to antique models which are excellent and "to be imitated" indicates his approach to antiquity as a resource.

English editions of Aristotle's *Ethics* were available from 1547, in the translation by John Wilkinson.¹⁷

¹⁴Mendelsohn 1982, 10-11, 197 n. 67. Jeremy Wood has recently discussed Jones's careful and selective use of prints and drawings as models for the improvement of his drawing technique. (Wood 1992.)

¹⁵Jardine 1975.

¹⁶Lee 1967, 9-16.

¹⁷Aristotle 1547.

On sig. 2v in his copy of the *Ethics*, below his signature, Jones wrote a note regarding the method for the study of Aristotle: "See for ye plase to beegin with ye principles and com downwards as beeginn beelowe or wth ye lowest and co[m] upwarde wch is to analisis wch was aristotels way." This is the only overt comment by Jones of his reading method and approach to study, and it is a summary of his approach to architectural design in general: the need to understand independently the details of design and the formation of general architectural principles. In a long passage dated Thursday the 19th of January 1614 Jones wrote in his Roman Notebook:

As in dessigne first on Studies the parte of the boddy of man as Eyres noses mouthes Earer and so of the rest to bee practicke in the parte sepperat ear on comm to put them togeathear to maak a hoole figgure and cloath yt and consequently a hoole Storry wth all ye ornamentes. So in Architecture on must studdy the Parte as loges Entrances Haales Chambers staires doures windoues: and then adorne them wth colloms cornishes. sfondati, stattues. paintings. compartimente. Emprese. maskuari. folliame. vasi. harpes. Puttini. Scarfinge. Stratsi. Scroules. bacemente. balustri Rissalti. Lions, or cayls claws, converted in to folliami. sattires. serpente victories, or angels. anticke heads in shells. cherubins heads wth winges. heades of beaste. Pedistals. Cornucopias. baskete of fruites. trofies. Juels and agates. medalie. draperies. frontispices Broken. and composed.¹⁸

While Jones equates all of these ornaments to the same level, including pedestals, bases and columns, along with trophies and those elements now thought more fittingly grouped as ornaments, the parts of building, that is the disposition of rooms, must be attended to first. The many studies by Jones of mouths, ears and hands in the Roman notebook attest to his use of this theory in the drawing of the human figure as well.

In the discussion in Chapter IV "De varie oppinioni del sommo bene," Jones notes "best to begin wth things knowne to us: / as to beegin wth honest maners and the[n] to know discourses of it to conform them," and farther down the margin, "he

¹⁸Roman notebook, fo. 100. Cf. the discussion of this passage in Peacock 1989, 285.

wch hath nether of thes in him self nor from others let him hear thes verses of hesiodus."¹⁹ As in his copy of Plutarch's *Moralia* (8vo), there are many marginal notes in Aristotle on anger and its proper manifestations.²⁰ Throughout the *Ethics* there are similar annotations by Jones on the effect of strong emotions.

Jones's careful reading of Aristotle, taken in conjunction with his practical conservatism in other areas, qualifies the many attempts to align him with Neoplatonic and hermetic thinkers of the English renaissance.²¹ Given Jones's general interest in moral philosophy, his reading of Aristotle is consistent with his interest in the fundamental humanist education of the time. As the work of Charles Schmitt has shown, the study of Aristotle in the sixteenth and seventeenth centuries was far more prevalent than intellectual historians of the period would suggest.²² John Case (d. 1600), fellow of St. Johns and author of *Lapis philosophicus* (Oxford, 1599) is representative of English Aristotelian interests of the age, and like Jones was an eclectic, who tempered the wilder claims of the Neoplatonic with the limitations of the natural world.²³ Aristotle's stress on the limitations of nature, for

¹⁹Against the text of Aristotle: "Mà la cose cognite sono in due modi cognite, parte (dico) son'cognite à noi, e parte son'cognite assolutame[n]te. Et forse stà bene determinare, chè e'si debbainco minciare dalle cose cognite à nui; però sia di necessita, chè chi hà ad udire ragioname[n]ti di cose honeste, et di cose giuste, et di cose, che apparte[n]ghino alla civil facultà, debba hauere pri[n]cipato da'costumi buoni: p[er]chè il principio di questa facultà è chè la cosa sia così." (p. 16r)

²⁰Jones notes "a hard thing to didermin how a man shuld be angry" against the text "per questa ragione anchora è piu opposto l'eccesso al mezo, perchè gli huomini, che ritengon l'ira, sono piu difficili al vivere insieme con gli altri. Mà (sicome io ho detto innanzi, & per le cose, che si dicono hora, è manifestissimo) e'non è agevole a determinarsi, nè come l'huomo debbe adirarsi, nè con chi, nè per che cose, nè quanto tempo, nè insino a quanto gli stia ben'farlo, ò vi s'erri dentro." (Jones's underlining), fo. 125r.

²¹For instance in Yates 1969; and even less successfully in Toplis 1973. The desire to see Jones as an occult figure is perennially popular, yet there is little evidence in his marginal annotations nor in his artistic production to suggest that Jones was associated with these interests.

²²The reading of Aristotle could also have a decidedly political motive, as in Richard Hakluyt's epitome of Aristotle's *Politics* for Queen Elizabeth. See Lawrence Ryan, "Richard Hakluyt's Voyage into Aristotle," *Sixteenth Century Journal* 12:3 (Fall 1981), 73-83; and the further discussion in Sherman 1991, 81.

²³The discussion of English Aristotelian ideas is based on the following works by Charles B. Schmitt: *John Case and Aristotelianism in Renaissance England* (Kingston and Montreal: McGill-Queen's University Press, 1983); "John Case on Art and Nature," *Annals of Science* 33 (1976), 543-59; "Towards a Reassessment of Renaissance Aristotelianism," *History of Science* XI (1973), 159-93.

example in the inherent limitations of certain materials, restrict the realm of possibility of the aesthetic within the realities of the physical world.

Barozzi, Giacomo da Vignola. *Regola delli cinque ordini d'architettura*. Romae: Andreas Vaccarius, 1607. Bound with *Nuova et Ultima Aggiunta delle Porte d'Architettura di Michel Angelo Buonaroti* (Romae: Pietro Marchetti, 1610) and *Tabernacoli Diversi novamente inventali da M. Giovanbatista Montano Milanese* (Roma, 1628).

Folio.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Not signed.

Binding: Rebound; vellum and paper over boards.

Marginal annotations.

I: Fowler 1961, no. 355; [Mortimer 1974, nos. 538, 539]; Krufft 1988, 89-92; Wiebenson 1983, III-A-4.

II: Harris/Higgott 1989, 124, 126, 128.

This edition of Vignola was printed in two parts, and plates I-XXXVII are from the plates of the 1563 edition.²⁴ The second part (Plates XXXVIII-XXXXV) has a separate title-page, engraved by Giovanni Battista Montano, with a portrait bust of Michelangelo.

The mixture of these two elements, the orders of Vignola and the inventions of Michelangelo, was a powerful combination for Jones. A large number of Jones's surviving drawings are for gateways, and this treatise provided a model for the grammar of the orders and their possible use in the designs of Michelangelo of designing imaginatively within the classical system. Beyond that, this type of presentation advanced an idea of the orders as distinctly connected with gateways through their representation in this shorthand form.

Jones knew of Vignola's treatise early in his career for there is an annotation in his copy of Vasari which refers to the *Regole*, "viniola. his booke/in print of Architecture" against the text of Vasari, "Ne meno ha in cio operato Iacopo Barazzo da Vignola Architetto; il quale in un libro intagliato in Rame ha con una facile regola insegnato ad aggrandire, & sminuire secondo gli spazii de cinque ordini d'Architettura; la qual opera è stata ultissima all'arte; e gli deve havere obligo, si come anco per i suoi intagli, e scritti d'Architettura si deve à Giovanio Cugini da

²⁴Fowler 1961, 285.

Parigi."²⁵ Citing Vasari, Jones notes that Vignola's book of architecture is in print, which would have made it possible for Jones to acquire a copy; and distinguished it from copies of architectural treatises which only circulated in manuscript for a more limited audience. Much of Jones's reading was directed toward a compilation of the available literature in the field, through references in other works in printed annotations of textual references.

Vignola was known in England before Jones, although it was not used as frequently as a source for the orders as Hans Blum's publication. The Earl of Northumberland and Sir Thomas Tresham both owned copies by the end of the sixteenth century.²⁶ John Summerson suggests that John Thorpe may have used Vignola for his explanation of the procedure for the drawing of the ionic volutes.²⁷ Thorpe may well have copied the volute schema from other available treatises, however Thorpe's use of Vignola's proportional system for the doric evidence, 1/2 of the columns diameter into 12 parts, is more convincing evidence.²⁸ For a 1611 edition of Vignola's *Le due regole della prospettiva pratica* Lord Herbert of Cherbury paid £1.7s.²⁹ The first English edition of Vignola appeared in 1655, translated by Joseph Moxon, and was inspired by the perceived inadequacies of the 1642 Amsterdam polyglot version then available.³⁰

John Harris and Gordon Higgott have suggested some of the ways Jones used Vignola, once he acquired a copy after his return from Italy in 1614. Jones simplified Vignola's presentation of the Doric order for an elevation of the Italian gateway at Arundel House, London (Harris/Higgott 1989, cat. 40) Harris and Higgott add that the elaborate pediment on the top of the drawing may have been

²⁵In Jones' copy of Vasari 1568, Book III, 308.

²⁶See Gent 1981, 81.

²⁷Summerson 1966a, plate T13, 45.

²⁸Thorpe wrote "the 1/2 into 12 pts." against a plan of the Doric order. Plate T14 in Summerson 1966a.

²⁹The price is recorded in a list of 931 items at Jesus College, Oxford accumulated from various collections, but including the books from the founding of Jesus College (1571), the gift of part of the library of Lord Herbert of Cherbury, and the books from a Principal of Jesus, Dr. Francis Mansell (before 1649). Books formerly in the collection of Herbert carry his initials and the purchase price. See also the entry for Palladio's *I quattro libri*. See Fordyce and Knox 1940; Lievsay 1969, 50-52.

³⁰S.v. "Vignola", E. Harris 1990, 458-59.

taken from the plate of the Porta Pia added to the end of the Vignola treatise of gate designs by Michelangelo.

In general, Jones was critical of Vignola's general proportions and architectural detailing. For example in the plate of the Doric pedestal and base Jones wrote "In all thes pedestals Viniola make ye plinth of ye Baace lytell wch ye ancienne never yoused."³¹ Yet there were cases where Jones thought that Vignola had improved on the antique models on which he had based his orders. On the plate of the Ionic frieze in Vignola Jones wrote "This Capitoll is taken from ye fortuna verrille but in that ye astragall is a carved under ye ovolo but I lyke this better."³² In his copy of Palladio Jones had recorded his disapproval of this detail in the Temple of Fortuna Virilis: "I do not lyke ye Caruing of the Astragall under ye Oullo. but it has 2 Astragalo wch is worse."³³

On the plate of the Doric cornice and entablature Jones commented on the depth of the channeling in the drafted masonry: "the rusticke is cutt in high 1/13 part of the plaine asler all most in depth as much as the hight. This is ranker than in palladio in ye tempell of mars ye revenger fo 22 but it may bee varied betwene thes too at pleasure for ye site and distance".³⁴ This annotations dates from the 1630's and the proportions Jones writes here served as the upper limit for the depth of the channeling. In his copy of Palladio Jones wrote on the plate of the Temple of Mars Ultor that the channeling was 1/10th the height of the ashlar.³⁵ As Gordon Higgott has discussed these annotations represent Jones's working method in determining the range of proportions within which the architect was free to design.³⁶

³¹Vignola 1607, plate XII.

³²Vignola 1607, plate XVIII.

³³Palladio 1601, IV, 50.

³⁴Vignola 1607, plate XXXII.

³⁵Palladio 1601, IV, 22.

³⁶Higgott 1992, 64.

Busca, Gabriello. *L'architettura militare*. Milano: Appresso Gio. Battista Bidelli, 1619. 4to.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Title page: "Inigo Jones" (scratched out).

Binding: contemporary limp vellum.

Extensive marginal annotations.

I: Cockle 1957, no. 811.

II: Harris 1973; Wilkinson 1923, no. 38.

Jones may well have heard of Busca's fame as a military architect and campaigner during his early trip to Europe, especially if his travels took him through the Duchy of Savoy while Busca was "architect of the State of Milan" from 1599.³⁷ This treatise on fortifications was only one by Busca. He also published *Della espugnazione et difesa delle fortezze libri due* (Turin 1585) and *Instruttione de' bombardieri* (Carmagnoloa 1584, Turin 1598).³⁸

Jones heavily annotated his copy of Busca's treatise on military architecture, the second edition of the 1601 publication, particularly those sections dealing with the siting of fortifications on lakes or near the sea.

³⁷See Pollak 1991, 8, for a full summary of Busca's career and publications.

³⁸Pollak 1991, 8.

Caesar, Caius Julius. *I commentari di C. Giulio Cesare con le figure in rame de gli alloggiamenti, . . . fatte da Andrea Palladio . . .* Vinetia: Appresso Girolamo Foglietti, 1618.

4to.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Not signed by Jones; George Clarke monogram on titlepage.

Binding: calf over boards; rebound by George Clark.

Marginal annotations.

I: Burns 1975, 110; Hale 1977; Isermeyer 1979; Puppi 1988, 187-94.

II: Harris 1973, 64; Harris 1973; Wilkinson 1923, no. 37.

Andrea Palladio's edition of Caesar's *Commentaries*, like his architectural treatise, returns to ancient sources as the means for modern reform.³⁹ Palladio added illustrations based on drawings made by his sons before their death in 1572; and a preface dedicated this publication to their memory.⁴⁰ Following a method in many disciplines, such as the study of mathematics in the sixteenth century, modern day reform in military techniques could be accomplished through the study of Roman methods.⁴¹

Jones shared with his patrons and their circle an interest in all military matters. Henry Percy, Earl of Northumberland, also owned a copy of Palladio's edition of Caesar's *Commentaries*, which he had specially interleaved and then annotated heavily.⁴²

The edition of Palladio was known in England as the copperplates in Sir Edmund Clement Edmonde's *Observations upon the five first books of Caesars Commentaries . . .*, London: Peter Short, 1600 (STC 7488) were based upon the

³⁹See Lionello Puppi, "Palladio e l'arte della guerra," *Contributi su Andrea Palladio nel Quatro Centenario della morte (1580-1980)* (Venezia: Ateneo Veneto, 1982), 11-32.

⁴⁰Burns 1975, 110.

⁴¹Hale 1977, 240-55.

⁴²Percy had this copy, now at Petworth, with him when he was imprisoned in the tower; and there employed an Italian "reader" to help him with his Italian texts. Batho 1960, 254-55, 259.

earlier Italian edition.⁴³ There are annotations by Jones throughout that summarize the main events discussed in the text.

⁴³Mortimer 1977, vol. I, 136.

Cartari, Vincenzo. *Le imagini de i dei de gli antichi*. Venetia: Presso Marc'Antonio Zaltieri, 1592.

4to.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: p1r; p2v; title page: "Inigo Jones" (all three scratched out).

Binding: Contemporary vellum over boards. On spine is written "Cartari Le Imagini de I Dei De Gli Antichi"

Not annotated.

I: [Mortimer 1974, no. 108]

II: Harris 1973, 64; Wilkinson 1923, no. 30.

While this volume is not annotated, it is clear that Jones certainly used Cartari in the production of his masques.⁴⁴ Cartari was the most popular of the Renaissance guides to mythology, intended particularly for the use by artists and poets.⁴⁵ Although Cartari had been translated into English in 1599, Jones typically owned the Italian edition.⁴⁶ Ben Jonson and George Chapman had also relied on Cartari as a resource for classical mythology.⁴⁷

Like many of the books in Jones's library, Cartari would have given Jones a context for his understanding of the setting of mythology and the activities of the ancients. The plates in Cartari show architectural ruins as the backdrop for the activities of the gods.

⁴⁴Harris 1973, 64.

⁴⁵D.J. Gordon, "Ripa's Fate," in his *The Renaissance Imagination* (Berkeley: University of California Press, 1975), 55.

⁴⁶Vincenzo Cartari, *The fountaine of ancient fiction. Wherein is lively depicted the images and statues of the gods of the ancients, with their proper and particular expressions . . . into English by Richard Linche* (London: Adam Islip, 1599).

⁴⁷On Cartari see Madeline Lennon, "Cartari's Imagini: Emblematic References in the Relationship of Text and Image," *Emblematica* 3:2 (Fall 1988), 263-82; D. J. Gordon, "The Renaissance Poet as Classicist: Chapman's *Hero and Leander*," in his *The Renaissance Imagination* (Berkeley: University of California Press, 1975), 102-33.

Cataneo, Pietro. *L'architettura*. Venetia: Aldus, 1567.

Folio.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Not signed.

Binding: Contemporary limp vellum.

Few marginal annotations.

I: Adams 1967, 1025; Fowler 1961, no. 83; Mortimer 1974, no. 114; Krufft 1988, 88-9; Pollak, no. 8; Wiebenson 1983, I-22.

II: Harris 1973; Wilkinson 1923, no. 15.

Cataneo discussed both architecture and fortification in his treatise, one of the last to do so in the sixteenth century. Scamozzi's treatise was similarly conservative in its combination of these two fields, long since discussed separately by specialists in the respective fields. Cataneo's treatise however never achieved the popularity throughout Europe of Palladio or Serlio.⁴⁸ The 1567 publication *L'architettura* owned by Jones was an expanded version of Cataneo's 1554 *I quattro primi libri di architettura*. In it Cataneo follows in large part Francesco di Giorgio's concept of the fortified city, with particular emphasis on the human analogy for architectural planning on a large urban scale and for smaller projects, such as the individual ecclesiastical building.⁴⁹ The treatise is highly critical of Vitruvius, and places a greater emphasis on the architect's philosophical and humanist education, "la vita humana," as the basis for design method.

It is difficult to know how much direct effect Cataneo as a treatise had on Jones. There are no annotations in the book by him, and no direct evidence of drawings after Cataneo.⁵⁰

Inside the front cover is a sectional drawing in pencil and shows a domed church with one side pavilion. (Figure 67) Measurements are drawn onto the drawing in feet. The section is overlaid a plan of a latin cross church with ambulatory and side aisles. The plan is not taken directly from any in Cataneo, but consistent with his plans in Book III.

This copy of Cataneo has been given to the library of Jones through the attribution of the drawing, as there is no owner signature nor annotation in a hand

⁴⁸Nicholas Adams, s.v. "Pietro Cataneo", in Wiebenson 1982, I-22, n.p.

⁴⁹Krufft 1988, 131-32.

⁵⁰Peacock 1990b. mentions Jones's use of Cataneo in general terms as evidence of Jones's interest in the human analogy in architecture.

that can be ascribed to Jones. (The one annotation, 'largazza', p. 182, is not recognizably in Jones's hand.) The drawing is, however, most certainly not by Jones but by his assistant John Webb. The drawings in the Cataneo relates to others by Webb also in the collections at Worcester College (Harris/Tait 160 verso, elevation of a domed church). The hatching of the drawing in the Cataneo treatise is similar to that by John Webb; the handwriting of the inscribed dimensions is also similar to Webb's hand on other drawings.⁵¹ Margaret Whinney in her study of Webb's designs for classical churches proposes that these drawings at Worcester College were exercises intended for a planned treatise on architecture.⁵²

Even if this drawing is by Webb the book could still have come from the collection of Jones, as Webb inherited Jones's library. The one note in Italian suggests that the book was purchased in Italy, though the evidence is not conclusive.

⁵¹See Harris/Tait 19779, 146 A-D for example.

⁵²Whinney 1945, 120-30.

Chapman, George. *An Epicede or Funerall Song: On the Most Disastrous Death, of the High-Borne Prince of Men, Henry Prince of Wales, &c.* London: T.S. for John Bridge, 1612.

4to.

George Chapman; Inigo Jones; John Webb; Robert Hoe Collection; Huntington Library, California. Ms. dedication to Jones from Chapman: "ffor Inigo Jones from his true ffriende Geo. Chapman Inigo Jones 1613".

Binding: Modern binding; marble paper over boards. Edges cut.

Not annotated.

I: STC 4974.

II: Cummings 1989.

While the signature in the copy of Chapman's *Epicede* appears to be in the hand of Jones, there is some question as to the authenticity of the Chapman dedication.⁵³ (Figure 68) It is probable that Chapman would have given Jones a copy of his elegy on the death of Prince Henry in 1612: both Jones and Chapman were employed at Prince Henry's court. Chapman had dedicated his translation of *Musaeus* to Jones.

To the Most generally ingenious, and our only Learned Architect, my exceeding good Friend Inygo Iones, Esquire; Surveigher of His Maiesties Workes.

Ancient Poesie, and ancient Architecture, requiring to their excellence a like creating and proportionable Rapture, and being alike over-topt by the monstrous Babels of our Moderne Barbarisme; Their uniust obscurity, letting no glance of their trueth and dignity appear, but to passing few: To passing few is their lest appearance to be presented. Your selfe being a Chiefe of that few, by whom Both are apprehended: and their beames worthily measur'd and valew'd. This little Light of the one, I could but not obiect, and publish to

⁵³See the review by Raymond B. Waddington, *Renaissance Quarterly* XLIII/4 (Winter 1990), 877-880 of L. A. Cummings, *Geo. Chapman: his Crowne and Conclusion, a Study of His Handwriting*. Salzburg Studies in English Literature: Elizabethan and Renaissance Studies, 106. (Salzburg: Institut für Anglistik und Amerikanistik, Universitat Salzburg, 1989).

your choice apprehension; especially for you most ingenuous Love to all Workes, in which the ancient Greeke Soules have appear'd to you.⁵⁴

Chapman's translation of Homer has a frontispiece with classical figures in the style of designs by Jones for masque costumes.⁵⁵ (Figure 69) The frontispiece was engraved by William Hole, who was at the court of Prince Henry with Jones and Chapman, and whose book designs often follow closely on the style of Jones. Jones may well have designed Chapman's tomb after the poet's death in 1630, based on a Roman tomb model and with an inscription praising Chapman's talents as a translator.⁵⁶

⁵⁴George Chapman, dedication to Inigo Jones in his translation of *The Divine Poem of Musaeus* (1616); printed in Richard Corballis, *George Chapman's Minor Translations: A Critical Edition of his Renderings of Musaeus, Hesiod and Juvenal*. Salzburg Studies in English Literature; Jacobean Drama Studies, no. 98 (Salzburg: Institut für Anglistik und Amerikanistik, 1984), xii.

⁵⁵Corbett/Lightbown 1979, 113-18.

⁵⁶White 1985, 27.

Cherubini, Giovanni Battista. *Le cose meravigliose dell'alma città' di Roma, dove si tratta delle chiese, stationi, indulgenze & reliquie de i corpi santi, che sono in essa.*

Contains *L'antichità dell'alma città di Roma di M. Andrea Palladio*. Roma: appresso Pietro Discepolo, 1609.

8vo.

Inigo Jones; John Webb; Devonshire Collection, Chatsworth. Signed: Title-page: "Roma, 20 febricij, Inigo Jones"

Binding: Rebound, 19th century; calf and paper over boards.

Not annotated.

I: Schudt 1930, 99.

II: Newman 1988, 435 n. 4.fv

While there are no annotations in this book, from notes in Jones's Roman notebook it is certain that he used Palladio's guide to the antiquities of Rome.⁵⁷ The notes are organized within the same categories as in Palladio, and follow Palladio's order. For example on the first page of his notes on the antiquities of Rome Jones wrote:

:waies:

Ther wear 29 principall wais but the most Cellebrated wear 3 Apia:
this was caled queene of the wais because ye tryonmfes passed this
wais: this was paced by Apia Claudius fro[m] the gate of St. Sebastian
to Capua and bing Broken yt was repaired by Traian to Brindisi
flaminia that C: Flammino being Consull Paved for the Porta Populi

⁵⁷See the notes out of Palladio's guide book in the Roman notebook, pp. 25-29, 31, 33, 35-36. On Palladio's guidebook to Rome see Puppi 1988, 3-36.

In the collection of Worcester College is a copy Palladio's *L'antichità di Roma* bound with a copy of *Le Cose Meravigliose dell'Alma Città di Roma*. (Venice: Girolamo Francino, 1588) There are no owner signatures, although there are notes on the flyleaf in many hands. There are no annotations in the text. While this copy in the Worcester College Library has traditionally been ascribed to the collection of Inigo Jones (Wilkinson 1923, 25), there is no direct evidence that this copy ever belonged to him.

to Rimini and yt is now called via larga
Emillillia was paved unto Bollognia.⁵⁸

Jones translated further notes from Palladio on the hills, aqueducts, sewers, baths,
and theaters.

⁵⁸Compare to the text of Palladio: "Ventinove furono le vie principali, ancorché ogni porta avesse la sua, e C. Gracco la adrizò e lastricò. Ma tra le più celebri furono l'Appia, et Appio Claudio essendo censore la fece lastricare dalla porta di San Sebastiano insino a Capua et essendo guasta Traiano la restuaurò insino a Brindisi, e fu adimandata regina delle vie perchè passavano per quella quasi tutti li trionfi; la Flaminia, C. Flaminio essendo console la fece lastricare dalla porta del Popolo infino ad Arimini e si chiamava ancor la via larga perchè se stendeva fino in Campidoglio; l'Emilia, fu lastricata da Lepido e C. Flaminio consuli insino a Bologna . . ." Andrea Palladio, *L'antichità di Roma*, sigs. 3v-4r.

Curtius Rufus, Quintus. *De Fatti D'Alessandro Magno, Re De' Macedoni*. Translated by Thomaso Porcacchi. Venice: Appresso Gabriel Giolito de' Ferrari, 1559.

4to.

Thomas Ward; [?]; Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: TP: "Inigo Jones" (scratched out).

Binding: Contemporary limp vellum; ties missing.

Not annotated by Jones. Poems and notes in Latin, English and Italian on title page and flyleaves in various hands.

I: STC Italian 1958, 207.

II: Harris 1973; Wilkinson 1923, no. 11.

Thomas Peacham recommended Quintus Curtius for the educational training of young men in his *The Complete Gentleman*: "Be then acquainted with Quintus Curtius, who passing eloquently with a faithful pen and sound judgement writeth the life and acts of Alexander, in whom you shall see the pattern of a brave prince for wisdom, courage, magnanimity, bounty, courtesy, agility of body, and whatsoever else were to be wished in majesty" ⁵⁹

Six editions of Curtius Rufus appeared in English translation between 1553 and 1602. ⁶⁰ The popularity of the English edition was due to its use in the education and training for public life. "Many have written, and experience besides declareth, howe necessarye Historicall knowledge is to all kinde of men, but specially to Princes and to others which excell in dignitie or beare authority in any commonweale: the same beeing counted the most excellent kinde of knowledge, the chiefest parte of ciuill prudence, and the mirrour of man's life." ⁶¹ The study of history was thought directly applicable to all sorts of disciplines. "As in all artes there bee certeine principles and rules for men to folowe, so in histories there be ensamples painted out of all kinde of vertues, wherein both the dignitie of vertue and foulness of vice, appeareth much more liuely then in any mortall teaching:

⁵⁹Peacham [1634] 1962, 60.

⁶⁰*The Historie of Quintus Curcius, conteyning the actes of the greate Alexander translated . . . by Iohn Brende* (London: Rycharde Tottell, 1553 and later eds).

⁶¹Curtius Rufus 1592, sig. A2r.

there being expressed by way of ensample, all that Philosophie dooth teach by way of precept."⁶²

This copy of Q. Curtius was owned by at least two others before Jones, and there are a great number of annotations in Italian, English and Latin on the front flyleaf and titlepage. (Figure 70)

⁶²Curtius Rufus 1592, sig. A2r.

Dion Cassius. *Delle Guerre de Romani*. Translated by Nicolo Leonicensi. Venice: Pietro di Nicolini da Sabio, 1548.

8vo.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Title page "Inigo Jones" (scratched out).

Binding: Contemporary limp vellum; ties missing. Title on spine: "Dione hist:".

Marginal annotations.

I: STC Italian 1958, 217.

II: Harris 1973; Wilkinson 1923, no. 6.

There are a few scattered annotations throughout the book by Jones in a hand that must be dated to after 1614. The notes are in Italian. In places Jones notes passages relevant to the study of architecture, as where he writes "inequalita dissolve le fabbriche."⁶³ Elsewhere there are notes on the history of temples, including the explanation for the giving of the name Pantheon.⁶⁴

⁶³Against the text: "oltra di queste p[er]che la inequalita dissolve anchora le fabbriche, lequali sono ben confitte insieme. . ." (p. 344v).

⁶⁴Jones noted "Pantheon" against this text: "il tempio nominato Pantheo, & forse che ha ricevuto questo nome, perche nelle statue gli sono scolpite molte imagini da gli Dei come in quella di Marte & di Venere: ma come io pe[n]so, perche essendo fatto in circo è simile al Cielo." (p. 361v)

Euclid. *De gli elementi libri quindici*. Translated by Federico Commandino. Urbino: Appresso Domenico Frisolino, 1575.

Folio in 2's.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Title page: "Inigo Jones" (scratched out).

Binding: Contemporary vellum over boards.

Not annotated.

I: [Mortimer 1974, no. 174]; Thomas-Stanford 1926, no. 42, 44.

II: Harris 1973; Wilkinson 1923, no. 21.

Although Jones's copy of Euclid is not annotated he certainly studied it based on annotations found elsewhere. For instance, Jones refers to Palladio's system use of Euclid for finding the dimensions of rooms.⁶⁵

Medieval masons traced their profession back to Euclid, as in the poem of John Lydgate, "By crafft of Ewclyde mason doth his cure,/ To suwe heos mooldes ruyle, and his plumblyne."⁶⁶ The popularity of Euclid in England was greatly increased by the Henry Billingsley translation in 1570 in English with the "Mathematical Preface" by John Dee.⁶⁷ For surveyors and masons some knowledge of Euclid was essential, and many of the English treatises of the period on surveying and the construction of the orders refer the reader back to that edition of Euclid for further study.⁶⁸ Jones may have owned another copy of Euclid -perhaps the 1570

⁶⁵Jones notes that Palladio shows two ways to find the height, geometrically and by numbers in the chapter on the height of rooms. Jones makes a marginal annotations "Euclid the 6 Book/Propo: 13". Palladio 1601, I, 53.

⁶⁶Quoted in John H. Harvey, "The Education of the Mediæval Architect," *Journal of the Royal Institute of British Architects* 52 (June 1945), 230-34, esp. 233.

⁶⁷See John Murdoch, "Euclid: Transmission of the *Elements*," Vol. IV, pp. 437-59 in Charles Coulston Gillespie, ed., *Dictionary of Scientific Biography* (New York: Charles Scribners' Sons, 1971). On John Dee and Euclid see Diana M. Simpkins, "Early Editions of Euclid in England," *Annals of Science* 22 (1966), 225-249; W.F. Shenton, "The First English Euclid," *American Mathematical Monthly* 35 (1928), 505-12; R.C. Archibald, "The First Translation of Euclid's *Elements* into English and Its Source," *American Mathematical Monthly* 57 (1950), 443-52. On John Dee's meeting with Commandino see Edward Rose, "John Dee and Commandino," *Scripta mathematica* 28 (1970), 325.

⁶⁸See for example the treatise by Richard More, *The Carpenters Rule* (1602, 1616).

translation by John Billingsley-or he may have made notes out into another notebook which does not survive.⁶⁹

Federico Commandino (b. Urbino 1509-1575), whose father had supervised the building of fortification at Urbino, established a study of mathematics at the court of Urbino in the mid-sixteenth century based on the revival and study of ancient Greek texts. This first Italian edition printed "in casa di Federico Commandino" uses the blocks and initials from the Latin edition published in Pesaro in 1572.⁷⁰ The preface to the translation of Euclid presents Commandino approach to mathematics as a discipline which unlike physics, does not rely on sense-phenomenon, but relies on *cogitatio* and analysis of the physical world.⁷¹

⁶⁹A copy of Billingsley's translation of Euclid (1570) at Worcester College from the collection of George Clarke may have belonged to Inigo Jones. There are annotations on fol. 14 in a hand close to that by Jones in other volumes. The annotation is to the first Theorem, fourth proposition: "Diggs. plan. ca. 4. The content of this Triangle is R 243 wch is. 15 & betweene. $\frac{3}{5}$, $\frac{15}{31}$. The perpend herof is 5 c. betweene $\frac{1}{5}$ & $\frac{2}{11}$." The reference is to Thomas Digges, *A Geometrical practical treatise named Pantometria, divided into three Bookes, Longimetra, Planimetra, and Stereometria, Containing rules manifolde for mensuration of all Lines, Superficies and Solides . . .* (London: Abell Jeffes, 1591). Thomas Digges was educated by John Dee, a close friend of the father Leonard Digges. See E. Harris 1990, 182.

⁷⁰Mortimer 1974, I, pp. 247-48, no. 174. Also see Thomas-Stanford 1926, 10-11.

⁷¹On Commandino see Rose 1975, 185-205.

Florus, Lucius Annaeus. *De fatti de Romani. Dal principio della città per infino ad Augusto Cesare.* Translated by Gioan Domenico Tharsia di Capo D'Istria. Vineggia: appresso gli heredi di Pietro de Ravani, 1546, (colophon 1547).

8vo.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: TP: "Inigo Jones" (scratched out); George Clarke monogram.

Binding: Contemporary limp vellum.

Not annotated.

I: Adams 1967, 657.

II: Harris 1973; Wilkinson 1923, no. 4.

"Florus (saith Ivstvs Lipsivs, who in Mr. Camdens opinion carryed the Sunne of antiquity before him) wrote a briefe, not so much of Liuie (from whom he often dissenteth) as of the Roman affaires, in my poore conceite, aptly, elegantly, neatly. There is in him a sharpnesse of wit, and shortnesse of speech, oftentimes admirable; and certaine gemmes as it were, and iewels of wise sentences, inserted by him with good aduisement, and verities."⁷² Florus was admired for his terse use of language and summaries of other authors. In the dedication to the Duke of Buckingham in the English translation, Bolton recommends Florus: "His Maiesties great example, and your Lordships feruernt imitation, to increase in the ful sail of fortune, the balasse of worthy readings, is here in part well fitted. For your Honour cannot possibly find in so little a room so much, so well together, of this weightie argument."⁷³

On a front flyleaf is written in a hand not by Jones "Learne to live and then learne to dy. first learne to live and afterwarde to dy."

⁷²Edmund Bolton, transl., *The Roman Histories of Lucius Iulius Florus from the foundation of Rome, till Caesar Augustus, fro aboue DCC. yeares, & from thence to Traian near CC. yeares, divided by Flor. into IV ages. Translated into English* (London: Wil Stansby, 1618), sig. A4r.

⁷³Florus 1618, sig. A1v.

Fulvius, Andreas. *Opera delle antichità della città di Roma, & delli edificij memorabili di quella*. Translated by Paulo dal Rosso. Vinegia: Michele Trameziano, 1543.

8vo.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: TP:

"Inigo Jones" (scratched out); George Clarke monogram.

Binding: Contemporary limp vellum; ties missing. Title along the spine: "Antichita de Roma"; "And[rea Ful]vio anti[chita] di Ro[ma]"

Not annotated.

I: Adams 1967, 1154.

II: Harris 1973; Wilkinson 1923, no. 3.

Part of Jones's collection of guidebooks and sources for the study of ancient Rome, this book was not referred to in Jones's annotations and there is no evidence of his reading in the volume itself.

Guicciardini, Francesco. *Dell'epitome dell' historia d'Italia*. Edited by F. Sansovino. Venice: per ordine di Iacomo Sansovino, 1580 [presso Gio. Antonio Bertano] 8vo.

Signed: Title page: "Inigo Jones".

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford.

Binding: Contemporary limp vellum; ties missing.

Marginal annotations in Italian.

I: STC Italian 1958, 321.

II: Harris 1973; Wilkinson 1923, no. 22.

The annotations in this book are in Italian, and seem to be in two different hands. One hand is clearly not that of Jones, but the other may be a further example of Jones writing in Italian as part of his language study or when he was reading in Italy.

An English translation by Geffray Fenton appeared in numerous editions from the middle of the sixteenth century. In the dedication to Queen Elizabeth, the translator praises Guicciardini for describing not only the events of the past but their causes. "And for the generall matter of his worke, it doth not onely conteine the warres and diuerse accidentes hapned in Italy and other partes for almost forie yeres, but also he doth so distinctly set downe the causes, the counsells, and the fortunes of euery principall partie introduced into those actions, that by his studie and iudgement, is traced & made easie to the reader, the way to all those swete and plentifull frutes which with paynfulnes are sought in Histories of this nature."⁷⁴

Guicciardini's readership in England had been promoted by Robert Dallington in his *Aphorismes Civill and Militaire* (1613) and known mostly from the printed version dedicated to Prince Charles. However, an earlier holograph manuscript of 1609 was a presentation copy to Prince Henry. This copy shows the owners signature, Henricus Princeps, and has further remarks on Henry's household as an "Academy" of art and science.⁷⁵ As Höltgen notes this book helped to improve the Jacobean image of Italy: "[Dallington] introduced to English readers a

⁷⁴Francesco Guicciardini, *The Historie of Guicciardin, Containing the Warres of Italie and other Partes . . . Reduced into English by Geffray Fenton* (London: Thomas Vautroullier, 1579), sig. *iiiiv.

⁷⁵Northamptonshire Record Office, F. H. 315. See Höltgen 1984a.

Catholic Italian historian critical of Roman superstitions and the political and territorial claims of the Papacy.⁷⁶ Jones was in the court of Prince Henry, and would have from early in his career been aware of the political implications of the study of military theory and history.

Guicciardini belonged to that body of military literature read by Prince Henry and his brother, and essential in the training of young gentlemen. It would, however have had a direct and evocative power in suggesting a behaviour for nobility which distinguished between private and public behavior.⁷⁷ For Jones, this political theory informed his architectural theory by establishing a code of representation which could be incorporated within Vitruvian ideas of decorum, the appropriate use of forms for the architectural owners.

⁷⁶Höltgen 1984a.

⁷⁷See Pauline Gregg, *King Charles I* (London: J.M. Dent, 1981), 34-5.

Herodotus. *Delle guerre de Greci & de Persi*. Translated by Mattheo Maria Boiardo. Venice: per Bernardino de Bindoni, ad instantia de M. Marchio Sessa, 1539.

8vo.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Title page: "Inigo Jones" (scratched out).

Binding: vellum over boards. On spine: "Herodoto: Itall:".

Extensive marginal annotations.

I: Adams 1967, 413.

II: Harris 1973; Wilkinson 1923, no.1.

Like Vincenzo Scamozzi's notebooks of passages from the classics relevant to the training of architects, Jones read Herodotus for details about the buildings of the ancients. Jones heavily annotated the section that describes a memory palace of the ancient world, the Labyrinth of the Crocodile in ancient Egypt by Amenemhet III.⁷⁸ It was, as Jones notes, "a building for memory" ("laqual fusse monume[n]to eterno e memoria della fama loro", 67r).

The English translation of Herodotus, published in 1584, emphasized the importance of reading histories in contrast to the viewing of paintings, and the necessity of textual description in the understanding of images.

So that Praxiteles with his pencill shall make the signe, and being not understoode, Herodotus shall tell his tale, by meanes whereof, that wych wanteth in the one, shall be so plentifully supplied in the other, that dyspising the Paynter for setting downe to little, we shall suspect the wryter for alleading to much, finding faulte with one for obscuritie, and in the other fearing flatterie. So lyvely in many things, and so evident in all things is the pleasant discourse of hystories, that a better counterfayte may be drawne with two penfull of incke in Herodotus tale, than with two potfull of colours in Appelles table.⁷⁹

⁷⁸W.W. How and J. Wells, *A Commentary on Herodotus* (Oxford: Oxford University Press, 1912), vol. I, 240-41.

⁷⁹Herodotus 1584, sig. A2r-A2v.

The architectural passages in Herodotus, like the nearly simultaneous publication in English of Francesco Colonna's *Hypnerotomachia Poliphili*, gave readers a wider language of architectural description.

This I beheld with mine eies, being named The Maze of the Crocodyles: for is a man would frame his coniecture according to the report which the Graecians make therof, measuring the walles and the beauty of the work after their account, certes he that give but a beggarly iudgement of so sumptuous & magnificent a building. For albeit the temple of Ephesus be an excellent & worthy monument, & the church or religious house of Samos, yet are they nothing in respect of the pires in Aegypt, one of the which may wel stand in comparison wth all the renowned works of Greece, and yet even these are far excelled & surmounted by the labyrinth. . . . Thus of the nethermost house we speake by hearesay, of the lodgings above viewing with our owne eyes, more straunge & wonderfull miracles then could be wrought by the helpe of men, for the sundry turnings and windings leading from one chamber to another, did wonderfully amaze and astonish my wits. Out of the great haules we go into certaine parlours, wherehence the way leadeth in other bedchambers, next unto which are situate divers secrete lodgings that open into the sixe great haules, standing on the contrarie part of the court, all which are coped over above with wrought and carved stone, encompassed also with a wall of most fayre and beautifull stone, ingraven with sundrie sorts of pictures. Every one of the haules are layde with smoth white stone, beautified on each side with a goodly course of pillers. To one corner of the Laberinth is adioyning a pyre or towre of stone, being fortie paces, wherein are the pictures of many straunge beasts hewne out and carved of stone.⁸⁰

⁸⁰Herodotus 1584, fo. 110v-111r.

L'Orme, Philibert de. *Le premier tome de l'architecture*. Paris: Federic Morel, 1567.
Folio.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed title page: "Inigo Jones"; George Clarke monogram.

Binding: calf over boards, with large impressed gold medallion in center of front and back cover; rebound by Clarke

Not annotated; few underlinings on 136v, 142r, 142v.

I: Fowler 1961, no. 99; Wiebenson 1983, I-24.

II: Harris 1973; Wilkinson 1923, no. 16.

There are a few underlinings in this copy of Philibert de l'Orme, though it is not certain that they are by Jones. In an annotation in Palladio, however, Jones does directly refer back to this treatise, preferring Philibert de l'Orme's representation of the detailing of the entablature of the Temple of Jupiter Stator.⁸¹

A copy of the 1561 edition, now in the Fowler Architectural Collection, is from the collection of Thomas Willoughby, who inherited it from Sir Francis Willoughby, builder of Wollaton Hall.⁸²

⁸¹Palladio 1601, IV, 69. Though there are no annotations on these pages in Philibert de l'Orme, there is a tell-tale smudge of ink on page 196, one of the pages referred to by Jones.

⁸²Fowler 1961, 81. Also see Friedman 1989.

Lomazzo, Gian Paolo. *Trattato dell'arte, della pittura, scoltura, et architettura*. Milan: Per Paolo Gottardo Pontio, 1585.

8vo.

Inigo Jones; Sidney Sabin; B. Weinreb. Signed: Title page "Inigo Jones."

Binding: Rebound in red calf over boards with gilt tooling; trimmed.

Marginal annotations.

I: Fowler 1961, no. 186.

II: Hölzgen, "Richard Haydocke," p. 18; Harris 1973, no. 88, 65-6.

This is a re-issue of the first edition of Lomazzo, Milan 1584, with a new title-page.

From notes in his Roman notebook on the proportion of children, techniques of coloring, and drapery design it was known that Jones owned a copy of Lomazzo, although the book itself only recently surfaced in a private collection.⁸³ As he does in his copy of Vasari, Jones refers to prints and drawings he knows from English collections. Jones refers in the margin to the location of Raphael's *St. George* (National Gallery, Washington), then in the collection of the Fourth Earl of Pembroke, "the Saint Giorg [t]hat my lo cha[m]b[er]lain hath."⁸⁴ Jones's interest in terminology appears in a long series of annotations against the chapter "De i Membri esteriori del corpo humano" where "per maggior chiarezza" Lomazzo defines the names of the parts of the human body. Jones lists each of the terms in the margin and underlines the corresponding text. As Lomazzo noted, it was crucial to understand the terms before proceeding to the problem of their correct proportioning, for the body of man contains the perfection of correct proportions.

⁸³Jones's annotations on children are on pp. 42, 58, on coloring, p. 96, 97, of the notebook now at Chatsworth.

The notebooks of the traveler Richard Symonds, written in the 1640's also contain notes taken out of Lomazzo, and suggest that he is using the treatise as a guide to paintings he saw during his travels. BM, Add. Ms. 17919, fo. 67; BM, Egerton 1636, fo. 105.

⁸⁴Against the text by Lomazzo: "E perche si possa auuertirsi da quest'errore, & intendere questa proportione, si come quella ch'ancora serue alli giovani, che tengono del bello, come sono i gracili, & leggiadri con certa mamera gentili di fierezza, Raffaello d'Vrbino la esprese nel santo Giorgio ch'uccide il Serpe, il qual si vede nè la Chiesa di Santo vittore de Frati in Milano & nel Sa[n]to Michele, che si trova in Francia à Fontanbleo, & in quel San Giorgio, che già fece al Duca d'Vrbino sopra vn Tauoliere:" (p. 48).

Jones notes at the beginning of the following chapter: "[T]he boddy of ma[n] [t]he most beautifull [th]ing in it all the [p]ropsions and [ha]rmonies."⁸⁵

The physician, Richard Haydocke, translated Lomazzo into English, and it appeared in print in 1598.⁸⁶ Haydocke only included the first five books of Lomazzo's treatise. In the introduction Haydocke states that he had difficulty obtaining a copy of the treatise. He had one copy from Thomas Allen, which was imperfect, 'the reliques of a shipwrecke.'⁸⁷ He could not find a copy in the book stalls of St. Paul's Churchyard. Finally Haydocke received a copy in gift from Thomas Brett, and this copy is now in the British Library.⁸⁸ Haydocke's desire to translate and publish Lomazzo in English emerged from a hope that this would improve the state of knowledge of the visual arts in England.

Lomazzo's treatise, in Italian or English, had a much wider readership than immediately apparent, and references to him appear in unexpected contexts. In the preface to his *Observations, upon the five first bookes of Caesars commentaries* (1600), Clement Edmundes recommends Lomazzo's analysis of the relationship of knowledge and practical skill.

. . .as Lomazzo the Milinese, in that excellent worke which he writ of picturing, saith of a skillful painter, that being to drawe a portraiture of gracefull lineaments, will never stand to take the symmetry by scale, nor marke it out according to rule; but having his judgement habituated by knowledge, and perfected with the variety of shapes and proportions; his knowledge guideth his eie, and his eie directeth his hand, and his hand followeth both with such facilitie of cunning, that each of them serve for a rule wherby the true measures of nature are exactly expressed. The like may I

⁸⁵Against the text by Lomazzo: "Egli è ragione che seguendo l'ordine delquale m'intendo particolarmente trattare le proportioni, e armonie, si faccia simile, & à proportione d'ogn'altro corpo artificiale, che sia il più bello, che si troua nella natura, nelquale siano comprese tutte le proportioni, & armonie artificiali tanto maggiori, quanto minori." (Jones's underlining), p. 40.

⁸⁶*A tracte containing the artes of curious paintinge caruinge & buildinge written first in Italian by Jo: Paul Lomatius painter of Milan and englished by R.H. student in physik* (Oxford: Joseph Barnes, 1598).

⁸⁷Gent 1979, 78.

⁸⁸British Library 561*.a.1.(1.) This copy also includes annotations perhaps connected with the translation and publishing venture: '160 reame of pap. serveth for 1000 copies, allowing 3 quire to a coppie, in wch reckoning there is 10 reame allowed for waste. Wch after 4s ye reame cometh to 32l.' Transcribed and discussed by Gent 1979, 78-79.

say of a skillful Souldier, or any Artizan in his faculty, when knowledge hath once purified his judgement, and tuned it to the key of true apprehension.⁸⁹

⁸⁹Edmunds 1600, 4.

Lorini, Buonaiuto. *Le fortificationi*. Venetia: Presso Francesco Rampazetto, 1609. Folio.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Title page: "Inigo Jones".

Binding: calf over boards. A fragment of paper once covered Jones's name on the titlepage, and subsequently his signature survives on this volume.

Extensive marginal annotations, with drawings.

I: Cockle 1957, no. 791; Krufft 1988, 139-40; Pollak, no. 33.

II: Harris 1973; Stoye 1989, ill. 8, 86; Wilkinson 1923, no. 34.

Lorini was active in the Veneto, and his treatise discusses fortification theory in broad strategic terms. The Venetian shift to the *terrafirma* stimulated a new concern with the defense of the Veneto against other Italian states and the rising Turkish threat.

Of all Jones's books on fortifications this one is the most thoroughly and completely annotated. (Figure 71) Jones worked through the extensive illustrations, writing textual descriptions of the plates. Lorini's exposition on fortifications served Jones as the standard text for his study, much as Palladio served for the orders and antiquity. Jones's interest in finding the authoritative voice in any field paralleled the dialogue and debate among writers on fortifications. It is typical of Jones's desire to seek consensus on any topic that he writes in Lorini "on waye and the best followed by ye Author as is sheawed in the dialogue in ye end of this book-." ⁹⁰

In the books on fortifications it is possible to clearly see Jones working with geometry and its practical applications. Mathematical treatises and manuscripts of the period often ended their theoretical discussion with exercises for drawing fortifications. ⁹¹ The drawing of fortifications as an exercise at the drawing board must have interested Jones, although there are no fortifications drawings by him that survive. Jones wrote in Lorini "the knowlidge of the lines by theory and the practice in working make it both easye and delightful. this donn by mathematicall instrumente The moving square the most easiest both to forme ye designs and reall

⁹⁰Against the text by Lorini: "Ne meno offerveremo tante, & cosi diverse opinioni scritte da altri Autori, ma si bene ne piglieremo una sola per la migliore . . ." p. 18.

⁹¹For example a mathematical manuscript (early 17th c.) at Sidney Sussex College from the collection of John Harrington ends with a series of fortification exercises.

worke." (p. 17) Fortification theory, with its mathematical basis and evolution through changing proofs, contrasted with architectural debate based on visual preference and traditional usage. Lorini is explicit in his insistence on the need for scientific methods being brought to the study of fortifications: "Mondimeno l'huomo savio deve sempre pigliare la buona parte, e senza passione alcuna'lasciare guidare non dall'usanze, ma si bene dalla ragione." (p. 18) Jones wrote in the margin "a wyse man not ledd by custome but by reason." With his emphasis on rules and justification in his study of classical architecture, Jones must certainly have seen the study of fortification as the consummate form of rational and scientific architecture.

Monte, Guidobaldo, Marchese del. *Le mechaniche*. Translated by Filippo Pigafetta. Venetia: Appresso Francesco di Franceschi Sanese, 1581.

4to.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Title page: "Inigo Jones" (scratched out).

Binding: rebound in marble paper over boards; edges trimmed; signature M (folios 45-48 r/v) in manuscript.

Marginal annotations.

I: STC Italian 1958, 446.

II: Harris 1973; Wilkinson 1923, no. 23.

From the time of its publication in 1577 in Latin, Guidobaldo del Monte's *Liber mechanicorum* was recognized as the most authoritative book on statics since antiquity.⁹² Jones may have, on the one hand, been reading Ubaldo simply for practical information on recent developments in Italian mechanics. Yet taken in conjunction with his reading of Commandino's edition of Euclid and the Vitruvian commentary of Bernardino Baldi, Jones appears to have been consulting a group of works by thinkers based at the court at Urbino.⁹³ Guidobaldo was a pupil of Commandino and in 1588 ensured that Commandino's Latin translation of Pappus was published, the ancient source for Guidobaldo's own treatise on mechanics.⁹⁴ Commandino, Baldi, and Ubaldo formed the core of a central Italian group of writers on mechanical and physical sciences; and Jones's reading of all three, and interest in the study of Pappus, suggests more than a casual interest in the theoretical and practical scientific ideas that emerged from Urbino. All three of those sixteenth century writers contributed to the recovery of ancient scientific texts and the discussion of technology based on ancient mathematics, a method which Jones would have found particularly appealing.

⁹²Rose 1975.

⁹³The following discussion is based on the review of Stillman Drake and I.E. Drabkin, *Mechanics in sixteenth-century Italy* (Madison: University of Wisconsin Press, 1969) by Charles B. Schmitt, "A Fresh Look at Mechanics in 16th-Century Italy," *Studies in History and Philosophy of Science* 1, no. 2 (1970), 161-75.

⁹⁴Paul Lawrence Rose, s.v. "Guidobaldo, Marchese del Monte," in Gillespie 1974, vol. IX, 487-89. Also see G. Downey, "Pappus of Alexandria on Architectural Studies," *Isis* 38, 113-114, parts 3-4 (1948), 197-200.

What is less clear is the stimulus behind this course of reading. Did Jones learn of these authors through the scientific contacts at the court of Prince Henry or in the circle of Thomas Howard, the Earl of Arundel? As all of these books were annotated later in Jones's career, the scientific scholars connected with Arundel may be a more likely choice, though without further evidence it is difficult to assign any one scientific tutor to Jones. A further possibility is that Jones was following in a tradition of learned studies in the fields of mechanics, engineering and architecture; and that his choice of authors were the best available editions of each author.

Jones's reading in mechanics followed Vitruvius's own division of architecture into three parts, building, sundials and machines, the latter two being part of the study of mechanics. While sixteenth century Italian architects were less interested in the connection between mechanics, fortification and architectural design, for Jones it seems that these connections were still vital and essential to his training in the field of architecture. The theoretical basis of all these disciplines was geometry, yet the specialization of architecture as a profession in Italy meant that it was no longer necessary to subordinate architecture to mechanics or mathematics.⁹⁵

The study of fortifications, as Catherine Wilkinson discusses, lay somewhere between the study of mechanics and architecture.⁹⁶ Though by the sixteenth century fortifications were the domain of specialized military engineers, and architecture as a profession moved away from the engineering aspects which tied building in all forms to medieval traditions. The large number of fortification treatises, books on mechanics and mathematics owned by Jones, however, indicate that he belongs to that earlier tradition of architectural theory, closer to Francesco di Giorgio than to Maderno for example.⁹⁷ In England, the fields of fortification, mechanics, perspectival study and architecture were still closely aligned at the beginning of the seventeenth century when Jones began his education in design.

There are annotations by Jones in the chapter "Dell'asse nella rota" that discusses the use of pulleys and machines for particular tasks. Jones would have

⁹⁵Wilkinson 1988, 469.

⁹⁶See Wilkinson 1988, 474 for a discussion of this point and the categorization of the field of fortifications in general.

⁹⁷This may also help to explain why Jones was interested in the technical achievements of Domenico Fontana yet critical of his architectural design.

needed such technical information for the construction of large scale buildings and for his innovations in stage machinery.⁹⁸ Ubaldo also wrote an important treatise on perspective, *Perspectivae libri sex* (Pesaro, 1600), whose sixth book "De Scenis" contributed much to the theory of stage and scenery design.⁹⁹

One signature of Jones's copy of *Le mecaniche* is transcribed in manuscript, a feature that I have not found in other copies of the book that I have examined. (Figure 72)

⁹⁸See Howarth 1980, 690-92.

⁹⁹See Paul Breman, s.v. "Guidobaldo del Monte," in Wiebenson 1982, III-B-12.

Palladio, Andrea. *I quattro libri dell'architettura*. Venice: Bartolomeo Carampello, 1601.

Folio

Inigo Jones; John Webb; Michael Burghers; George Clarke; Worcester College, Oxford. Signed: Signed repeatedly on title page and flyleaf: "Inigo Jones"

Binding: Contemporary limp vellum.

Extensive marginal annotations.

I: Burns 1975, 101-104, and passim; Fowler 1961, no. 214; Kruft 1988, 100-106, and passim; Wiebenson 1983, I-25.

II: Palladio [1601] 1970; Harris 1973, no. 86, 64-5 and passim; Harris/Higgott 1989; Cerutti 1980; Cerutti Fusco 1985; Higgott 1992; Howarth 1985; Marini 1985; Newman 1980b; Newman 1988; Newman 1992; Tafuri 1970; Wilkinson 1923, no. 31; Wittkower 1974a.

Inigo Jones's copy of Palladio's *I quattro libri* is the single most celebrated book in the history of English architecture. Since the eighteenth century, and perhaps before, it was the focus for those architects intent on establishing a firm link between English classicism and the sixteenth century Venetian tradition which they saw embodied in Palladio's treatise and established in England in the work of Inigo Jones.

The fame surrounding this book is well justified. It was by all measures the central book in Jones's reading and a record of his changing attitude and understanding of Italian architecture and the ancient models. It is not clear when Jones purchased his copy of Palladio. There is a note on a front flyleaf—not in Jones's hand—recording the price "1601 doi docati."¹⁰⁰ (Figure 5) The note may record an Italian bookseller's price, suggesting that Jones purchased the book in Italy during one of his early trips abroad. It is known that Jones was in Italy before his 1613-14 trip with Arundel, and Jones may have purchased the book then. Annotations in the book are in a hand by Jones that can be dated with some certainty to pre-1613, and are witness to Jones's early reading and study of Palladio, an interest which was to continue throughout his architectural career.¹⁰¹ The Oxford engraver Michael

¹⁰⁰Newman 1992, 18; 49 n. 3.

¹⁰¹Cf. the discussion of the annotations in Harris 1973, 64-5, where John Harris states that the annotations all post-date Jones's return from Italy in 1614.

Burghers acquired the book (after Webb's death?), and signed the book with his name and the date April 21, 1694. George Clarke purchased the book from Burghers on March 3, 1704.¹⁰²

The 1601 edition was the third edition of Palladio's treatise, a reprint of the 1581 edition with the same plates as 1570 edition.¹⁰³

The book remains in its original binding, plain limp vellum with no external decoration, save the remnants of ties also made from the same vellum. There is in the annotations to the text as well as in the marginalia added by Jones to the numerous flyleaves, evidence of his use of the book as nearly a commonplace book, for he kept there notes on medical treatments taken from treatises and advised by patrons and friends. (sigs. [SSSS] 1-4r,v) (Figure 73) Most of these medical notes were most likely added from 1632 on, the date of the first, "An approved medicin for the Stone in the kidnies fro[m] my lo: Pembroke 1632." For a future and much needed biography of Jones, further research is needed on Jones's use of medical treatises and the advice of physicians. While interesting for what this could tell us about other of Jones's reading interests, often very personal and immediate, it would also help to explain his frequent use of anatomical metaphors in his architectural annotations. Just before these pages with medical notes is one flyleaf which summarizes Jones's pre-occupation the problem of metrology in architectural practice.¹⁰⁴

As the Palladio is one of the most thoroughly annotated books, Jones purchased it early in his career, and he continued to read it throughout his career, a study of Jones's reading patterns of Palladio reveals much about Jones's architectural education. The greatest number of studies of Jones center on this books and Jones's interpretation of it. In part this has been due to its publication in facsimile with a transcription of the annotations, thereby allowing scholars without easy access to the libraries at Oxford the ability to study Jones's Palladio. As Rudolf Wittkower pointed out in a review of the facsimile, and as others have noted since, the use of

¹⁰²Harris 1973, 64.

¹⁰³Fowler 1961, 176-77.

¹⁰⁴See the discussion of these pages in the preceding chapter on Jones's reading practices.

the facsimile alone presents serious problems.¹⁰⁵ The availability of the facsimile, as with its eighteenth century publication in the Leoni translation of Palladio, has increased its relative importance within the remaining books from Jones's library.

In a recent article John Newman has traced Jones's early reading habits.¹⁰⁶ Jones's need to understand the vocabulary of the orders, and their relationship to ancient models is central in his early reading, as Newman traces through the annotations in the Palladio. Many of the studies of Jones's annotations to Palladio are in a similar mode: attempts to elaborate the ability of Jones to glean the classical message from Palladio. Yet too often this assumes that Jones is working in an architectural vacuum in England, that there was no previous interest in Palladio or understanding classical architecture. Jones was only one reader of Palladio in England before 1650. Arundel, Edward Coke, Robert Cotton,¹⁰⁷ Christopher Hatton, John Holles, Thomas Tresham, Lucy, Countess of Bedford, Robert Fludd Ben Jonson, and Henry Percy, Earl of Northumberland, all owned copies of Palladio.¹⁰⁸ John Thorpe used Palladio before 1620, and John Smythson's drawings indicate a similar interest in variant solutions on the theme of villa and country house designs.¹⁰⁹ Jones was certainly not alone in his reading of Palladio, yet there is not another copy of the treatise that I have seen so carefully annotated. If others were reading Palladio, they were not mining the treatise for information in the same way as Jones.

There is evidence that a series of manuscript translations of Palladio circulated in the years before the first English printed translation of Palladio's First

¹⁰⁵ Wittkower 1972, 61-2.

Firstly, the transcription is highly inaccurate. Jones's handwriting is not always easy to decipher and the number of faults in the transcription indicate carelessness as well as expected inaccuracies. Secondly, it is difficult to see differences in ink color and other details of Jones's hand in the facsimile, as it was printed in a sepia ink on colored paper with less than careful printing technique.

¹⁰⁶ Newman 1992, 18-50.

¹⁰⁷ Robert Cotton's copy of the 1581 edition is now in the Fowler Collection (no. 213); and bound with Vincenzo Scamozzi, *Discorsi sopra L'Antichità di Roma* (Venice 1583). Cotton's name appears on the title-page of Scamozzi's treatise, "Robertus Cotton 1603". See Fowler 1961, 176.

¹⁰⁸ See Gent 1981, 84; McPherson 1974.

¹⁰⁹ Summerson 1966a; Friedman 1989, 73-6.

Book appeared in 1663.¹¹⁰ Three copies of interleaved copies with manuscript translations survive, one of them owned by John Webb and with his annotations (from the collection of George Clarke, now at Worcester College) (Figure 74); a second from the collection of John Oliver (now at the Yale Center for British Art, New Haven); and a third at King's College, Cambridge. The Webb and Oliver copies have similar glossaries at the end of the translations, with Italian architectural terms and their English equivalents. The Italian terms are translated out of John Florio's dictionary *World of Wordes* (London, 1598), the same dictionary used by Jones.¹¹¹

While the urge continues to create a convincing historical and design narrative that explains the relations of Jones to Palladio, there have been dissenting voices which have questioned the entire enterprise. Manfredo Tafuri in an article which presented the historiographical problems in discussing Palladianism in the generation immediately following the publication of the treatise, posits that the Jones/Palladio relationship is essentially problematic. "L'architettura, con il Jones, viene inchiodata nella sua contraddizione fondamentale, nella sua ineliminabile dicotomia: da un lato è la sua proposta di razionalizzazione dell'esperienza quotidiana, dall'altro l'autonomia dei suoi processi di configurazione."¹¹² Tafuri notes that while Jones was isolated in his purist interest in Palladio, on the other hand Palladio assumed in English culture the force of "a cultural filter," already formulated in Palladio's treatise.

Tafuri too easily accepts the Wittkower interpretation of the value of number and proportion in Jones's work. "Per Inigo Jones la relazione numerica sembra in effetti valere 'in sé', nella sua brutale nudità, nella sua esasperante assenza di significati."¹¹³ The work of Gordon Higgott on Jones's architectural design method has qualified this position by showing Jones's flexibility and critical attitude to the problem of proportions based on the appearance of the solution to the

¹¹⁰*The First Book of Architecture by Andrea Palladio. Translated out of Italian: With an Appendix Touching Doors and Windows, by Pr Le Muet, Translated out of French by G. R. [Godfrey Richards] (London: Printed by J.M., 1663). On this edition see E. Harris 1990, 352-55.*

¹¹¹On Florio see Spartaco Gamberini, *Lo studio dell'italiano*; Rossi 1969, 95-212. On Jones's use of Florio see Newman 1992, 50 n. 17.

¹¹²Tafuri 1970, 59.

¹¹³Tafuri 1970, 58.

spectator's 'eye'.¹¹⁴ Yet the position of Wittkower that "many of the best Italian thinkers and artists of the following generations [after Alberti] accepted this rational mathematical interpretation of beauty which implied that every part in a building down to the minutest details has its fixed size and shape, and Inigo Jones still subscribed to it. For him, as for his Italian peers, a building was an organic whole, completely definable in terms of metrical relationships."¹¹⁵ Wittkower's belief that Jones's architecture is based on numerical relationships follows his belief that Jones's architecture is based on Palladio. A careful examination of Jones's annotations to Palladio, however, shows how critical he was of many of Palladio's particular design solutions and later in Jones's reading, the inaccuracies of Palladio's historical reconstructions.

Copies of Palladio were known in England before Jones purchased his. However, the attention he gave it as an architectural authority most likely came from the suggestions of others. Some of the earliest annotations by Jones in his Palladio refer to the Palladio drawings owned by Sir Henry Wotton. Jones studied the drawings and treatise in tandem, comparing the drawings for the plates with the printed book. The continuity of the handwriting in these annotations suggests that Jones went through the book and drawings as one exercise. Wotton knew of Palladio's architecture from his time in Venice as ambassador and association with the intellectual and artistic community in the Veneto. Before Jones saw the buildings of Palladio, he would have heard and read of them in the travel account of his friend Thomas Coryat.

¹¹⁴Higgott 1992, 62-5.

¹¹⁵Wittkower 1974a, 64.

Patrizi, Francesco. *La militia romana di Polibio, di Tito Livio, e di Dionigi Alicarnaseo*. Ferrara: Domenico Mamarelli, 1583.

4to.

Walter Raleigh; Inigo Jones; John Webb; George Clarke; Worcester College.

Signed: Title page: "W. Raleigh" (scratched out) and Raleigh's motto "Amore et virtute"; "Inigo Jones" (scratched out).

Binding: Contemporary limp vellum.

Not annotated.

I: STC Italian 1958, 493.

II: Harris 1973; Wilkinson 1923, no. 24; Oakeshott, no. 183.

Walter Oakeshott, in his discussion of Sir Walter Raleigh's library, suggests that the book was sold off shortly after Raleigh's death and came into Jones's collection soon after that time.¹¹⁶ (Figure 75) Jones's connection with Raleigh is not clear, though it may be possible that Jones acquired this copy of *La militia romana* through his intellectual circle, which included John Donne. One of Donne's patrons, Henry Percy, Earl of Northumberland, was imprisoned in the Tower at the same time as Raleigh, and objects out of Raleigh's collections were given to Percy.¹¹⁷ While there is no direct evidence to support this exact route, a similar one through related circles may have occurred. Relatively small circles of readers in England made the lending of books, especially foreign titles, a common means of adding to a collection.

This book is a compilation of the writings of Polybius, Titus Livius and Dion Halicarnassus, appealing to the growing audience for military publications derived from ancient authors.¹¹⁸ Patrizi's praise of Polybius as a philosopher rather than as an historian, for Polybius wrote to teach through explanation rather than through clear historical narrative.¹¹⁹ As Arnaldo Momigliano notes, Patrizi thought Polybius could provide a positive model for military organization.¹²⁰

¹¹⁶Oakeshott 1968, 292-94, 307.

¹¹⁷Batho 1960.

¹¹⁸On Patrizi see the bibliography listed in Schmitt 1988, 829.

¹¹⁹Burke 1966, 144-45.

¹²⁰Momigliano 1974, 367-68.

Piccolomini, Alessandro. *Della institutione morale*. Libri III. Venetia: Appresso Giordano Ziletti (appresso Gio. Antonio Bertano), 1575.

4to.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Title page: "Inigo Jones" (scratched out).

Binding: Contemporary limp vellum.

Marginal annotations.

I: Adams 1967 1105.

II: Harris 1973; Wilkinson 1923, no. 20.

Jones made a note of the use of terms for loss of honor: "vericondia or shamfasnes is feare to bee dishonored."¹²¹ The close tie between virtue and continence is discussed by Piccolomini, and Jones carefully annotated the chapter "come sia differente la Temperantia dalla continentia." These qualities are similar to those held by Arundel as the foundation for a personal *gravitas* and restraint in one's outward appearance and behaviour. As Jones notes "continence in tuo maners 1-in overcoming sensual delighte 2 or in not beeing overcom by sensual contristation [*contristatione*]."¹²² These moral virtues are distinctly male specific in Piccolomini's text and Jones notes this dichotomy between male and female qualities in his annotations: "constanci is a second kind of continence / the oposit to this is effeminatnes wch cannot indure any truble of mind or boddy."¹²³ The connection of this moral position and architectural practice or design is nowhere directly stated. From the annotations, however, it is clear that Jones saw in this book the means by which a philosophy was able to be applied to actions in the world. For

¹²¹ Against the text: "Non solamente (come ho detto nel quinto libro) ne gli habiti stessi dell'appetito sensitivo si ritrovano tra i loro estremi vitiosi le virtù collocate, dove son posti due estremi biasimevoli, che tra loro ritengono una certa mediocrità degna di lode, come adivien nella verecondia, la quale e un'affetto lodevolissimo. ne si puo dir virtu, non essendo altro verecondia, che un timore d esser dishonorato." (Jones's underlining), p. 285.

¹²² Against the text: " . . . al presente diremo solamente alcune poche cose della continentia, laquale in due maniere si considera, ovvero in superare il diletto sensuale, overamente in non esser dalle sensuali constrictationi superato." (Jones's underlining), p. 244.

¹²³ Against the text: "Et questa seconda specie di continentia per proprio nome è chiamata constantia. il cui contrario delicatezza, ovvero effeminatezza possiam chiamare:" (Jones's underlining), 245.

as Jones writes at the beginning of the chapter "del numero delle virtu morali, & de' soggetti di quelle,": "morell virtues ar not only formd in ye intrinsik affecte but also in operationes with out."¹²⁴

¹²⁴Against the text: ". . . che la virtù morale non sol si trova intorno a gli affetti instrinsechi, ma ancora alle operationi di fuori . . ." 185-86.

Plato. *La republica*. Translated by Pamphilo Fiorimbene. Vinegia: appresso Gabriel Giolito de Ferrari et fratelli, 1554.

8vo.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Title page: "Inigo Jones" (scratched out).

Binding: Contemporary limp vellum.

Extensive marginal annotations.

I: Adams 1967, no. 1468.

II: Harris 1973; Wilkinson 1923, no. 10.

There are scattered annotations throughout his copy of Plato. Although Jones most carefully annotated Book III which includes a discussion of the arts. Jones began annotating where the subject is the role of the orator. Jones wrote "maner of speech foluith the habite and affecte of the mind."¹²⁵ The art then responds directly to what is in the mind, "Maner of speech foluith the Habit and affecte of the mind". Certain arts are especially suspect to this relationship, as Jones notes in the text: "Thes arte ar full of it Painting & tapestry variety & Architecture."¹²⁶

The arts are discussed in Book III as the foundation of study for young men, and Jones has annotated those passages that discuss educational training for both the understanding of art and its production. The best artists are those whose characters' are good. Jones notes "what kynd of Artiffiers must be saught" against the text "Ma bisogna cercare quegli artefici, i quali per buona lor natura possono trovare la natura dell'honesto, & del conueniente. . . ." (Jones's underlining; p. 121) Equally for the training of the viewer Jones notes Plato's recommendation for learning music. Jones annotates "Honest worke in sight and hearing of young men" and "why young men shuld learne musike" as Plato states "ch'ella massimamente penetra nell'interiora dell'anima, & la consonantia & l'Harmonia la commoue fortissimamente, & gli apportano una certa uenust`a, & decoro, & ciascuna che drittamente `e ammaestrato in quella diuenta Honesto" (Jones's underlining; p.121) As John

¹²⁵ Against the text: "Soc. Il modo di dire, & l'oratione, non sequeno l'habito & l'affetto del'animo?" 120.

¹²⁶ Against the text: "L'arte della pittura, & ogni arteificio simile, è pienodi cotai cose. n'è piena ancora l'arte del tessere, la varietà, l'architettura, et ogni altra operatione di arme, & instrumenti." (Jones's underlining), 120.

Shute had noted in his treatise on architecture, Jones comments on Plato's emphasis on knowing grammar and languages, the "nesesity of knowing letters," "els wee ca[n] not be gra[m]arians."¹²⁷

Following a tradition established by the work of Frances Yates, there has been a seemingly endless desire to see Jones as one of the fore-most Neo-Platonic thinkers of the English Renaissance based on an analysis of his marginalia in conjunction with the a contemporary hermetic intellectual culture. While Jones must have known of these ideas from his connections at court, I believe it is completely mis-guided to attribute his "comprehensive approach to architecture, . . . laborious attention to details . . . familiarity with many Classical authors, . . . [and] preoccupation with architectural precedent" to "Neo-Platonic thinking."¹²⁸ These precepts were the standard principles of architects, and patrons, who valued humanist culture for its moral value and cultural expediency.

¹²⁷ Against the text: "Soc. Si come allhora sufficiente sappiamo lettere, quando habbiamo cognitione de gli elementi che sono pochi in tutte quelle cose, nelle quai sono trasportati, & non gli habbiamo spezzati ne in le cose picciole, ne in le grandi, come se non fusse bisogno intenderle. Ma deliberammo in ogni luogo conoscerli: come che non potessimo esser grammatici, prima che a questo modo non fussemo instrutti." (Jones's underlining), 122.

¹²⁸ Toplis 1973, 62; 216 n. 15.

Plutarch. *Alcuni opuscoli de le cose*. Translated by A. Massa and G. Tarcagnola. 2 parts. Venetia: per Comin da Trino di Monferrato, 1567.

8vo

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford.

Binding: Rebound, modern calf with gilt stamped ornament over boards. Title-page torn.

Extensive marginal annotations.

I: STC Italian 1958, 528.

Plutarch's *Moralia*, as well as the *Lives*, were translated in England in 1603 by Philemon Holland; and earlier by Thomas Elyot. Holland's work was based on the important French translation by Jacques Amyot (1559, 1572), which he praises in the dedication to King James.¹²⁹ Translated into the vernacular Plutarch's *Moralia* was used by Montaigne and others as a model for the philosophical essay on a variety of topics.¹³⁰

Thomas Elyot's *The Education of bringing up of children | translated oute of Plutarche* (London: Thomas Berthelet, 1532) was dedicated to his sister for the moral education of her children. In the dedication of this work as well in that later translation by Holland, Plutarch's relevance for the education was stressed. Elyot wrote "For as god shall iuge, the lack of children shuld nat be to me so payneful, as feare of havinge succession of heires, in whom shulde be lacke of vertue & lerning." (sig. A2v) Holland's emphasis on the moral education of children is more fully presented in his thorough translation of the *Moralia*, and he as well sees the education of children best served through moral philosophy: "For unlesse our mindes be framed unto virtue from our infancie, impossible it is that we should performe any worthy act so long as we live." (p.1)

A concern of vernacular translation was the potential problems of propriety once the Latin or Greek work was made available to a wider audience, as it could more easily serve as an authoritative voice for polemical positions. Therefore, the

¹²⁹On Amyot's translation and its importance see Robert Aulotte, *Plutarque en France au XVIe siècle. Trois opuscules moraux traduits par Antoine du Saix, Pierre de Saint-Julien et Jacques Amyot*. Etudes et Commentaires 74. (Paris: Éditions Klincksieck, 1971).

¹³⁰Anthony Grafton, "The Availability of Ancient Works," in Schmitt 1988, 788.

choice of particular terms in translation was crucial, and many translations included glossaries for reference and to fix the meaning.

Jones read Plutarch carefully and made numerous annotations over a period of time. Certain topics in particular seem to have interested him and those sections are most heavily marked. Of the books which survive from his library it was the one he studied most carefully for advice on moral philosophy. As always with Jones's annotations, however, he is interested in transforming abstract ideas into operational rules applicable for everyday use. On the one hand Jones notes that "an Architect shuld chose good and obedient work[m]en," a recommendation with immediate practical applications and all the more important given Jones's limited knowledge of practical building experience.¹³¹ Many of the comments also have a direct relevance to life at court. A series of annotations by Jones on the dangers of curiosity identifies "curious spies" that move like winds. Plutarch warns "quelli venti (come dice Aristone) ci sono piu molesti, e fastidiosi, che ci tolgono il mantello di dosso, e pur il curioso no[n] scuopre i matelli, ne le veste de'vicini, ma le mura istesse, apre le porte, et a guisa di ve[n]to, penetra, e passa fin l`a . . ." ¹³²

¹³¹ Against the text: " . . . che uno architetto medesimamente faccia elettione di persone nel suo lavoro che sappiano attentamente servire . . ." (Jones's underlining), La Seconda Parte, p. 14v.

¹³² La seconda parte, 150r.

Plutarch. *Opuscoli morali*. Translated by Sig. Marc'Antonio Gandino. Parte Seconda only. Venetia: Appresso Fiorauante Prati, 1614.

4to.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Title page: "Inigo Jones" (scratched out)

Binding: Contemporary calf over boards.

Extensive marginal annotations.

I: *Seventeenth Century Italian Books* vol. II 1986, 692-93.

II: Harris 1973; Wilkinson 1923, no. 35.

Throughout this copy of Plutarch Jones made many annotations on the relationship of moral philosophy to musical harmony and the relationship of the arts in general. In one of the most assiduously annotated chapters, "Del numero delle Muse, cose a tutti non diuolgate," (Book IX), Jones noted that Plutarch puts three muses as fundamental: "foundatio[n] of all arte and siences ar 3 that is folosofi orratori and mathematikte."¹³³ Plutarch's method of comparative analysis brought one art into the light of another, and Jones noted an "exelent simile of musick & fisick" in the margin against "ma come la Musica ha la perfettione dal suo contento, non per togliere via la grave, e l'acuto, e ne' corpi la medicina induce la sanità, non con istinguere il calore, e la frigidità; ma con ridurre queste qualità ne' loro debiti temperme[n]ti." (p. 92). Music and medicine were two topics that Jones had a personal interest. The many medical annotations at the back of his copy of Palladio's *I quattro libri* attest to his careful reading of medical treatises and recording of the medical advice of his patrons and friends.¹³⁴

This annotation differs from most of Jones's annotations on the scientific, technical analysis of his reading. It does, however, show how Jones is looking for connections between the text at hand and the world at large. Printed marginalia often included references to places where "here is an excellent simile."¹³⁵ The

¹³³ Against the text of Plutarch: "Nondimeno hauendo gli antichi osseruato, come cred'io che tutte le scienze, & tutte l'arti, che con ragione s'imparano, & con la fauella, sopra tre maniere sono fondate, filosofica, oratoria, & mathematica; fin sero che questi fussero doni di tre Dee, & le nominarono Muse." (Jones's underlining) p. 491.

¹³⁴ Palladio 1601.

¹³⁵ See the discussion of printed marginalia that signposted the language of simile in Slights 1989, 690-91.

search for proverbs was part of a mode of reading in the Renaissance that searched out the proverb and the nugget of truth. Readers often signposted such places to copy out and include in commonplace books. Jones's one surviving notebook was in many ways much more a commonplace book than a sketchbook. In it he included passages taken from his reading, drawings, a kind of visual annotation, to be re-organized in a form that would be of some use to him later.

The printed and manuscript marginalia both attest to a method of comparative reading that set one text against another. No text was seen in isolation. The concentration of cross reading was stimulated by the relative small number of books available to Renaissance readers. There certainly is the sense in Jones's annotations that he read attentively and with great concentration the books that he owned. In contrast to the library of John Dee or Kumley, Jones's library was, I believe, relatively small. The cross references are to a small number of comparative texts.

The number of annotations on music suggest that Jones is reading Plutarch as a general background to his role in producing masques, but also for Plutarch's discussion of the power of the arts to move the emotions and spirit. Jones wrote "musick hath more force to mak drunk the[n] wine," and "strang effect of lesivious musicke."¹³⁶

¹³⁶ Against the text: "Ma dapoi che tentato, & prouato il convito, s'auidde, che la maggior parte pe[n]deua a darsi piacere, & lasciarlo fare quel, che voleua, per empirli co' suoni, & mouimenti lasciui del flauto, hoggimai scoprendosi, mostró, che la musica ha maggior forza, che non ha il vino ad inebbriare coloro, li quali a caso, & fuor di misura si sommergono in essa. Perche già non bastaua a conuitati lo strepitare, & lodarlo, che finalmente alcuni salterono fuori, & si posero insieme con esso a far certi mouimenti in vero strani, nondimeno a questi suoni, & ca[n]ti proportionati." (Jones's underlining), p. 449.

Plutarch. *Vite de gli huomini illustri greci et romani*. Parte Prima. Translated by Lodovico Domenichi. Venice: Bartolomeo de Gli Alberti, 1607.

4to.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Title page: "Inigo Jones" (scratched out)

Binding: contemporary limp vellum.

Few marginal annotations.

II: Harris 1973.

There is only one annotation in this volume, in the life of Cimone, where Jones noted that the Portico di Pissile was painted by Polignoto. The Portico was made, according to Plutarch, "per far piacere all Città."¹³⁷ In his copy of Vitruvius, however, Jones refers to Plutarch's life of Marius and the description of the Temple of Honour.¹³⁸

Plutarch's *Lives* served as a classical model for the increasingly popular sixteenth century genre of compilations of historical biographies. Giorgio Vasari's *Delle vite de' piu eccellenti pittori scultori et architettori* and Bernardino Baldi's *Vite dei matematici* (1587-96) both collected individual biographies of men within scientific and professional disciplines based on Plutarch's example.¹³⁹ The translation by Lodovico Domenichi, from the 1517 Greek edition published by Giunti, was the standard edition of this work.¹⁴⁰

¹³⁷ p. 799.

¹³⁸ Jones wrote Mariana see plutarke in the Life of Marius + yt seames that this temples of honour & virtu had no portico behynd." Against the text of Vitruvius "Lo aspetto detto Peripteros cioè alato intorno, è quello, che tiene d'amendue le fronti sei colonne: ma ne i lati undici con le angulari, si che queste colonne siano poste in modo che lo spacio, che è tra colonna, & colonna, sia d'intorno da i pareti a gli ultimi ordini delle colonne, & si possa passeggiare d'intorno la cella. come è nel portico di Metello, di Giove Statore, & alla Mariana dell'Honore, & della uirtu, fatto da Mutio [\pm added by Jones] senza la parte di dietro." Vitruvius 1567, 120.

¹³⁹ On Baldi see B. Bilinski, "La 'Vita di Copernico' di Bernardino Baldi dell'anno 1558 alle luce dei ritrovati manoscritti delle *Vite dei matematici*," *Bibliotheca e Centro di Studi a Roma dell'Accademia Polacca delle Scienze, Conferenze*, fasc. 61 (1973); idem., "Prolegomena alle *Vite dei matematici* di Bernardino Baldi (1587-1596)," *Bibliotheca e Centro di Studi a Roma dell'Accademia Polacca delle Scienze, Conferenze*, fasc. 71 (1977).

¹⁴⁰ Cochrane 1981, 258.

Polybius. *Les cinq premiers livres des histoires de Polybe Megalopolitien; avec trois Parcelles du VI. une du VII une du VIII & une du XVI.* Translated by L. Maigret. Lion: par Ian de Tournes, 1558.

Folio

[French owner?]; Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Title page: "Inigo Jones".

Binding: Calf over boards; central medallion impressed. At one time the signature of Inigo Jones was covered by paper pasted down.

Few marginal annotations in French.

I: Adams 1967, no. 1810.

II: Harris 1973.

There are a few annotations in French, and some underlinings throughout the text. There are no recognizable annotations in Polybius by Jones. In his copy of Leon Battista Alberti's *Della architettura*, however, Jones noted Alberti's reference to Polibius.¹⁴¹ Machiavelli had translated the military chapters of Polybius, and was the first to appreciate Polybius as a political theorist.¹⁴² The popularity of Polybius increased in England in the late sixteenth century among learned readers, such as Isaac Casaubon and William Camden. Casaubon, in his 1609 edition of Polybius, praised the ancient historian's delving into the causes of war and its moral consequences.¹⁴³ In contrast to the histories of Livy, for example, the readership of Polybius increased as the desire for the quality of eloquence became less in demand, and the interest in historical explanation rose. The popularity of Polybius reached a peak around 1600, as vernacular translations made his difficult language less of a barrier; and those that did read him in Greek came to the text with a better

¹⁴¹ Jones wrote "Polibio" and a pointing hand against the text: "A Termo in Etholia debellata da Filippo, dicono, che erano ne Portici del Tempio meglio che quindici milla pezzi d'arme, & per adornare il tempio meglio che dumila statue, lequali secondo che racconta Polibio furono tutte disfatte da Filippo, eccetto che quelle, nellequali era, o scritto il nome di alcuno Dio, o che rendevano simiglianza alli Dii, & non è forse da considerare manco la gran' quantita, che la varieta di si fatte cose." (Jones's underlining) Alberti, *Della architettura*, VII, 180.

¹⁴² Momigliano 1974, 361.

¹⁴³ Discussed by Burke 1966, esp. 144-45, 151.

knowledge of the language.¹⁴⁴ Isaac Casaubon had planned a massive commentary on the text which he never completed. His edition and introduction, however, praised Polybius for his pragmatic military expertise, religious devotion and understanding of the causes of events. Casaubon's arrival in England in 1610 must have encouraged an English readership, already aware of the historian through the writings of William Camden, *Annales rerum Anglicarum et Hibernicarum regnante Elizabetha* (1615).¹⁴⁵ Polybius attracted a general reader as well as a scholarly audience, and Sir Thomas Wentworth is typical of those who read and annotated Polybius in their country houses in the early seventeenth century as part of the general reading program for the aristocracy.¹⁴⁶

¹⁴⁴Momigliano 1974, 369.

¹⁴⁵Momigliano 1974, 370.

¹⁴⁶Bodl. Ms. Firth. B2, fo. 104v; cited in Sharpe 1978, 240-41.

Ptolemaeus, Claudius. *La geografia*. Translated by Girolamo Ruselli. Aggiuntoui vn pieno discorso di M.G. Moletto. Venetia: Appresso Vincenzo Valgrisi, 1561.

4to.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Title page: "Inigo Jones" (scratched out).

Binding: contemporary limp vellum; gold on fore-edge. Impressed gold medallion in center of front and back cover: hammer emerging from clouds, striking an anvil, and encircled with the motto "ICTA NITESCIT". On spine is "TOLOMEO" impressed in gold and bands of gold foliate ornament. Pages ruled in red ink. On title-page is inscribed "Geogr".

Not annotated.

I: Adams 1967 2235; Sanz 1959, 206-207; Henry N. Stevens, *Ptolemy's Geography. A Brief Account of All the Printed Editions Down to 1730* (London: Henry Stevens and Sons, 1908, 2nd edition; Reprinted Amsterdam: Theatrvm Orbis Terrarvm, n.d.), 50.
II: Harris 1973; Wilkinson 1923, no. 12.

Of all Jones's books which survive with their original bindings, his copy of Ptolemy is unique in the quality and elaborate decoration of the binding and textual rubrication.¹⁴⁷ (Figures 76) Antony Hobson has suggested that the binding is French, and contemporary with the book.¹⁴⁸ I have not been able to trace the arms impressed on the covers, but they were not, as far as I know, connected in any way with Jones. As Jones had his books covered in the plainest of vellum bindings, with no particular interest in elaborate gold stamping, it is likely that Jones purchased the book already bound, and perhaps second hand. If the binding is French, he may have purchased the book during his travels in France early in his career, or en route to Italy in 1613 when Jones spent nearly five weeks in Paris.

One of the greatest treasures of 14th century humanist libraries was the Greek codex of Ptolemy's *Geografia*, which Chrysolarus had brought to Florence and was later acquired by Duke Federico of Urbino.¹⁴⁹ The Ruscelli edition of Ptolemy

¹⁴⁷ Cf. copy in the Bodleian Library bound in plain limp vellum with no hand-ruling (Holkham d.62).

¹⁴⁸ Anthony Hobson to Dr. Richard Sayce, 16 June 1976, private correspondence, Worcester College Library.

¹⁴⁹ Now Vaticana MS.Urb.Gr.82. See Rose 1975, 27.

was a new edition in Italian with numerous cartographic innovations, including the representation of the world in two hemispheres. The maps exerted a considerable influence on cartographic practice, and was used as the model for the Vatican frescoes painted under Pius IV.¹⁵⁰ With the large number of editions of Ptolemy available when Jones travelled to Italy, the Ruscelli version with its new and extensive notes must have appealed to Jones's desire for the best in "modern" commentary on classical texts.

¹⁵⁰Sanz 1959, 206-207.

Rusconi, Giovanni Antonio. *Della architettura libri dieci*. Venetia: appresso I Gioliti, 1590.

Folio.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Not signed.

Binding: Rebound; calf over boards. Edges trimmed.

Marginal annotations.

I: Adams 1967, no. 960; Fowler 1961, no. 280; Mortimer 1974, no. 551; Krufft 1988, 78; Wiebenson 1983, I-20.

II: Peacock 1990b; Harris 1973; Wilkinson 1923, no. 29.

Rusconi's publication project was planned as an Italian translation of Vitruvius with commentary and illustrations, though that never appeared in print in his lifetime.¹⁵¹ It was only after his death that the innovative illustrations were published with a summary of Vitruvius provided by the publisher.¹⁵² The approach taken in the illustrations reflects the contemporary interest in scientific illustration, and its use in conveying complex and technical information.¹⁵³ For Jones as a reader the illustrations must also have given a view of Vitruvius's architectural ideas as the setting for a great Roman drama. Like the Roman history created by Guillaume du Choul from the evidence of coins, the plates in Rusconi show the building activity of the ancient world as a project on a grand scale, a world apart from the abstracted illustrations of Palladio to the Barbaro edition of Vitruvius.

There are only a few annotations by Jones in the margins. He notes the example of *scamilla impares* in one illustration (Figure 77), a problem of Vitruvian terminology that he had studied through his reading of Palladio and Barbaro's Vitruvius.¹⁵⁴

¹⁵¹On Rusconi see Anna Bedon, "Il Vitruvio di Giovan Antonio Rusconi," *Ricerche di Storia dell'arte* 19 (1983), 84-90; Luigi Vagnetti and Laura Marcucci, "Per una coscienza vitruviana. Regeto cronologico e critico," *Studi e documenti di architettura* 8 (1978), 72.

¹⁵²See s.v. "Marcus Vitruvius Pollio, *Della Architettura di Gio. Antonio Rusconi*," in Wiebenson 1982, I-20.

¹⁵³S.v. "Marcus Vitruvius Pollio, *Della Architettura di Gio. Antonio Rusconi*," in Wiebenson 1982, I-20. Also see Krufft 1988, 78, and the bibliography, 395 n. 72.

¹⁵⁴See Newman 1992, 435-41.

Sarayna, Torellus. *De origine et amplitudine civitatis veronae*. Veronae: Ex officina Antonii Putelleti, 1540.

Folio.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Title page: "Inigo Jones Venetia 30 Juli 1614 2 li 1/2"; other notes (scratched out); not in Jones's hand.

Binding: Calf over boards; rebound by Clarke.

No marginal annotations.

I: Adams 1967, no. 393; Fowler 1961, no. 289; Mortimer 1974, no. 462.

II: Harris 1973; Wilkinson 1923, no. 2.

Torello Sarayna's publication of the antiquities of his native Verona represented a major event in the archaeological interests in regional antiquities of the first half of the sixteenth century.¹⁵⁵ The plates by Giovanni Caroto helped to publicize his antiquarian research for a wider readership in Italy, which included Palladio, Baldassare Peruzzi, and Sebastiano Serlio; and through printing encouraged a larger audience throughout Europe. Jones purchased his copy of Sarayna in Venice as he notes on the title-page. This is typical of Jones's book buying: purchasing 'local' histories such as Summonte's guide to Naples when he was in Italy and often while he was visiting the city or region itself. Jones would have known of the antiquities in Verona from the descriptions and plates in his copy of Serlio's Third and Fourth Books.¹⁵⁶ The fame of Verona's antiquities extended beyond the local antiquarians' interest.¹⁵⁷ Beneath the portrait engraving of Sarayna is a criticism of Sebastiano Serlio's description of the Veronese antiquities.¹⁵⁸ Palladio had also used Sarayna's discussion of the Roman monuments, and he may have directly adapted plates for the figures on the facade of the Palazzo Valmarana.¹⁵⁹ Jones may have known of this connection between Palladio and

¹⁵⁵On Sarayna and especially on Caroto's study of Verona's antiquities see Marini 1980, 33-118.

¹⁵⁶In his Fourth Book Serlio had published details of Veronese antiquities as models for the door of the tuscan order and as an example of a doric capital. See Burns 1980, 103; 331 n.1.

¹⁵⁷See Burns 1980, 103-4.

¹⁵⁸For the history of the plates of Sarayna see Mortimer 1974, II, pp. 641-42, no. 462.

¹⁵⁹Burns 1975, 110.

Sarayna from his discussions with Scamozzi. Giorgio Vasari had also written in his *Vite* that he had been sent a copy of Sarayna's treatise on the antiquities of Verona by Giovanni Caroto.

Jones would have known of Sarayna and the importance of Verona antiquities from the publication in 1611 of Thomas Coryat's travel accounts, *Coryat's Crudities*. Jones had contributed a dedicatory epistle to the Coryat's publication, and was certainly familiar with the publication. Coryat gave a lengthy and glowing account of Verona, and mentioned Sarayna's history:

So many notable antiquities and memorable monuments are to be seene in this noble city of Verona, as no Italian citie whatsoever (Rome excepted) can shew the like. But the worthiest and most remarkable of all if the Amphitheater commonly called the Arena, seated at the Southwest end of the city where cattell are sold; whereof I have expressed a picture in this place, according to the forme of it, as it flourished in the time of the Roman Monarchy. . . . It was reported unto me by Gentlemen of good note in this citie of Verona, that the like Amphitheater is not to be seene at this day in all Italy, no not in Rome it selfe. . . . That it was built by one of the Roman Emperours every man beleeveth, but by whom no Chronicle, Annals, or auncient History doth certainly record. But Torellus Sariana, a learned man borne in Verona, who hath written certaine bookes of the antiquities of this citie, is drawn by certaine arguments and conjectures to affirme, that it was built by the Emperour Augustus, and that in the two and fortieth year of his Empire, which was that very year that our blessed Saviour was borne into the world. Were such a building to be made in England, I thinke it would cost at the least two millions of our pounds, that is, twenty hundred thousand pound, even as much as tenne of our fayrest Cathedrall Churches.¹⁶⁰

Jones's ownership of Sarayna indicates his interest in regional antiquities and the Roman heritage throughout Europe. In his annotations to Palladio and in his surviving drawing of the Pont du Gard, Jones demonstrates his fundamental precepts in the study of antiquity: an interest in the variety of Roman monuments, their historical context, and the value of local Roman antiquities in the development of any new style.

¹⁶⁰Coryat [1611] 1905, 311-12.

Scala, Giovanni. *Geometria pratica dichiarata da Giovanni Scala. Sopra la tavole dell' eccte. matthematico Giovanni Pomodoro tratte d'Euclide et altri authori. Opera per Generali da guerra, Capitani Architetti Bombardieri e Ingegneri Cosmografimon che per ordinarij professori di misure.* Roma: Apresso Giovanni Martinelli, 1603; (colophon: Roma: Apresso Stefano Paolini, 1599).

Folio in 2's.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Title page: "Inigo Jones" (scratched out); George Clarke monogram.

Binding: Contemporary vellum over boards. Title on binding spine: "Scala Geom Pratic" and George Clarke monogram.

Added letters by Jones on Tavola VII, and few corrections to accompanying page of text.

I: Cockle 1957, no. 944.

II: Wilkinson, no. 33.

Scala's *Geometria pratica* belongs to a genre of treatises which were immensely popular throughout Europe from the middle of the sixteenth century onward. Based on Euclid, they presented mathematical information directed toward the immediate concerns of military architects and surveyors. In the title and dedication to Vincenzo Gonzaga, the Duke of Mantua, Scala emphasizes the military usefulness of the treatise for the building of fortifications. The high quality of the engravings of Giovanni Pomodoro demonstrate Euclid's principles for surveying, mapmaking, and architectural drawing. (Figure 78) These skills were essential to the professional but also to the amateur, interested in recording the buildings and sites observed during travel and for his own architectural interests.

In England a group of books appeared contemporaneous with Scala's publication, devoted to the similar problems of practical geometry. Leonard Digges's *Boke Named Tectonicon* (1556, and seventeen subsequent editions to 1656) explained 'the Carpenters Ruler' and the way of measuring "all manor land, timber, stone, steeples, pillers, globes, board, glasse, pavement, &c. without any trouble."¹⁶¹ Digges was a close friend of John Dee, whose preface to the 1570 translation of Euclid by Henry Billingsley encouraged the English craftsmen to study the

¹⁶¹ See E. Harris 1990, s.v. "Leonard Digges," 182-83.

principles of mathematics. Richard More in his *The Carpenters Rule* (1602, 1616) refers readers to Euclid, the weekly lectures at Gresham College, and other publications for further information on mathematics.¹⁶² In his corrections of Digges's rule, by then available to masons and surveyors for nearly 50 years, More advertised the improved rule by William Bedwell, not yet published.¹⁶³ Thomas Bedwell's treatise was published by his nephew, William Bedwell as *De Numeris Geometricis* (1614). This system for mensuration required advanced mathematical training, and is evidence of the increasing scholarly methods available for English artisans. Whether the more involved methods were actually used is uncertain, and evidence to the contrary is suggested by the continued printings of Digges's older treatise.¹⁶⁴

¹⁶² See E. Harris 1990, s.v. "Richard More," 317.

¹⁶³ See E. Harris 1990, s.v. "Thomas and William Bedwell," 118.

¹⁶⁴ John Martyn commented that Bedwell's treatise required mathematical training that was "far beyond ordinary capacities." (John Martyn, *Mensuration Made Easy*, 1661, 8; Cited in E. Harris 1990, 119.

Scamozzi, Vincenzo. *L'idea dell architettura universale*. Venice: Giorgio Valentino, 1615.

Folio.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Volume I, title page: "March 25 1617"; "Inigo Jones" (scratched out) ; Volume II, title page: "Inigo Jones" (scratched out).

Binding: Rebound by Clarke; calf over boards.

Extensive marginal annotations, both volumes.

I: Fowler 1961, no. 292; Kruft 1988, 114-19; Pollak 1991, no. 54; Wiebenson 1983, I-26.

II: Harris 1973; Harris/Higgott 1989; Wilkinson 1923, no. 36.

When Jones met Scamozzi in 1614, they discussed the forthcoming treatise, as Jones wrote in his copy of Palladio that "Scamozo utterly dislikes this desine of Paladio and hath maad on wch must comm fowrth in his book as far in my opinion from Vittruuous as this . . ." ¹⁶⁵ Jones had a copy of the treatise in hand soon after its publication; he marked the date March 25, 1617 on the title-page. As his own publisher, Scamozzi acted as agent for the book's distribution. He was eager to ensure a wide distribution of copies and in a surviving letter he noted that by 1616 copies had reached northern Europe through the Frankfurt Book Fair. ¹⁶⁶ Scamozzi's own desire to popularize his ideas, and create a ready market for his treatise, may well have motivated his tutorials for Jones in Venice.

In Scamozzi's discursive chapters on ornament, the education of the architect, and the nature of architectural drawing Jones found a kind of architectural writing different from anything he had seen in any of his other treatises. Here was a discussion of the central precepts of classicism both personal and academic. Scamozzi provided an extensive academic apparatus in the printed marginalia which referred the reader back to the myriad of classical and modern sources used by Scamozzi. For each of the Vitruvian principles discussed by Scamozzi

¹⁶⁵ Palladio 1601, II, 69.

¹⁶⁶ In a letter from Vincenzo Scamozzi in Venice to Curzio Picchena in Florence, 18 June 1616. "Le mie opere (lodato Iddio) per mezo di librai hanno felice spazzo a Roma, Napoli et in Sicilia; e per queste parti della Lombardia, e con la Fiera di Francfort ne sono andate in Anversa, e fino in Londra." A.S.F, Mediceo, 1330, cc. 222; transcribed in Appendix A, 5 in Elam 1985, 213, and 206.

there was a full listing of sources for further study and comparison. Against the most important of these principles, decorum, Jones wrote "in this part architecture houldes much of Filosofi morrall & naturall."¹⁶⁷ Jones extracted from Scamozzi an explicit connection between architectural decorum and moral philosophy, applicable to the designing of architecture as a comment on the status of the patron.

While Vitruvius wrote of the necessary skills for the architect, Scamozzi described these same characteristics in terms of the status of the profession and the great solemnity of the calling.

Hippocrate parlando della Medicina, disse che la vita era breve, l'arte lunga, l'occasioni vernivano in un'istante, l'esperienza fallace . . . ma noi veramente diciamo, che l'Architettura e scienza & arte difficilissima d'apprendere, & effettuare all'huomo di vita tanto procellosa, e breve.¹⁶⁸

In Scamozzi's treatise there is a far greater distinction made between the various social levels of the architect and head mason, and for Jones, suggested a status to the architectural profession beyond what was the norm in England. Jones wrote "what ye controler is to the Architect" against the text of Scamozzi: ". . . essendo che per sentenza d'Aristotele, che noi chiamiamo capo mastro, edifica tutto quello, che è prescritto, & ordinato, dall Architetto, & è puro esecutore della sua volontà, e non altrimenti."¹⁶⁹

At the beginning of the second volume, Jones carefully annotated two chapters: one "Della diffinitione de gli ornamenti sopra alle colonne: e Frontispici, e Tetti, e Pedestili, e Piedamenti de gli edifici" and "D'alcuni, che doppo Vitruvio hanno trattato molto differentemente de gli ordini: i quali deono esser cinque, e non più." Scamozzi gives a series of general rules and reasons for the need for ornament in buildings, and why it should correspond to a logic based on the observation of nature, the hierarchies of society and the examples of God. For

¹⁶⁷ Against Scamozzi's text: "E finalmente il Decoro, anch'egli riguarda il fine dell'edificio; essendo proprio un'aspetto ornato, e senza difetto; di modo, che rende maestà, gratia, e bellezza: la qual cosa auuiene, allhora, che tutte le parti sono fatte con ragione, & approbate da'termini limitati, e che soggiacciono all'Arte, secondo il genere, e le modulazioni della cosa, e non fatte à caso; la onde si vede chiarissimamente quanto l'Architettura in tutte queste parti tenghi della Filosofia morale, e naturale." Scamozzi 1615, I, 8-9.

¹⁶⁸ Scamozzi 1615, I, 27.

¹⁶⁹ Scamozzi 1615, I, 29.

example, Jones wrote "the Aspecte of the fro[n]t more adorned the[n] the sydes. and least behind," following man as the model.¹⁷⁰ Scamozzi offers explanations for the various parts of buildings, why they were adorned, and what they represent. Jones make annotations throughout this section, summarizing Scamozzi's rules for ornament. This internal logic for the use of ornamentation contrasted sharply with traditional English use of ornament, praised more for inventiveness than consistency. Jones notes for example Scamozzi's precept that "ornamente of on kynd of building not mixt with an other as sacred secular & privat."¹⁷¹

Scamozzi discussed ornament as separate from the disposition of the building as a whole. "Sono poco da lodare alcuni, che per certo risparmio del costo del sito, ò per loro caprici fanno grandissime spese ne'siti ristretti, storti, slancati, e piramidali, ò triangolari, ò di portione di cerchio, ò molto fuori di squadro; in modo che è Sale, e gli appartamenti delle Stanze, e l'altre parti vengono fuori di sesto, poiche non è ornamento alcuno, che possi coprire questi difetti . . ." Against this Jones wrote "no ornament can civer this deffect."¹⁷²

While the eighth book of Scamozzi, on building construction, was often not included in later editions and translations, Jones read this section carefully. Scamozzi's description of building techniques was far more extensive than any of the other treatises Jones had available, and the technical aspects of continental classical building would have been most foreign to him. There are many notes by Jones on Scamozzi's discussion of building with bricks, including using bricks for columns where it could then be covered with stucco to save cost (especially 308-11). Jones saw this technique at the Palazzo Thiene at Vicenza, and made drawings in his copy of Palladio of the building techniques used there.

Jones was particularly interested in some of Scamozzi's design solutions, and presentations of the orders. He certainly looked to Scamozzi's Tuscan order for his

¹⁷⁰ Against the text of Scamozzi: "Così à punto l'Architetto, dee offervare la dispositione de gli ornamenti, e collocarli nelle parti più conueneuoli, e proprie dell'edificio: Intanto che l'aspetto principale di esso: ad imitatione del corpo humano, sia più ornato, che le parti da' lati, e meno il di dietro: il quale precetto fu molto osseruato da gli antichi, come vediamo nello opere loro." (Jones's underlining) Scamozzi 1615, II, 8.

¹⁷¹ Against the text: "E quanto all'applicar essi ornamenti l'Architetto dee far la distintione d'un genere dall'altro; in modo, che in parte alcuna non siano misti, ne confusi insieme; applicandoli come ricerca il genere di ciascuno d'essi, le qualità dell'edificio, e la conuenienza del bisogno." (Jones's underlining) Scamozzi 1615, II, 8.

¹⁷² Scamozzi 1615, I, 224.

designs for the portico of St. Paul's, Covent Garden and a design for a brew-house, perhaps at Hassenbrook Hall, Essex.¹⁷³

Scamozzi's treatise is concerned with general principles, which can then be applied to particular examples. The combination of theory of practice which is at the heart of the treatise appears in the architectural frame of the title-page. (Figure 79) The use of the two figures appears in Jones's masque design for the proscenium arch of *Albion's Triumph* (1632).¹⁷⁴ As D.J. Gordon explains, theory in this case is the knowledge of principles, most often based on mathematical knowledge. Disciplines which operate according to theory rise above the level of manual crafts.¹⁷⁵

In the continuing importance placed on Jones's reading of Palladio, the important use Jones made of Scamozzi has been too easily overlooked. Jones's dislike of the architect—who was by Jones's own accounts arrogant and opinionated—did not prevent Jones from doing what he so often criticized Scamozzi of, appropriating the designs of others as the basis for his own work. Scamozzi places imitation as one of the highest forms of artistic production, an improvement on nature through the power of rational thought and scientific method.¹⁷⁶

¹⁷³Summerson 1966, esp. 88-9; Harris/Higgott 1989, 264.

¹⁷⁴D.J. Gordon, "Poet and Architect: The Intellectual Setting of the Quarrel between Ben Jonson and Inigo Jones," in Gordon 1980, esp. 87-91.

¹⁷⁵Ibid., 92.

¹⁷⁶See Jannaco 1961.

Serlio, Sebastiano. *Libro primo (-quinto) d'architettura*. Venice: G. B. & M. Sessa; F. Rampazetto pr., 1559-62.

Folio.

Inigo Jones; John Webb; Michael Burghers; Queens College, Oxford. Not signed.
Marginal annotations.

I: Adams 1967, 975; Fowler 1961, no. 324; Mortimer 1974, nos. 473, 474; Krufft 1988, 77-91; Wiebenson 1983, I-12.

II: Kings Arcadia, no.92, 67; Newman 1992.

On the a page of Book V (V, 17) there is an annotation, not in Jones's hand, "my moste hartie commendationes unto you my veri Lovinge frinde trusting in god that you are in good health as I was at the markinge yore R." It is written in a secretary hand, but I have not been able to connect it with any other annotations, nor the mysterious "R" with anyone close to Jones.

A few annotations are in an early hand by Jones, and can be ascribed to a date before his trip to Italy in 1613. Most of the annotations, however, are later, and in Books III and IV. Of the early annotations, Jones made a lengthy series of notes on the use of the doric order, "the Ansients dedicated This Dorricke Order T[o the] most Roboustious good (i.e. gods)," "Cristians too Saintes o[f] the like nature," "Also to Soldierly an[d] Robustious parsones of what Condition soever."¹⁷⁷

Farther down the page Jones made a further series of annotations on the problem of the Doric base, and notes "The Corinthian bace In the Antiquities being other wise maade Serlio Taakes The Atticke baace for ye Dorr[ick] and this baace Bramanti The Renuer of ye good archi[tect] In Ittali used in his workes."¹⁷⁸

In a later group of annotations in Book IV on the orders, Jones commented upon Serlio's schema for the superimposition of the orders. Jones wrote against the four solutions suggested by Serlio "the collo[m]b aboufe hath the pedistall evne wth ye foot of ye collomb below and ye base stands perpindicular with ye body of ye pedistall. this he saith is according to Vitruvius mening," "this collomb aboufe is as bige at the foot as ye collomb below is at ye heade this is take[n] fro[m] ye theater of Marcellus. Scamotzo approveth this maner of placing order upon order," "this

¹⁷⁷Serlio 1559-62, IV, 17. Transcribed and discussed in Newman 1992, 39.

¹⁷⁸Ibid.

collombe of ye second order is of ye same bignes wth ye under collombe and is take[n] fro[m] ye Colloceu[m] wch hath the upper orders all of a bignes being far from the eye," and "in this collombes aboufe ye plinth or pedistall commith out no farder the[n] ye foot of ye collomb below and is diminished $1/4$ part."¹⁷⁹ Jones dissects Serlio's various solutions for the placing of one order upon another, noting in particular the examples of the Theater of Marcellus and the Colloseum.

¹⁷⁹Serlio 1559-62, IV, 65r.

Serlio, Sebastiano. *Tutte L'Opere D'Architettura et Prrospectiva. . . . Diuiso in sette Libri. Con vn'Indice copiosissimo con molte Considerationi, & vn breue Discorso sopra questa meteria, raccolto Da M. Gio. Domenico Scamozzi Vicentino, Di nuouo ristampate, e corrette* (only Books I-III). Vinegia: Presso gli Heredi di Francesco de' Franceschi, 1600.

4to.

Inigo Jones; John Webb; Thomas Steward (late seventeenth century); Canadian Centre for Architecture, Montreal. Signed: title page, "Inigo Jones".

Binding: contemporary limp vellum.

Extensive marginal annotations.

I: Fowler 1961, no. 334; Mortimer 1974, no. 477; Kruft 1988, 77-91; Wiebenson 1983, I-12.

II: Canadian Centre for Architecture 1988, no. 8, 41; Harris/Higgott 1989; Newman 1992.

Inigo Jones owned this copy of Serlio early, and most of the annotations are in the earliest hand. Certain sections were carefully read, including the important passage on the Pantheon. (Figure 22) These annotations would have been made by Jones before he had ever seen the building, and taken in conjunction with the passages on the Pantheon in Palladio, drawings by Palladio from the collection of Sir Henry Wotton, and the description of travelers before him, Jones had a broad sense of this important ancient building. Of all the descriptions of antiquities in Rome, Serlio's description of the Pantheon contained the germ of his approach to antiquities. Jones noted "Pantheon the fayrest & Best understood amongst ye antiquitis," and "the members answeare to ye boddye."¹⁸⁰ Jones accepts Serlio's praise of the building as the one best understood amongst all the antiquities, and therefore worthy of study as exemplar. Jones translated Serlio's anatomical analogy of the Pantheon into a particularly English notion of correspondence between parts, which is at once organic and geometrical. Serlio defines the building in terms of basic geometry, and Jones noted that "the round the perfaytest forme" and "wth in

¹⁸⁰ Against the text of Serlio: "Tra gli antichi edifici che si veggono in Roma, istimo che il Pantheon per un corpo solo sia veramente il piu bello, il piu integro, & il meglio inteso: & è tanto piu maraviglioso de gli altri, quanto che havendo egli molti membri, cosi ben tutti corrispondono al corpo . . ." (Jones's underlining) III, fo. 50r.

ye heygh is Just ye Breadth."¹⁸¹ The unusual source of light in the Pantheon contributed to the building's miraculous effect on the viewer, according to Serlio. Jones noted "on only lyght and that aboufe wch dilateth yt self every whear."¹⁸² Through the discussion of the Pantheon Serlio puts forward some of his basic precepts on architecture, and Jones made notes of many of these perceptual notions of the relationship of the part to the whole, awareness of the effects of light, and use of geometrical terms in architectural description.

Serlio uses the example of the Pantheon to commend the judicious architect.

. . . ma veramente l'Architetto che gli ordinò fu molto giudicioso, & riservato: giudicioso perche seppe accompagnare li membri molto bene, & fargli corrispondere a tutto il corpo, & non volse confondere le opere con molti intagli: ma gli seppe compartire con gran giudicio, come al suo luogo ne traterò diffusamente: fu riservato, che volse osservare l'ordine Corinthio in tutta l'opera, nè ci volse mescolare altro ordine.¹⁸³ (Jones's underlining)

Against this Jones noted "the architecte Juditious and Reserved In comparing ye members wth ye hole and not confounding wth tonnes Covering [?]. Reserved In observing the Corinthia[n] order throughout."

This edition of Serlio contained the "Indice Copiosissimo" added to the 1584 and 1600 editions by Giovandomenico Scamozzi, father of Vincenzo Scamozzi. The index updates Serlio's text by including the ideas of the son Vincenzo, and runs to 38 pages. The notes of Vincenzo are noted by marginal commas, and may indicate Vincenzo's annotations to his copy of Serlio transferred into print.¹⁸⁴ Jones read the index carefully, and has made several notes on passages that he found of interest.

¹⁸¹ Against the text of Serlio: "& questo aviene, che quel prudente Architetto, che ne fu inventore, fece elezione della piu perfetta forma, cioè della rotondità, onde volgarmente se gli dice la ritondita: percioche nella parte interior tanto è l'altezza sua, quanto la sua larghezza." (Jones's underlining) III, fo. 50r.

¹⁸² Against the text of Serlio: "& forse il presato Architetto considerando che tutte le cose che procedono ordinatamente, hanno un principale, & sol capo, dal quale dipendono gli altri inferiori, volse che questo edificio havesse un lume solo: ma nelle parte superiore, accioche per tutti i luoghi si potesse ugualmente dilatate, come in effetto si vede che fa." (Jones's underlining) III, fo. 50r.

¹⁸³ Serlio 1600, III, fo. 50v.

¹⁸⁴ Bury 1989, esp. 95.

Against the entry "Opere guidate da muratori, vedi come riescono con poco decoro, & honore de'gran Signori," Jones made a disparaging reference to the "Carpenters at Audley End."¹⁸⁵ The index represents, however, a more general interest in the late sixteenth century for the codification of texts through indexing.

¹⁸⁵Serlio fo. 14r.

Strabo. *La prima parte della geographia*. Translated by Alfano Buonaccinoli. Venice: Francesco Senese, 1562.

4to.

Vincenzo Scamozzi; Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Flyleaf in Scamozzi's hand: "Strabone Amaseo Filosofo stoico fiori sotto Augusto & inorse sotto Tiberio Imperatori: Ante Christo. 140. come habbiamo da' proprij suoi scritti. Lib. 13 fac. 118." and below "De' Libri di Vicentio Scamozzi."; Title page: "Inigo Jones" (scratched out); "ffor Mr. "

Binding: Contemporary limp vellum. On binding edge: "13 Strabone".

Extensive marginal annotations by Scamozzi. Additional annotations by Jones.

I: Adams 1967, no. 1909.

II: Harris 1973; Wilkinson 1923, no. 13.

This copy of Strabo's *Geographica* in an Italian translation originally belonged to Vincenzo Scamozzi, whom Jones met in Venice in 1613. Scamozzi may have given the book to Jones as a gift; although there is no gift inscription suggesting that. It is more likely that the Venetian architect sold the book to Jones, perhaps along with his own drawings and some of those of Palladio. The book is marked by Scamozzi on a front fly leaf, and annotated by him throughout in his typical marginalia of a dot with a slight vertical line attached. (Figure 80, 81) The marginalia is comparable to other books known to have come from Scamozzi's library that I have seen, including his copy of Philibert de l'Orme (British Library) and Guillaume Philander (Avery Library, Columbia University).¹⁸⁶ (Figure 82)

¹⁸⁶For discussion of other books from the collection of Scamozzi see Pagliara 1986, 5 n. 1 (Scamozzi's copy of *I dieci libri dell'architettura di M. Vitruvio tradotti et commentati da Monsig. Daniele Barbaro*, Venetia 1567); Cropper 1984, 81 n. 67 (Scamozzi's copy of Francesco Commandino, *Archimedis opera nonnulla*, Venice 1558).

Summonte, Giovanni Antonio. *Historia della citta e regno di Napoli*. 2 vols. Naples: Giovanni Iacomo Carlino, 1601, 1602.

4to.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Volume I, title page: "Napoli 1 mayio 1614. 14 Carlini 2 volls." Volume II: "Napoli 1 mayio 1614: 14 Carlini 2 volls Inigo Jones" (scratched out) (Figure 83) ; George Clarke monogram on TP in both volumes.

Binding: Both volumes in contemporary limp vellum. Design of three quatrefoils and central medallion impressed into fore edges of both volumes.

Not annotated.

I: *Seventeenth Century Italian Books* vol. II 1986, 884.

II: Harris 1973; Wilkinson 1923, no. 32; Chaney 1993.

Jones purchased both these volumes while he was in Naples, as he notes on the titlepage. Although he did not annotate the volumes, Edward Chaney has suggested that he used the books in his design for the great door at the Banqueting House; and that he read Summonte in conjunction with his study of the remains of the Temple of Castor and Pollux (Dioscuri), which had been incorporated into the Church of S. Paolo Maggiore (1581/3-1603) by Fra Francesco Grimaldi. (Figure 84)

Vasari, Giorgio. *Delle vite de' piu eccellenti pittori scultori et architettori*. [Three parts in 3 vols] Volume I of the Third Part. Fiorenza: appresso I Giunti, 1568.

4to.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Title page: "Inigo Jones" (scratched out).

Binding: vellum over boards; re-backed.

Marginal annotations. Studies of heads on flyleaf by Jones. Portrait head of Antonio da Correggio drawn in pen and ink, p. 16. (Figure 85)

I: Adams 1967, no. 296; Mortimer 1974, no. 515.

II: Chase 1991; Newman 1992; Harris 1973; Wilkinson 1923, no. 17; Wood 1992.

According to Peacham, Inigo Jones was one of the few men in England who owned a copy of Giorgio Vasari's *Vite*, a book difficult to find in England.¹⁸⁷ In the 1622 edition, Peacham thanks Jones for allowing him to see his copy of Vasari.¹⁸⁸ John Dee, John Selden, and Richard Haydocke all owned copies as well.¹⁸⁹ Edward Norgate quotes Vasari in his treatise on painting, *Miniatura* (c. 1621-26).¹⁹⁰

Jones owned his copy early in his career, as there are many annotations in a hand which can be dated to before his trip to Italy in 1613. A lengthy series of these early annotations in the *Proemio* select out Vasari's discussion of design and the defects of artists of the Second Period.¹⁹¹

Jones read his copy of Vasari selectively, and some lives were annotated fully and in others only selected elements noted. The lives of Giuliano and Antonio da Sangallo were annotated after his return from Rome, and Jones summarizes Vasari's narrative of the design of St. Peter's as "the building of St peters church in roome given to mihill Angell. Giuliano di San Gallo therwith offended went to fiorence."

¹⁸⁷ Peacham, *The Complete Gentleman*, 137; cited in Gent 1981, 72. As Gent notes, the other copy mentioned by Peacham was that belonging to Thomas Mountford, Prebendary of Westminster (d. 1632/3).

¹⁸⁸ See Howarth 1985, 118.

¹⁸⁹ Gent 1981, 72. Richard Haydocke, the translator of Lomazzo's *Trattato dell'arte de la pittura* into English (1598), would have had an obvious need for the book.

¹⁹⁰ Gent 1981, 72.

¹⁹¹ Transcribed and discussed in Wood 1992, Appendix.

(p. 60) In the life of Antonio da Sangallo the younger, Jones annotated the chapter thoroughly, mostly in an early hand.

Throughout the annotations there are references to Vasari's recommendation to study antiquity as the best training, and his praise of those artists who did so. In the life of Fra Giocondo, Jones notes that "fra gocondo a learned ma[n],"¹⁹² "an architecte and prospectivo,"¹⁹³ but also that "he staid in Rome many yeares being young and Studied ye antiquiti."¹⁹⁴ Read in conjunction with Plutarch's Lives and the histories of Herodotus and Polybius, Vasari provided a model for Jones of the artist as heroic figure with a crucial role in the court life of his patrons.

¹⁹² Against the text: ". . . parlero prima di fra Iocondo. il quale quando si vesti l'habito di san Domenico, non fra Iocondo semplicemente, ma fra Iocondo fu nominato. ma come gli cascasse quel Giouanni no[n] so, so bene che egli fu sempre fra Iocondo chiamato da ognuno. e se bene la sua principal professione furono le lettere ese[n]do stato non pur Filosofo, e Teologo eccellente ma bonissimo greco, il che in quel tempo era cosa rara, cominciando apunto allora à risorgere la buone lettere in Italia . . ." (Jones's underlining), 245.

¹⁹³ Against the text: ". . . costui dunque essendo gran literato, intendente dell'architettura, e bonsissimo prospettivo . . ." 245.

¹⁹⁴ Against the text: ". . . stette fra loco[n]do in Roma nella sua giouanezza molti a[n]ni, e da[n]do op[er]a all cognitione delle cose antique, cioè no[n] solo alle fabriche, ma a[n]co all'i[n]scrizioni antiche, che sono ne i sepolchi, & all'altre anticaglie, e no[n] solo i Roma, ma ne paesi all'i[n]torno, & i[n] tutti i luoghi d'Italia, raccolse i[n] un bellis. libro tutte le dette i[n]scrizioni, e memorie, e lo ma[n]dò a donare . . ." 245.

Vasari, Giorgio. *Ragionamenti sopra le inventioni dipinte in Firenze nel Palazzo.*

Florence: Filippo Giunti, 1588.

8vo.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Title page: "Inigo Jones" (scratched out).

Binding: Rebound [eighteenth century?]; calf over boards.

Not annotated.

I: STC Italian 1958, 712.

II: Harris 1973; Wilkinson 1923, no. 26.

Vegetius Renatus, Flavius. *Dell'arte della guerra*. Translated by Francesco Ferrosi. Venice: Gabriel Giolito, 1551.

8vo.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Title page: "Inigo Jones" (scratched out).

Binding: contemporary limp vellum.

Extensive marginal annotations.

I: STC Italian 1958, 713.

II: Harris 1973; Wilkinson 1923, no. 7.

The annotations in Vegetius indicate that Jones read this book throughout. There are annotations on some pages in two different inks and suggest that Jones returned to passages again to study them again.

Vegetius would have appealed to Jones on several accounts. First, Vegetius was a fundamental author for the study of ancient war and subsequently a primary source for the training of young gentlemen in the military arts. On this basis alone, Jones would have read Vegetius in order to participate in the common culture of his patrons. For the study of architecture, however, Vegetius provided a model of necessity of knowing both practical knowledge gained through experience and the study of theory available in printed books. Jones wrote "booke and practise" against "Et quelle cose, che si facevano prima, si possono imparare con la pratica, & co'libri." (p. 52v) War provided an excellent model for the study of any art because of its absolute consequences, as Jones notes "errors made in ye warr ar presently punished" and "un practised soulders ar ether killed or flyt."¹⁹⁵

Jones noted in his copy of Gabriello Busca, *L'Architettura militare*, that it is necessary to read the historians of the period in order to study fortifications; and that "Vitruvius and Vegetius ye only authors left."¹⁹⁶ Vegetius was immensely

¹⁹⁵ Against the text: "Oltra di cio (come dice Catone) facendosi alcuno errore nell'altre cose, si puo di puoi emendare, ma gli errori, che si fanno nelle guerre, non hanno correngimento alcuno, conciosiacosa che la pena seguiti incontanente il peccato, percio che quelli, che combattano poltronamente, et senza esserui pratici, o eglino sono subito tagliati a pezzi, o datisi all fuga non ardiscono di uoltar la faccia a'uincitori." (Jones's underlining), fo. 16r-16v.

¹⁹⁶ Against the text: "Le Regole de Scrittori si riducono à Vitruvio solo, & à quel poco che Vegetio ne scrive, che è argomento, che gran cose non fosse la loro." Busca, *L'architettura militare*, 40.

influential in the Middle Ages and Renaissance for military studies of all types, and the books fortuna far exceeded its literary value or organization as a resource of ancient Roman warfare.¹⁹⁷

¹⁹⁷S.V., "Flavius Vegetius Renatus," in N.G.L. Hammond and H.H. Scullard, eds., *The Oxford Classical Dictionary* (Oxford: The Clarendon Press, 1973), 1111.

Viola Zanini, Gioseffe. *Della architettura*. Padova: Appresso Francesco Bolzetta, 1629.

4to.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Flyleaf: "This booke was Inigo Jones's" in later hand.

Binding: Contemporary vellum over boards.

Marginal annotations in English and Italian.

I: Fowler 1961, no. 446; Krufft 1988, 123-24; Wiebenson 1983, I-29.

II: Fowler 1961, no. 446, p. 347; Harris 1973; Wilkinson 1923, no. 39.

By 1629, when Zanini was published, Jones had carefully studied the orders, and the annotations in this book represent a later stage in his refinement of ideas of classicism. The most thoroughly annotated section is on the Corinthian order and the description of constructing the scrolls of the capitals. Over two pages Jones annotates Viola Zanini's explanation of the construction of the abacus, for as Jones notes it is the "error of many in making of ye croked line of the Abaco."¹⁹⁸

Jones makes cross-references to Scamozzi; and important comments on the definition of theory as something resting on the intellect and not on the senses. He marked the following passage "Deffinition of Theory," with a pointing fist to denote its importance:

Questa voce Teorica appresso Greci significa contemplatione, & visione, laquale depende dall'intelletto, e non dal senso. La Pratica viene così detta quasi praticata, non versa come la Teorica intorno la speculatione, & intelletuale sapienza, ma intorno alle operatione sensitive cioè di poca speculatione, non dimeno da quella con la frequenta esperienza si possono acquisitare l'Arte e la Prudenza."
(Jones's underlining; p. 299)

¹⁹⁸ Written against the text of Zanini: "Ma questo da molti operarij non è considerato, ben che l'errore se li rappresenta davanti gli occhi, come si vede in molti capitelli Corinthij, & questo hauuene, che essi formano un triangolo gli angoli delquale tocchino li angoli del quadrato, & non lasciando fuori il Sporto della corna, l'Abaco viene ad haueve mancho incarò, & il capitello riesce senza gratia." Viola Zanini, *Della architettura*, 400.

Vitruvius Pollio, Marcus. *I dieci libri dell' architettura*. Venice: F. de Franceschi & G. Chrieger, 1567.

4to.

Inigo Jones; John Webb; William Barry; Lord Burlington; Devonshire Collection, Chatsworth. Signed: Title page: "Inigo Jones"; Jones's motto "Altro diletto che Imparar non trouo"; "Wm Barry Lond. 1714" (Figure 21)

Binding: Rebound, eighteenth century; calf over boards with gold tooling; spine is original.

Extensive marginal annotations.

I: Adams 1967 917; Fowler 1961, no. 410; Mortimer 1974, no. 550; Krufft 1988, 97-100; Wiebenson 1983, I-21.

II: Harris 1973, 65; Higgott 1992; Newman 1992.

This is the quarto edition of the first Italian edition by Barbaro (Venice: Marcolini, 1556), and has a reduced copy of the title-page border of that edition.¹⁹⁹ With Daniele Barbaro's commentary, incorporating philosophical precepts from Aristotle's *Ethics* and elsewhere, it was the most scholarly of the Vitruvian commentaries available.

Jones's copy of Vitruvius is the only printed book which survives with his motto, "Altro diletto che imparar non Trovo," on the title-page (Jones's also wrote this motto on his notebook of passages taken from other sources). The motto itself is taken from Barbaro's commentary, and it is therefore appropriate that Jones should have written this on the book itself. As the primary ancient source for the study of classicism, with its learned apparatus, the identification of this book with Jones's scholarly study is all the more fitting. For Barbaro's translation and commentary represents a particular Venetian interest in the scientific Vitruvian study, seen in the light of civic humanism and an antiquarian philological method.²⁰⁰ In his introduction to the recent edition of Barbaro's commentary on Vitruvius, Manfredo Tafuri places the publication more firmly within the scientific and intellectual

¹⁹⁹Fowler 1961, 322.

²⁰⁰Pagliara 1986, 85.

debate of the mid-sixteenth century.²⁰¹ Written at a time of internal tensions within Venetian society, and an uneasy peace, the commentary of Barbaro argues for an assessment of tradition against reason, and the appropriation of new scientific study. John Dee had praised Vitruvius in his Preface to Euclid (1570) as a repository of ancient scientific information, and certain proof of the foundations of architectural study. Vitruvius was not just an architectural source, but a compendium of knowledge, the equivalent in scientific studies to Antonio Possevino's *Bibliotheca selecta* (editions from 1593).

Thus much, and the same wordes (in sense) in one onely Chapter of this Inco[m]parable Architect Vitruvius, shall you finde. And if you should, but take his booke in your hand, and slightly looke through it, you would say straight away: This is Geometrie, Arithmeticke, Astronomie, Musike, Anthropographie, Hydragogie, Horometrie &c. and (to co[n]clude) the Storehouse of all workema[n]ship.²⁰²

Dee's listing of the topics to be found in Vitruvius suggested a form of reading followed by Jones: for an understanding of the relationship of architecture to the other branches of scientific study. While there are numerous technical annotations by Jones on architectural topics, he also read for more general precepts and concepts applicable to many fields.

Many of Jones's notes in Vitruvius reflect what could be called a scholarly reading, a summary of the main points of the texts in the margin. In the later annotations, those which can be dated to after 1630, there are annotations comparing the text of Vitruvius or Barbaro with other books. However, there are many more of these comparative annotations in Palladio, especially in Book IV. The summary of information is first in the Vitruvius, and then qualified against the later treatises.

While Vitruvius was the only possible ancient text from which to study the origins of classical architecture, it was not the best source for the details of classicism. In general, however, Jones carefully read those sections on the general

²⁰¹Manfredo Tafuri, "[Introduction] La norma e il programma: il Vitruvio di Daniele Barbaro," in *Vitruvio, I dieci libri dell'architettura*. Tradotti e commentati da Daniele Barbaro (1567) (Milano: Il Polifilo, 1987), xi-xl.

²⁰²Dee 1570, diiir.

principles of classicism, ideas of order, decorum, symmetry, eurythmia, distribution and proportion. It was the difference, as Jones notes, between "things of the[m]selves" and "things that have Relation to others."²⁰³ This lengthy series of annotations by Jones on Barbaro established a structure for the understanding of architectural design and ornament, and placed it into a context relevant for Jones. The prevalent use of the orders in England, for example, saw them as unique objects, 'of themselves." Whereas, the principles espoused by Vitruvius required that their relationship to one another and to the project at hand (as well as to the culture at large) be taken into account by the informed architect. The applicability of Vitruvius's concepts in any discipline transforms the general rule into the particular precept. Jones wrote in a later hand "order disposition &c. are generall and commun termes and thearfore have thear diffinitiones in the common & generall sience caled Metaphysik but when any artifficer will appli any of thos partes to his proper knowlidge he reduceth that universalitie too the particular and propriete of his owne arte."²⁰⁴

Many of Jones's annotations indicate that he read Vitruvius as the textual source for the significance of ancient architecture. What Jones may have known as rules for the ordering of classical buildings, in Vitruvius he found an explanation for its appearance and existence. For example, Jones wrote "the reason why Temples weare winged aboute wth pillars." (p. 131) In this way Jones is reading Vitruvius for an understanding of the causes of classical architecture in much the same way that English readers of the same period read Polybius for an understanding of the causes of ancient events.²⁰⁵

²⁰³ Against the commentary of Barbaro: "Dico adunque per intelligentia di quello, che si deve esponere, che alcune cose inquanto all'esser loro non si referiscono ad altre, ma libere, & assolute sono. Altre hanno rilatione, & rispetto, & senza non starebbero." (Jones's underlining) Vitruvius 1567, I, 26.

²⁰⁴ Against the commentary of Barbaro: "Perche in molte cose ritrovano ordine, dispositione, decoro, distributione, & le altre parti sopra dette, però diremo che questi termini sono generali & communi: & come generali, & communi hanno le loro diffinitioni nella scienza generale, & commune. che e'la prima detta metaphysica. Ma quando alcuno artefice vuole applicare alcuna di quelle parti alla propria cognitione, restringe quella universalità al particolare, & proprio dell'arte sua, come si vede al presente, nella dette diffinitioni, & prima nella diffinitione dell'ordine." (Jones's underlining) Vitruvius 1567, I, 27-8.

²⁰⁵ See the previous entry on Polybius in this chapter.

In the first book Jones made a lengthy note on the the need for an architect to have a broad knowledge, more so than a perfect understanding of any one field of study.

The meaning of Pittio is that so much as belongs to the Architect he shuld bee more verst in the[n] the proffesors of the severall artes and doctrines. for the Architect (saith he) ought more to work in all ye artes & doctrines then thos that any on thinges by thear industri and exercise have brought to a perfait clearnes or thus. That in all the artes and doctrines the Architect shuld bee able to doe more (wch is in matter of Architecture) then they who any particular thinge by thear exercise and industri have brought to perfait clearnes. Eexample of this of sum mathematicians of Oxford that desined for a gate for ye garden of simples lamly.²⁰⁶

Jones criticizes the gateway to the Oxford Botanical Garden, designed by 'mathematicians' that is perfectly according to the rules but with no sense of judgement.²⁰⁷

Jones's reading of Vitruvius with Barbaro's commentary an introduction to the difficulties of the study of classical architectural, based on this one textual source. There is more than one annotation which highlights that "this place of vittr: Harrd to be understood"²⁰⁸ following on Barabro's further discussion "della distributione di dentro delle Celle, & dello antitempio." For an English reader, however, aside from the difficulties with terminology felt by all students of Vitruvius, the exegesis by Barbaro gave a series of metaphors for the study of architecture. Jones notes one of these in particular, "an exelett Comparison of Barbaro betwene the Orrator and the architecte."²⁰⁹ The use of metaphor and simile was a common intellectual structure in the English Renaissance, and particularly applicable to the description of architecture.

²⁰⁶Vitruvius 1567, I, 22.

²⁰⁷Henry Wotton makes a similar distinction in his commentary on Italian Vitruvian studies, saying that before Alberti "of the Italians that tooke [Vitruvius] in hand, Those that were Gramarians seeme to have wanted Mathematicall knowledge; and the Mathematicians perhaps wanted Gramer." Wotton [1624] 1903, viii.

²⁰⁸Vitruvius 1567, IV, 176.

²⁰⁹Vitruvius 1567, III, 115. See the discussion of this passage in the preceeding chapter on Jones's study of the architectural orders.

Jones reads Vitruvius in two ways. First, as a scientific treatise filled with the content of the ancient source. Second, as an intellectual system which connected architecture with scientific thought, moral philosophy, and educational practice. This reading as simile was presented in fuller detail in the commentary by Barbaro.

Xenophon. *L'opere morali di Xenophonte*. Translated by Lodovico Domenichi. Vinegia: appresso Gabriel Giolito de Ferrari, 1547. Bound with Xenophon, *I sette libri di xenophonte della impresa di ciro minor tradotti per M. Lodovico Domenichi*. Vinegia: Appresso Gabriel Giolito de Ferrari, 1547.

8vo.

Rich. Carr(?); Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Binding: Contemporary limp vellum. Binding ties missing.

Signed: TP: "Inigo Jones" (signed twice; once over Rich. Carr signature; both scratched out).

Extensive marginal annotations.

I: Adams 1967, no. 27.

II: Harris 1973; Wilkinson 1923, no. 5.

Lodovico Domenichi's translation of Xenophon, from Francesco Filelfo's 1502 Latin version, was the standard edition through to the seventeenth century.²¹⁰ Jones read throughout Xenophon's *Moralia*, making annotations on many different sections. Xenophon gave background to Jones's formulation of ideas about the role of architects in society and their proper philosophical and moral training. Jones drew two elaborate pointing hands against "Nel modo, che esaminiamo gli statoari, rispose Socrate, no[n] si lasciando persuadere da le parole loro; ma tutti quegli, che noi veggiamo haver fatto bene le prime statore, crediamo anchora, ch'egli possa far bene l'altre." (Libro secondo, p. 71v) More generally, Jones wrote "thos ar loved of god who ar good in any good profession."²¹¹

In Xenophon, however, Jones found voiced a theory of direct emotive response to the visual world. In Book 3, Jones made a series of annotations on art and its effects. He begins by noting that "painting is imitation" and that "bautifull figures ar made by taking the best of several men &." He goes on to write "virtues and vises expressed by ye face and gestures of me[n]. standing or moving" and that "this is allso im[m]itation." This form of imitation revealed the soul's working through external evidence, although Jones notes "to immitate the bauti of the soule

²¹⁰Cochrane 1981, 258.

²¹¹Written against the text: "Diceva anchora, che quegli sono ottimi & amati da Dio, i quali fanno bene ne l'agricoltura, le cose, ch'appertengono a la agricultura ne la medicina, le medicinali; ne la Repub. le civili." Libro terzo, p. 94v.

harde to doe." The visual world was value laden in the Socrates dialogue, and Jones notes that "honest and good maners being expressed delight more the[n] wiked."²¹²

In general, Jones found in Xenophon's dialogue a moral justification for seeing art as an active force in a culture.

²¹²"Creditu dunque, che gli huomini piu volentieri veggono o le cose per lequali appaiono i costumi honesti, buoni, et amabili; o pur quelle, per lequali si comprendono gli infami, i cattivi, & gli odiosi?" Xenophon, *Morali*, Libro terzo, 95r.

Xenophon. *Della vita di Cyro Re de Persi*. Translated by Iacopo di Messer Poggio Fiorentino. Firenze: gli Heredi de Philippo di Giunta, 1521.

8vo.

Inigo Jones; John Webb; George Clarke; Worcester College, Oxford. Signed: Title page: "Inigo Jones" (scratched out).

Binding: Rebound in marble paper over boards; leather spine; red leather label; covers loose.

Few marginal annotations in Italian, not in Jones's hand.

I: STC Italian 1958, 738.

II: Harris 1973.

This, like other small octavo volumes in Jones's collection, may have been purchased while he was travelling in Italy.

ADDITIONAL BOOKS REFERRED TO BY JONES

d'Albenas, Jean Poldo. *Discours historial de l'antique et illustre cité de Nismes, en la Gaule Narbonoise, Avec les portraitz des plus antiques & insignes bastimens dudit lieu, reduitz `a leur vraye mesure & proportion, ensemble de l'antique & moderne ville.* Lyon: Guillaume Roville, 1560.

Folio.

In 1609 Jones travelled to Provence and studied antiquities there. After his return he made a drawing of the Pont du Gard based on a plate in d'Albenas's history of Provençal antiquities and Jones's own careful observations of the monument itself. (Figures 53, 54) Gordon Higgott's study of this drawing establishes that Jones corrected d'Albenas's illustration, and that Jones translated the caption onto his own drawing.¹ It is likely that Jones would have owned such a book for he was interested in regional studies of antiquities, such as his copy of Sarayna's book on antiquities in Verona.²

A copy of this book, now in the collection of Worcester College, came with the Clarke books and was previously owned by Robert Cotton.³ It is not certain that Jones used or owned this copy of D'Albenas. There is no direct evidence from marginalia that Jones was a later owner. However, it would not be expected that Jones would have signed his name as an indication of ownership, as perhaps he had the best intentions of eventually returning the book to Cotton. Jones did not return other books to Cotton (see entry below: *Discours du Grand et Magnifique triumphe*) and it is possible that this book as well was borrowed by Jones and never returned.

¹Higgott 1983, 24-34; Harris/Higgott 1989, no. 5, 40-42.

²See the entry under Sarayna in the Annotated Bibliography chapter.

³Signed twice on the titlepage "Robert Cotton"; George Clark monogram on titlepage; George Clarke bookplate on inside cover. Binding: calf over boards; gold impressed medallion in center of front and back covers; George Clarke binding. Few pencil marginal annotations, not in Jones's hand.

Baldi, Bernardino. *De verborum Vitruvianorum significatione; sive, Perpetus in M. Vitruvium Pollionem commentarius*. Urbino, 1612.

While Jones's copy of Baldi's Vitruvian dictionary does not survive, he makes references to it in his annotations on the meaning of "triclinium" and "scamilla impares".⁴ In his copy of Barbaro's Vitruvius Jones wrote "the triclinii for the spring and autumbe tourdes the East | thos Triclinii for ye some[r] tourdes the north | And roomes to paint in &c tourdes ye north | Se Ber: Baldo./ This chapter belongs to distribution for youse."⁵

Bernardino Baldo had written a biography of his mentor the mathematician Federico Commandino as the modern day inheritor of an ancient scientific tradition. He included a biography of Vitruvius among his *Vite*, and later published a dictionary of difficult terms from Vitruvius along the lines of the earlier work by Guillaume Philander.

A copy of Bernardino Baldo in the Bodleian Library is from the collection of John Webb (signed in Webb's hand on the title-page, "Jo. Webb") and has a few marginal annotations in his hand. There are not, however, any annotations by Inigo Jones to confirm that this copy originally came from his collection.⁶

⁴See Newman 1988, esp. 436

⁵Against the text in Vitruvius: "I Triclinij di primauera, & d'Autumno si drizzano all'Oriente, perche l'impeto del Sole opposto andando di lungo verso l'Occidente fa quelle stanze di lumi circondate piu temperate in quel tempo, che si fogliono adoperare. Ma quelli della state deono riguardare al Settentrione, perche quella parte, non come le altre, che nel sostitio per lo calore ardenti, per esser riuolta dal corso del Sole, sempre è fresca, & nell'uso porge sanità, & piacere. Et cosi que luoghi, doue si hanno a saluare scritte, & tauole, o pitture, detti Pinacotheci, oue si fanno le coltre, o piumacci cuciti con diuersi colori, & imbottiti, o doue si dipigni, bisogna che riguardano al Settentrione, acioche i colori di quelli per la fermezza, & egualità de lumi siano nelle opere impermutabili." Book VI, Chapter VII, 295.

The relevant text in Baldo includes: "Quaedam nos hoc de re in verbo oecos, multa & pulchra Philander, plurima & pulcherrima Mercurialis l. I. de re Gymn. c. II. Veterumtricliniorum imaginem quandam habemus in Monachorum coenaculis, quae vulgò rectoria appellantur. Caeterùm priscos diuites pro anni temporibus triclinia mutasse palàm est, vel ex iis quae apud Vitruuium ipsum leguntur." (p. 189)

⁶Bodleian Lister.F.19. The book is bound in calf over boards with gold tooling on covers. On the title-page is signed in a different hand "Liber Musei Ashmoleani. Oxon-."

Bordino, G. F. *De rebus praeclare gestis a Sixto V Pon. Max . . . Carminum liber primus*. Romae: Ex officina I. Tornerij: Apud F. Zanettum, 1588.
4to.

Bordino was a member of the Oratorian community S. Filippo Neri in Rome, was later Archbishop of Avignon, and wrote a series of laudatory poetry for Sixtus V's building program for Rome. Bordino's book predates the more well-known encomium by Domenico Fontana (also owned by Jones).

In 1606 Edmund Bolton gave a copy of this book to Inigo Jones inscribed "Ignatio Jonesio suo per quem spes est, Statuarium, Plasticen, Architecturam, Picturam, Mimosim, omnemque veterum elegantiarum laudem trans Alpes, in Angliam nostram aliquando irrepturas. MERCURIUS IOVIS FILIUS."⁷ The copy has since been lost from the collections at Worcester College. John Peacock, in his study of Jones's designs for the masque *Prince Henry's Barriers* (1610), shows how Jones used Bordino's illustrations of S. Giovanni in Laterano as a source for the scene of St George's Portico.⁸ More generally, however, Bolton's gift encouraged in Jones an interest in the urban renewal and building projects of Sixtus V.⁹ Not only was this pontificate close in recent memory, but Sixtus's concern for creating a 'capital city' of architectural unity and grandeur served as a powerful model for large scale architectural transformation.¹⁰ Bordino's book further contained full page engraved illustrations of the building projects and plans for the city, and was certainly an important visual source for Jones.

du Choul, Guillaume. *Discours de la religion des anciens romains* (Lyons: G. Rouille, 1556, 1581; Reprint: In the series *The Renaissance and the Gods*. New York: Garland, 1976.). Translated into Italian as *Discorso della religione antica de Romain*,

⁷Gotch 1928, 251. See the discussion of this dedication in the preceding chapter on Jones's library.

⁸Peacock 1987, 182.

⁹Peacock 1987, 182.

¹⁰On Sixtus V's architectural program see, among others, L. von Pastor, *Sisto V: il creatore della nuova Roma* (Rome, 1922); T. Marder, "Sixtus V and the Quirinal," *Journal of the Society of Architectural Historians* 37 (1978), 283-94; L. Spezzaferro, "La Roma di Sisto V," pp. 365-405 in *Storia dell arte italiana*, part 3, ed. Federico Zeri, vol. V *Momenti di architettura* (Torino, 1983).

insieme un'altro & essercitij della Castramentatione, & disciplina militare, Bagni, & essercitij antichi di detti Romani and illustrati di Medaglie & Figure, tirate de i marmi antichi, quali si trovano à Roma, & nella Francia. Lyons, 1569.

In his annotations on the Temple of Peace in his copy of Palladio (Book IV p. 13) Jones refers to "Medals of Vespasian and Titus in Choule fo. [left blank]"¹¹ As I have discussed in the chapter on Jones and antiquity, Jones used du Choule's history of the ancient Romans as supplementary historical evidence in the study of the Temple of Peace. Of the many possible sources that Jones could have used, the choice of du Choul and the emphasis on coins as documents is significant. Throughout his career Jones retained an interest in the antiquities of Provence, a result of his early travels there, and he may have known of the French numismatic studies based in Lyons. Du Choul's method of writing historical narrative based on non-literary evidence was followed by historians close to Jones, especially by Edmund Bolton in his *Nero Caesar, or Monarchie Depraved* (London, 1624).¹² For Jones, who had carefully studied the ancient remains of Roman buildings, coins as a surviving physical artifact would have served as a powerful form of evidence.

Dion Cassius. *L'histoire de Dion Cassius . . . abregée par Xiphilin.* Paris, 1588.

Jones refers to the Xiphilinus epitome (eleventh century) of Dio Cassius in his copy of Palladio's fourth book on antiquities.¹³ In two places in his annotations on the Temple of Minerva Jones refers to Apollodorus and the life of Hadrian: "The Foro Traiano was built by Appolodorus ye architectt, this is out of Zifilin whear is ye death of Apollodorus and the tirany of Adrian"; "This tempell was made by Apolodorus se Xifilin in ye life of Adrian fo. 238." (*I quattro libri*, IV, 23, 25)

¹¹On Choule see Cooper 1990.

¹²Woolf 1990, 194-95.

¹³John Peacock, "Inigo Jones's catafalque for James I," *Architectural History* 25 (1982), 5 n. 28.

Discours du Grand et Magnifique triumphe, fait au Mariage de tresnoble & Magnifique Prince François de Vallois Roy Dauphin fils aîné du treschrestien Roy de France Henry deuxiesme du nom, & de treshaute & verteuse Princesse, Madame Marie d'Estreuart Royne d'Escosse. Rouen: chez Iaspar de Rémortur, & Raulin Boulec, 1558.

Jones borrowed two books from the library of Sir Robert Cotton on sixteenth century triumphs, most likely for his work on masques.¹⁴

A note of such bookes as have been lent oute by Sr Robt Cotton to divers [borrs?] and are abroade in their hands att this daye the 15th of Januarye 1630

[fo. 178r]

To Mr Inigo Jones

1. Triumphes att the Coronation of Anne of Britany, write[n] to Leroy King of France

2. Triumphes att the Coronation of Marye Sister to Hen: 8. Marryes to Leroy King of France

[fo. 179v]¹⁵

I have not been able to trace the first volume—perhaps a manuscript of the coronation of Anne of Brittany—although it was likely to have been similar to the second volume borrowed from Cotton, a well-known edition on the marriage ceremonies of Mary Stuart. The *Discours* appeared in three French and one English edition in 1558, the year of the marriage.¹⁶

¹⁴Sharpe 1979, 76.

¹⁵British Museum, Harley Ms. 6018.

¹⁶French editions were published in 1558 in Paris, Rouen and Lyon [Tannenbaum 1944, I, nos. 7, 8, 9]. An English edition was also printed in Paris in 1558: *A declaration of the Triumphant Marriage of . . . Francis de Valois & Mary Stuart*, Paris 1558 [Tannenbaum 1944, I, no. 13]. A Latin edition also appeared: *J. Mercerii . . . Dialogue in noblissimi Gallorum delphini & illustrissimae Scotorum reginae nuptis*, Paris 1558 [Tannenbaum 1944, I, no. 1107]. A reprint of the Rouen edition of 1558 was published by the Roxburghe Club, edited by Sir H. Ellis, *Ceremonial of the Marriage of Mary Queen of Scots with the Dauphin of France* (London: G. Woodfall, 1818).

A Scottish eyewitness at the marriage published an account in Scotland in 1559, which now only survives in fragments. See Douglas Hamer, "The Marriage of Mary Queen of Scots to the Dauphin: A Scottish Printed Fragment," *The Library* n.s., 12, no. 4 (March 1932), 420-28.

Dürer, Albrecht. *Della simmetria dei corpi humani, Libri quarto. Nuovamente tradotti dalla lingua Latina nella Italiana, da M. Gio. Paolo Gallucci Salodiano*. Venetia: Presso Domenico Nicolini, 1591.

On the verso of a drawing now at Chatsworth Jones made a list of items, perhaps a list he intended to purchase or a record of items he owned. Among that list is "of Anatomy: Albet dure Italian."¹⁷ Jones twice referred to Dürer's treatise in his copy of Lomazzo. Once to note that Lomazzo cited Dürer as a source for "la bella proportione," that "lomazzo taket[h] from Albert Du[rer]" (p. 45). In another place Jones cites Dürer as a source for human proportion, or what Jones translates as "flections and trasportations." Jones wrote "mihil angell yoused ye arte of flections and trasportations for flections see Albert Dure his Simitri" (p. 252).

In the reign of Elizabeth Dürer's name was used frequently to evoke the general idea of a great artist, and he is mentioned in that context by Bacon, Dee, Hilliard, Haydocke, Peacham and John Donne; and copies of his treatise appear in many of their libraries.¹⁸

The popularity of Dürer in Northern Europe increased after the publication of Erasmus's *Euology* on the artist in 1528.¹⁹ Erasmus praised his skill in *monochromata*, that is in the medium of prints; and his accurate observation of *symmetrias et harmonias*. Based on classical tropes of praise, Erasmus equates Dürer's skill in all fields with ancient artists. The use of ancient encomium aligned Dürer with a classical tradition, and ensured him a place in a continuity of ancient artist. Even more compelling, however, is Erasmus's praise of Dürer for his skill in complex visual representation.

Durerus quanquam et alias admirandus, in monochromatis, hoc est nigris lineis, quid non exprimit? umbras, lumen, splendorem, eminentias,

¹⁷Chatsworth vol. X, p. 9, no. 62v.

At the top of the sheet are studies of heads by Jones. The full listing of items below this is: "Broad Riband for garters/ Scarlett for my thumb/ Booke. ye Bible & of Anatomy: Albet dure Italian/ Shooes/ Bag of Stockins/ to see what is in ye basqett."

¹⁸Gent 1981, 74 n. 43.

A later 17th century treatise reflects the reputation of Dürer: *Albert Dürer revived or a book of drawing, limning, washing or colouring of maps and prints, and the art of painting, with the names or mixtures of colours used by the picture-drawers with directions, how to lay and paint pictures upon glass* (London, 1680). See Schlosser 1964, 646.

despressiones: ad haec, ex situ, rei unius non unam speciem ses oculis
intuentium offerentem.²⁰

Erasmus's praise of visual paradox (wrongly assumed by Panofsky to refer solely to Dürer's use of stereometrical perspective) stands at the head of an English aesthetic that delighted in the seemingly contradictory image. That aesthetic continued throughout the sixteenth century and found an architectural apogee in the buildings, for example, of Sir Thomas Tresham as in his Triangular Lodge at Rushton or the buildings designed in the shape of letters, standing for the name of the builder or owner, such as John Thorpe's designs in the form of "I T."²¹ Some contemporary viewers perceived the buildings of Jones as examples of this delight in the curious device, as in his plan for the H shaped Queen's House built over the road from Dover to London.

Dürer, Albrecht. *Etliche underricht, zu befestigung der Stett, Schloss, und flecken*.
Nürnberg: [Hieronymo Formschneyder?], 1527.

Jones made reference to Dürer's treatise on fortifications in his copy of Gabriello Busca's *Dell'architettura militare* (p. 104).²² Dürer's treatise involved the innovative use of plans, elevations and cross sections for a printed publication.²³

Fontana, Domenico. *Della trasportatione dell'obelisco Vaticano*. Roma: Domenico Basa, 1590.
Folio.

¹⁹See Panofsky 1969, 200-27; Gent 1981, 33.

²⁰Erasmus, *Desiderii Erasmi Opera Omnia*, ed. Jean Leclerc (Leiden 1703-6), i, cols. 909ff; cited in Latin in Panofsky 1969, 225 n. 78.

²¹See Summerson 1966a.

²²See Bury, "Early writing on fortification," no. 8, 12-15; Cockle, no. 766; Pollak 1991, no. 17.

²³On the influence of Dürer's treatise for Serlio see Rosenfeld 1989, esp. 103.

Jones refers to Fontana's treatise, but only as an oblique reference to what he saw as one of the most pernicious faults in 'modern' architecture, the excessive complication of moldings caused by projections of the surrounds. In a series of related annotations in his copy of Palladio, Scamozzi, Vitruvius and Serlio Jones disapproves of this tendency in the recent generation of Roman architects to freely interpret the antique precedents.

The reference to Fontana occurs on the pages of Palladio's presentation of the Temple of Vesta at Tivoli (Book IV, pp. 90-94) on the final page of plates of details of the window and door moldings (p. 94). While Jones is perhaps sceptical of the wide bottom moulding he notes that in practice it is effective, "thes architraus of the dore and windowed haue ye under faccia greatest wch is not ordinary yt in ye work It doth well London 8 March 1618." Across the page, on the opposite margin, Jones goes on to note that this antique example and Serlio's publication have been a false license for 'modern' architects to improvise. "The retorne of ye Architraue of this window and of ye 2 geates in Serlio fo 51 hath giuen occasion to ye modern architectes to fly out in this exedyngly thos that ar rottened higher then ye tope of ye light ar falce and make ye faccia dubble Scam: Li 6 fo 163/ this error in Fontana: fo: and most of ye romain Architectes moderne." The reference to Scamozzi is to a passage criticizing the excessive complexity of door and window mouldings, to which Jones concurred "The Architrave of doores must never have more the[n] 2 fassie", and to the plate on the opposite page showing "ornamenti delle porte, e fenestre corinte."²⁴

By 1639 Fontana's book was still difficult to acquire in England. Nicholas Stone, Junior purchased a copy "according to my father direction in his letter I bought the booke of Archyctecture of Domenico Fontana to be sent for England for Mr Kinsman being uery scarsly to be found; cost 25 [crowns] 00 [iulios] 00 [biocs]."²⁵

Gamucci, Bernardo. *Le antichita della città di Roma*. Ed. T. Porcacchi. Venice: Giovanni Varisco, 1569.

²⁴Against the text of Scamozzi: "Le fronti de'Stipiti, ouero Erte, & il Limitare, ò Architraue non habbiano mai più di due Fascie con le loro Golette, ò Cimacij di sopra, & Astragaletti, ò cosa simile frà la Fascie . . ." (Jones's underlining), Scamozzi 1615, II, VI, 162.

²⁵Stone [1620-30] 1918-19, 193.

Of all Jones's guidebooks on Roman antiquities Gamucci was the one he referred to most frequently in his later annotations (after the 1620's) when he was interested to correlate historical writers on ancient Roman monuments with the reconstructions in Palladio. Against Palladio's plate of the Temple of Jove (Templum Serapis) Jones wrote "Gamuci Antiquiti thinks this to be a pallas and no tempell." (*I quattro libri*, IV, p. 42).²⁶

There is a copy of Gamucci's guidebook to Rome in the collections of Worcester College that has traditionally been ascribed to Jones's library based on an annotation on the flyleaf that records the dimensions of Westington Hall.²⁷ That book is an edition which does not match the page references in annotations in his Palladio. It is likely that Jones owned a copy of Gamucci, for in his annotations he makes specific references to the page in Gamucci where the information can be found.

Groote, Alessandro de. *Neovallia: dialogo, nel quale con nuova forma di fortificare piazze si esclude il modo di far fortezze alla regale come quelle che sono di poco contrasto*. Monaco: Vedova Berghin, 1617.

Cockle, no. 808; Pollak 1991, no. 28.

Jones refers to the earlier treatise of de Groote in his copy of Lorini.²⁸

Labacco, Antonio. *Libro d'Antonio Labacco appartenente a l'architettura nel quale si figurano alcune notabili antiquita` di Roma*. Venetia: Girolamo Porro, 1576.

Folio.

²⁶Also see Jones's annotations on Palladio's reconstruction of the Temple of Peace, where he disagrees with both Palladio and Gamucci for making the portico without a giant order, and based only on "coniecture". Palladio 1601, IV, 13.

²⁷The copy at Worcester contains manuscript notes on a front flyleaf that records the dimension of Westington Hall [??] "The lengthe of westington hall lxxii the breadth xxiii length 210 feete breadth 66 feete."

²⁸See the following entry for the fortification treatise of Tensini. Lorini, *Le fortificationi*, p. 161, in the chapter on "Fortezza fatta co'balvardi senza spalla."

Jones's copy of Labacco does not survive; but from his folio references it is probable that he owned the edition reprinted in Venice in 1576.²⁹ As Jones refers directly to folio numbers and notes that "Anto: l'abaco dessignes this temple otherwise as I haue noted in his booke" (Palladio, IV, 129: The Temple of Neptune) he most likely owned his own copy of Labacco.³⁰ Jones used the reconstructions of Roman antiquities by Antonio Labacco as a comparative source against Palladio for the reconstruction of the capitals of the Temple of [Mars Jones is critical of Labacco on his historical inaccuracy and less successful design inventions, but he prefers the visual presentation of Labacco. "This bacce of the pillaster is most exactly donn in Abacco and the making of the under boulder and casment wth severall Centers, this hear hath only the measures but not the line nor garbe."³¹ The engraved plates of Labacco could provide more detail and allow Jones to work directly from the plate, using his compass to measure off the book itself rather to have to rely on the printed measurements as in Palladio.

Jones's particular use of the term "garbe" refers to the style of presentation in the Labacco plates, a grace of outline not found in the more rough woodcut plates of Palladio.³² This matters to Jones because of his way of responding to the printed images in his library. His active way or redrawing the plates, whether through annotations, incised lines, trying the measures, or the use of separate drawings,

²⁹The copy in the British Library [561*f 7 (1-2)] is bound with *Diverse figure al numero di ottanta, Disegnate di penna nell'hore di recreatione da Annibale Caracci intagliate in rame*, Roma: Lodovico Grignani, 1667. Labacco, like Vignola's plates on the orders, attracted other material such as the Caracci prints. See the entry under Vignola in the appendix of Jones's surviving books.

³⁰Other references to Labacco in Palladio include: Book IV: 15, 21, 22, 68.

³¹Palladio 1601, IV, 22.

³²S.v. "garb" OED, meaning 1, sense b. Jones use of the term "garbe" has other implications based on its use in England at the time. According to the *Oxford English Dictionary*, the term most likely came into English usage through the French "garbe" or Italian "garbo", meaning in both cases elegance and grace. Florio uses "garb" in this sense in his translation of Montaigne: "Surely its [love's] course hath more garbe when it is comixt with unadvisedness and trouble." The word had a further sense like the Italian "modo", meaning a way or manner of doing something, a style or fashion.

'Garb' also refers to a particular quality in the details of the order present in its profile and indicative of the emotive character of the form. Scamozzi devotes particular attention to the form of mouldings that ought to represent the beauty and vitality of the material. Against this section Jones wrote "tender mouldings gives graviti and bauti to the work, a s the too solide and swelling make it deformed without garbe. So the leane & cutted maner sheaues the work weak & dry. So as marbell or other nobell stones become like wood dry & fleshless." (Scamozzi, *L'idea dell'architettura*, II, 140)

required precise visual and descriptive information not available from any one source. While Serlio's text provided more description, Palladio gave full measurements, and Labacco's precise Roman engravings more accurate details.³³

Mauro, Lucio. *Le antichità della città di Roma, raccolte da chiunque hà scritto, ò antico, ò moderno*. Venetia: Appresso Giordano Ziletti, 1562.

In his copy of Lomazzo Jones made a reference to Mauro's book on antiquities: "Lucio Mauro dele Antiquita" against the text of Lomazzo "nel libro chiamato Lucio Mauro, dove si potrà vedere quante fossero le grandezze & meraviglie de Greci, & dopo de i Romani, in cotal facultà . . ." (p. 621) This may only have been a bibliographical reference to the available literature on the subject of antiquities, a topic that interested Jones.

Pirro Ligorio:

There are two references that Jones owned or studied works by Pirro Ligorio. The first is a reference in his copy of Palladio (Book IV, 35) against a plate of the Temple of Antonia and Faustina: "H & it many times the ansientes carrved the vndercuting of the corrona with leaves as in PirroLigorio and wth other workes and fansies." The second is by Christopher Wren in his Second Tract on Architecture, *Parentalia* (London, 1750), 354.

"I have seen among the Collections of Inigo Jones, a pocket-book of Pyrrho Ligorio's . . . wherein he seemed to have made it his Business, out of the antique Fragments, to have drawn the many different Capitals, Mouldings of Cornices, & Ornaments of Freezes, etc. purposely to judge of the great

³³Zerner 1988, 281-94.

Liberties of the ancient Architects, most of which had their Education in Greece."³⁴

Philander, Guillaume. *Civis Ro. in decem Libros M. Vitruvii Pollionis de Architectura Annotationes*. [?Romae: apud Io. Andream Dossena Thauriemen, 1544.]

Jones refers to Philander through an annotation in his copy of Serlio's *Architettura Libro quarto* (Queens). Against the text of Serlio: "Io con piu maturo consiglio ho co[n]siderato quel passo di Vitruvio, dove egli dice che si sculpsca il Cimatio Dorico, e lo Astragalo Lesbio in la scima scalptura, & anco io l'ho conferito con alcuni greci, dove si conclude, che scima scalptura voglia dire Sculptura di basso rilievo . . ." Jones wrote "Philander in the 4 book of Vitrus: fo 189 saith in the annotationes that he admonished serlio of his error tuching scima scalptura. but selio names him not."³⁵ Philander criticized Serlio's Third and Fourth books for their lack of historical and philological accuracy, and accuses Serlio of rushing Book III into print.³⁶

Philander's annotations was the first time that the Vitruvian text was juxtaposed with a distinct genre of writing on the orders with the hope to produce a usable grammar, reduced to the essentials yet flexible enough to solve problems in actual building.³⁷ The treatise emerged from the philological program established by the mid-sixteenth century Accademia della Virtù, to reconcile classical literature on architecture with the visible remains.³⁸

In 1563 John Shute named Philander, along with Serlio, as the source for his *Chief Groundes of Architecture*. Henry Wotton also praised Philander as one of the most important commentators of Vitruvius in *The Elements of Architecture* (1624).

³⁴Quoted Bold 1989, 32.

³⁵Serlio, *Architettura. Libro quarto*, sig. 21v.

³⁶See the discussion by Hans-Christoph Dittscheid, "Serlio, Roma e Vitruvio," pp. 132-48 in Chrisof Thoenes, ed., *Sebastiano Serlio. Sesto Seminario Internazionale di Storia dell'Architettura* (Milano: Electa, 1989), esp. 132; Hubertus Günther, "Studien zum venezianischen Aufenthalt des Sebastiano Serlio," *Münchner Jahrbuch der Bildenden Kunst* 32 (1981), 42-94, esp. 43 n. 27.

³⁷Pagliara 1986, 78.

³⁸See the summary of this program in Wiebenson 1988, esp. 68.

These English architectural authors, like Philibert de L'Orme in France and Daniele Barbaro in Italy, used Philander as a modern commentary on Vitruvius, and the frequency with which authors cited him as a source attests to his popularity throughout Europe.³⁹ Philander's commentary on Vitruvius, highly scholarly and philologically based, appealed to an audience that valued a literary genre of classical commentaries and textual exegesis.⁴⁰

Jones's copy of Philander does not survive, if indeed he owned his own.⁴¹ He did however make notes about Philander's use of Serlio and decision not to mention him by name. Philander, like Baldi, assisted the reader in understanding the difficult terminology in Vitruvius, and through a scholarly method of classical references of the nearly 240 authors cited in the preface..

Quintilian. *Institutio Oratoria*.

It is not at all surprising that Jones should have read Quintilian, given his interest in education treatises, such as Plutarch, classical authors on art, and discussions generally of prose style and ancient rhetoric. Quintilian was highly praised in the England from the sixteenth century on. Sir Thomas Elyot's educational manual *The Governour* (1531) and Thomas Wilson's *Arte of Rhetoricke* (1562) both rely heavily on Quintilian.⁴² Although Jones's copy does not survive, he mentioned him in his copy of Vitruvius along with Xenophon and Aristotle as a source on style, what Jones notes from Vitruvius "fewe and clear sentenses."⁴³ As

³⁹Wiebenson 1988, 67-74.

⁴⁰ See Anthony Grafton, "Renaissance Readers and Ancient Texts: comments on some commentators'," *Renaissance Quarterly* 38 (1985), 615-49.

⁴¹See Newman 1988, 436

⁴²s.v. "Quintilian," Harvey 1974, 357. See also Percival 1983.

⁴³The full annotation by Jones is as follows: "in architecture ye wordes of artt ar harly understood," "fewe and clear sentenses: se Zenofon. of Socrates. li.4.fo.104 of sentenses see Arrstotells orratory. li. 2. fo. 86. Quintillian li. " Vitruvius, *I dieci libri*, V, 204.

Jones did not list a specific page reference it is not possible to be sure of the edition-there were nearly 150 editions by 1600.⁴⁴

Sardi, Pietro. *Corona imperiale dell'architettura militare divisa in due trattati. Il primo contiene la teorica. Il seconda contiene la pratica. Venice: Barezzo Barezzi [at author's expense], 1618.*

Jones referred to Pietro Sardi treatise on fortifications in his copy of Lorini, which Jones seems to have used as a central text in his studies on the subject.⁴⁵ Jones referred to Sardi as refuting the claims of Lorini. Sardi also wrote *L'Artigliera* (Venetia: Appresso Giovanni Guerrigli, 1621), though it is more likely that Jones is referring to the text on fortification, of more interest to him than the study of artillery.⁴⁶ Sardi, like Vincenzo Scamozzi, published his treatise at his own expense. The two works bear a stronger resemblance in their intellectual structure based on extensive quotation of ancient sources and general discussion of theory and practice.

Suetonius, *De Vita Caesarum*; perhaps the Italian edition *Vita di duodeci imperatori descritta per Suetonii. Nuovamente tradotta in volgare. Venetia 1539*, and later editions of 1554 and 1611.

Jones made references to the history by Suetonius in his copy of Vitruvius. Suetonius, Jones notes, gives further information on the building of the Temple of Giove Olympian in Athens. *The Lives of the Caesars* had been translated into

⁴⁴See J.J. Murphy, *Renaissance Rhetoric: A Short-Title Catalogue of Works on Rhetorical Theory from the Beginning of Printing to A.D. 1700* (New York, 1981); Brian Vickers, "Rhetoric and Poetics," Schmitt 1988, 721.

⁴⁵Lorini, *Le fortificationi*, p. 95.

⁴⁶Bodleian Vel. F2.c.8

English in 1606 by Philemon Holland, although Jones most likely owned an Italian edition.⁴⁷

"See Suetonius fo 65: 60: The aspect was Hipethros." [Vitruvius 1567, 309]

"X—Suetonius in the life of Augustus saith that the Kinges his freendes and confederats agreed togeather wth a comon charge to finnish the Temple of Giove Olimpioin in Athenes, begon. long beefore and to dedicat yt to his Genius." [Vitruvius 1567, 309]

Tensini, Francesco. *La fortificatione*. Venetia: Euangelista Deuchino, 1624.
Cockle, no. 813.

In his copy of Lorini, Jones notes that "Balardi staccati thes have binn sett fourth by Alex: de Grotte and lately by Tencini."⁴⁸

Tetti [or Theti], Carlo. *Discorsi di fortificationi*. Venetia: Bolognino Zaltiero, 1575 and later eds.
Cockle, no. 776.

Jones used Tetti's treatise on fortifications as an argument against Scamozzi's schemes in his treatise *L'idea dell architettura universale*. On a plate in Scamozzi of a fortification and detail of a bastion wall Jones has marked "H thes canaleti ar take[n] from Carrlo tetti Li. 1 fo. 9 & Scamozo make it his owne invention. as his maner is. Car Tetti disco[m]ends it himself."⁴⁹

The first edition of Tetti's book, printed in Rome in 1569, was published against the author's wishes, evidence that it originally circulated in manuscript

⁴⁷*The Historie of the twelve Caesars, Emperours of Rome. Written in Latine . . . and newly translated into English, by P. Holland. Together with a marginal glosse, and other briefe annotations there-upon* (London 1606).

⁴⁸In Lorini, *Le fortificationi*, p. 161, in the chapter on "Fortezza fatta co'balvardi senza spalla."

⁴⁹Scamozzi 1615, I, 197.

form for a limited audience.⁵⁰ It is not certain to which of the later editions Jones refers. The book appeared in five further editions to 1617.

Vesalius. *De humani corporis fabrica*. [Basel: Johannes Oporinus, 1543?]
Harvard Italian, no. 529.

Jones is known to have given his copy of Vesalius to King Charles I: "Item an other Booke in folio of Annotame done after Phasario. given to ye kinge by ye K: Surveyo Mr Inigo Jones."⁵¹ Jones used the book himself to copy the muscle of face and head into his Roman sketchbook (fo. 23).

Wotton, Henry. *The Elements of Architecture*. London: John Bill, 1624.

Jones would have known about this book through his connection with the court, and more generally from his connection with Wotton; Jones lists throughout his copy of Palladio that he had seen and studied Wotton's collection of Palladio drawings. However, there is more direct evidence of his opinion of Wotton's treatise in an annotation in Jones's copy of Vitruvius. Against Vitruvius's statement: "Ma quelli, a i quali la natura benigna tanta di solertia, & uiuezza d'ingegno, & di memoria hauerà conceduto, che possino insieme, & la Geometria, & l'Astologia, & la Musica, & le altre discipline perfettamente conoscere, certamente passano i termini, & gli officij dello Architetto, & si fanno Mathematici, doue facilmente possono disputare contra quelle discipline, perche di piu arme di scienze armati sono," Jones wrote "noot that most writers of Architecture doe leaveth thos parte wch the undertsand nott as Scamotzo. Sr He: Wotton."⁵²

⁵⁰Cockle 1957, 201.

⁵¹O. Millar, "Abraham van der Doort's Catalogue of the Collections of Charles I," *Walpole Society* 37 (1960): 125; quoted in Jeremy Wood, "Inigo Jones, Italian Art, and the Practice of Drawing," *Art Bulletin* 74, no. 2 (June 1992): n. 58, 258. On Vesalius see William A. Wallace, "Traditional Natural Philosophy," in Schmitt 1988, 208.

⁵²Vitruvius 1567, I, 25.

ROBERT MARTIN: A BOOKSELLER'S CATALOGUE

One of the central concerns of any study of libraries is to determine the availability of books.¹ As I have noted in the preceding discussion of Jones's library, he could have acquired books during his travels, from foreign ambassadors, from other collections in England or through book dealers. With all these various avenues for books to enter into private English hands, it is difficult to state with any certainty that one book or another was available to an English reader. Did English readers ignore some books, or refer to them infrequently in their notes, because they simply couldn't find a copy? There is the evidence of collectors going to great lengths to have the latest architectural title. As I have noted elsewhere, Nicholas Stone's sons, away in Italy studying drawing and sculptural techniques, were asked to find a copy of Domenico Fontana for a "Mr Kinsman [as the book] being uery scarsly to be found."² Similarly Lomazzo and Vasari were difficult to purchase in England.

In the early 17th century, however, specialized book dealers traded in foreign language publications for the English market. One of these dealers, Robert Martin, dealt in books "ex Italia selecti," and published four catalogues in 1633, 1635, 1639 and 1640.³ While the books were selected in Italy, there are other imprints in the catalogue as well, including French titles. What is of interest here is that Martin includes a section on "Libri de Architectura, & ad Bellum Spectantes." There are other categories on music (over a hundred titles), theology, medicine, mathematics, and law. The categories of professional or at the least a devoted amateur, interest suggest that these catalogues were intended for specialized readers.⁴ All of the titles in the architecture section are in Italian. In other library lists, though not necessarily book dealers, architecture books were included under the general heading of mathematical treatises, as in the catalogue made of the books donated to Sidney Sussex College, Cambridge by Lucy, Countess

¹ Lucy Gent summarizes this problem in her discussion of English library catalogues and their relevance for studies of the visual arts. See Gent 1981, 71-8. On the book trade in England see Bennett 1989, III, 40-66, 199-235.

² See the entry under Domenico Fontana in the Additional Books Appendix.

³ On Robert Martin see Lievsay 1969, 42-48; Rhodes 1966, 131-38; Rossi 1989, 23-4.

⁴Rossi 1989, 24.

of Bedford. Martin's catalogue is an excellent example of the connection in England of architectural treatises with military books. Lucy Gent makes the important point that readers in England may have ignored Italian painting treatises because they did not have a category to place that type of books, and subsequently that type of knowledge.⁵ If they did not see the books as fitting within one of their standard divisions of education then there would have been the inclination to ignore the message.⁶ Certainly one of the advantages of the study of library and book sellers catalogues is the information they provide on the categories for the organization of information and ideas of any period, which are often substantially different from those of today.⁷

The categorization of titles in Martin's list indicates a growing awareness of a genre of architectural literature, its connection with broader military education and interests, and the ready market for a wide variety in titles. Most library catalogues of the period group architecture titles under *Libri mathematici*, as Vitruvius, the standard ancient author, was catalogued under science generally as was John Dee's preface to Euclid, the other standard source on architecture before 1600.⁸ An early seventeenth century librarian had a category of 'Libri de Architectura, Pictura &c', but this was the exception rather than the rule.⁹ While libraries may not ordinarily have recognized a category such as "architecture" by the mid 17th century, booksellers evidently knew the demand for the books was increasing. Booksellers such as Martin made increasing use of alphabetization and clear layout in their lists to allow potential buyers to find titles easily, and to know the range of literature available in any given field.¹⁰ This would have been especially important with dealers specializing in foreign literature, as their catalogues would have served an important bibliographical function in informing readers about new publications and editions which they would otherwise would never have seen. Catalogues supplemented other sources of information on books

⁵ Gent 1981, 76-7.

⁶ Gilbert 1943-45, 87-106.

⁷ See the discussion of this point in Birrell 1987, 64-5.

⁸ For example, the Donor's Book at Sidney Sussex College, Cambridge.

⁹ Northamptonshire Record Office, Finch-Hatton MS 4025, fol. 3r; cited in Gent 1981, 66 n. 1.

¹⁰ Eisenstein 1979, 91.

such as returning travelers, ambassadors, correspondents, general merchants, and even more common, printed books themselves which referred to other titles in the text or in printed marginalia.

In Martin's list of architectural books the most striking inclusion is the large number of fortification treatises and military manuals. By the 1630's the study of fortifications had become a separate field from civic architecture, and specialists developed often with expertise in more than one field of military experience. The *bombardieri*, for example, were experts in cannon warfare and fortifications, and the medieval tradition of the engineer were hired by those armies as free-lance architects to travel with them. The study of architecture was directly connected with the study of fortifications, following on the continental tradition of the study of military architecture as one of the main duties of the architect.¹¹

In the transcription which follows I have added in the notes an identification of the volume, as it is not always obvious from the catalogue entry. I have not repeated the note when the book reappears on the later list.

¹¹ See Adams 1984.

Catalogus Librorum Quos (In Ornamentum Reipublicae Literariae) Non sine Magnis Sumptibus & Labore, Ex Italia Selegit Robertus Martine, Bibliopola Londinensis: Apud Quem In Coemeterio Divi Pauli Postant venales. Londini, Typis Augustini Mathewes, M. DC. XXXIII.

4to.

British Library 821.k.35 (1.)

"Libri de Architectura, & ad Bellum Spectantes" [sig. 2v-3r]

Architectura di Vitruvio con Comentarij fol. Como 1521.¹²

-Idem Latine fol. Venet. 1567.¹³

-di Serlio 4. Venet. 1619.¹⁴

-di Viola 4. Padoa 1619.

-Militare di Busca 4. Milano 1619.¹⁵

-di Giovanni Antonio Rusconi fol. Venet. 1590.¹⁶

-di Andrea Palladio fol. Venet. 1616.¹⁷

¹² Marcus Vitruvius Pollio, *Di Lucio Vitruvio Polione De architectura libri dece traducti de latino in Vulgare affigurati: Commentati: & con mirando ordine insigniti* (Como: Gotardus de Ponte, 152).

¹³ Marcus Vitruvius Pollio, *De Architectura Libri Decem, Cvm Commentariis, Danielis Barbari* (Venetiis: Apud Franciscum Franciscium Senensem, & Ioan. Crugher Germanum, 1567). Fowler, no. 409.

¹⁴ Sebastiano Serlio, *Tutte l'opere d'architettura, Et Prospetiva . . . Diviso in Sette Libri* (Venetia: Appresso Giacomo de'Franceschi, 1619). Fowler, no. 335.

¹⁵ Gabriello Busca, *L'architettura militare* (Milano: Appresso Gio. Battista Bidelli, 1619). Cockle 1957, no. 811.

¹⁶ Giovanni Antonio Rusconi, *Della architettura libri dieci*. (Venetia: appresso I Gioliti, 1590). Fowler 1961, no. 280; Wiebenson 1983, I-20.

¹⁷ Andrea Palladio, *I quattro Libri dell'Architettura* (Venetia: Appresso Bartolomeo Carampello, 1616). Fowler, no. 215.

-Universale di Scamozzi fol. 1615.¹⁸

-Discorsi di Medesimo Sopra l'Antichità di Roma fol. Venet. 1582.¹⁹

-de Zanini 4. Padoa 1629.²⁰

-Corona Imperiale di Architectura di Sardi fol. Venet. 1598.

-Regole delle 5 ordini d'Architectura de Barozzi fol.²¹

-Opere diversi dell'Architectura Militare di Lupicini 4. Venet. 1601.²²

Antoni della Scienza & arte della Guerra fol. Firenze 1604.²³

Branca delle machine nuove 4 Roma 1629.

Bellici nuove Inventione di Fabricar fortezze fol. Venet. 1598.²⁴

Branca della vera Arte Militare fol. Venet. 1585.²⁵

Choul Discorso sopra la Castrametatione & Discipline Militare de Romani fol.²⁶

¹⁸ Vincenzo Scamozzi, *L'Idea della Architettura Universale* (Venetiis: Presso L'Autore, 1615). Pollak 1991, no. 54.

¹⁹ Vincenzo Scamozzi, *Discorsi sopra l'antichità di Roma* (Venetia: appresso Francesco Ziletti, 1582).

²⁰ Gioseffe Viola Zanini, *Della Architettura Di Gioseffe Viola Zanini Padovano Pittore, Et Architetto. Libri Dve Ne'quali con nuoua Simmetria, & Facoltà si mostrano le giuste regole de i cinque ordini di detta Architettura . . .* (Padova: Appresso Francesco Bolzetta, 1629). Fowler 1961, no. 446.

²¹ Giacomo Barozzi da Vignola, *Regola Delli Cinque Ordini D'Architettura*, edition uncertain. See Fowler 1961, 281-88.

²² Antonio Lupicini, *Architettura militare Con altri Auuertimenti appartenenti alla Guerra* (Venetia: R. Meietti, 1601). Cockle 1957, no. 783. First edition published Florence, 1582.

²³ Giovanni Altoni, *Il soldato . . . della scienza, et arte della guerra* (Fiorenza: V. German, 1604). Cockle 1957, no. 595.

²⁴ Giovanni Battista Belici, *Nuova Inventione di fabricar fortezze, de varie forme, in qualunque sito di piano, di monte, in acqua, con diversi disegni, et vn trattato del modo che si hà da osseruare in esse, con le sue misvre et ordine di levar le piante, tanto in fortezze reali, quanto non reali, etc* (Venice: Appresso Tomaso Baglioni, 1598). Cockle 1957, no. 794.

²⁵ Lelio Brancaccio, *Della nuoua disciplina & vera arte militare del Brancatio. Libri viii etc.* (Venetia: Aldo, 1585). Cockle 1957, no. 557.

²⁶ Guillaume du Choul, *Discorso della religione antica de Romain, insieme un'altro & essercitij della Castrametatione, & disciplina militare, Bagni, & essercitij antichi di detti Romani.* (1559?? need to check this). Cockle 1957, no. 702. First edition published in Lyon, 1557.

Cataneo dell'Arte Militare 4. Brescia 1608.²⁷

Essercitio della Guerra de Leone 4. Venet. 1586.

Ferretus de Re & Disciplina Militare fol. Venet. 1575.²⁸

Groote Neovallio Dialogo di Fortificare Piazze fol. Monach. 1617.²⁹

Il Bombardiero Veneto Essaminato del Suo Generale 4. Ven. 1631.³⁰

Il perfetto Bombardiero da Gentili 4. Venet. 1626.³¹

I Charichi Militari del Signor Brancatio 8. Venetia. 1626.³²

Leone dell'Apparechiamento della Guerra 4. Venet. 1586.

Le Fortificatione di Bonajuto Lorini fol. Venet. 1609.³³

La Reale & Regolare Fortificatione dal Sarti fol. Venetia 1630.³⁴

[F3R]

²⁷ Girolamo Cataneo, *Dell'Arte Militare libri tre, ne' quali si tratta il modo di fortificare, offendere, diffendere, & fare gli Alloggiamenti Campali; Con l'essamini de' Bombardieri, & formare le Battaglie* . . . (Brescia: V. Sabbio for T. Bozola, 1571). Cockle 1957, no. 542; Pollak 1991, no. 7.

²⁸ Giulio Ferretti, *De re et disciplina militari aureus tractatus* (Venetiis: B. Zalteri, 1575). Cockle 1957, no. 545.

²⁹ Alessandro de Groote, *Neovallia: dialogo, nel quale con nuova forma di fortificare piazze si esclude il modo di far fortezze alla regale come quelle che sono di poco contrasto*, (Monaco: Vedova Berghin, 1617). Cockle 1957, no. 808; Pollak 1991, no. 28.

³⁰ Luigi, Baron de Sciaban, *Il Bombardiero veneto essaminato dal suo Generale; dialogo fatto Francese, & tradotto in Italiano*, etc (Venetia: Gio: Pietro Pinelli, 1631). Cockle 1957, no. 696.

³¹ Eugenio Gentilini, *Il perfetto bombaridere* (Venetia: A. dei Vecchia, 1626). This is a later edition of *Instruttione de' Bombardieri . . . ove si contiene l'esamina usata dallo Strenuo Zaccharia Sciaiuina. L'Aggiunta che copiosamente dichiara, quanto nell'Esamina si comprende et un discorso intorno alle fortezze* etc (Venetia: F. dei Franceschi, 1592). Cockle 1957, no. 669; Pollak 1991, no. 26.

³² Lelio Brancaccio, *I Carichi Militari* (Anversa: Ioachimo Trognese, 1626). Cockle 1957, no. 609. The first edition published 1610.

³³ Buonaiuto Lorini, *Le fortificationi*, (Venetia: Presso Francesco Rampazetto, 1609). Cockle 1957, no. 791; Pollak 1991, no. 33.

³⁴ Antonio Sarti, *La reale et rogolare fortificatione descritta in quesiti et risposte* (Venetia: Euangelista Deuchino, 1630). Cockle 1957, no. 823.

Modo di ben mettere in ordinanza gli essertiti 4. Roma³⁵

Maggio della Fortificatione della Citta fol. Venetia 1582.³⁶

Medina l'Arte de navigare 4. Ven. 1609.

Novo Teatro di Machine e Edificij fol. Padoa 1621.³⁷

Pelliciani per essercitare Fanteria 4. Medono 1613.³⁸

Pistofilo del maneggio dell'uso dell'armi 4. Scena 1620.³⁹

Proteo militare di Bartolomeo Romano 4. Napoli 1595.⁴⁰

Rocca discorsi di Guerra 4. Venetia 1582.⁴¹

Ruscetti precetti de la militia Moderna 4. Ven. 1630.⁴²

Sperandio breve Compendio dell'Arte Militare 4. Venet. 1628.

³⁵ Giovanni Francesco Fiamelli, *Modo di ben mettere in ordinanza gli eserciti con una giunta di cose attenenti alli governi delli stati e di eserciti* (Roma: Luigi Zanetti, 1603). Cockle 1957, no. 592.

³⁶ Girolamo Maggi and Giacomo Castriotto, *Della fortificatione delle citta . . . Libri III* (Venetia: Rutilio Borgominiero, 1564). Cockle 1957, no. 772; Pollak 1991, no. 35.

³⁷ Vittorio Zonca, *Novo Teatro di machine et edificij*, etc (Padoua: F. Bertelli, 1621). Cockle 1957, no. 839.

³⁸ Bartolomeo Pellicciari, *Parte prima delle rassegne et modo per essercitare fanteria. Con Dichiarationi espedita, & Figure rapresentanti li siti, il numero della Soldatescha, & diuersi atti, che giornalmente occorono in guerra* (Modona: Giulian Cassioni, 1613). Cockle 1957, no. 618.

³⁹ Bonaventura Pistofilo, *Oplomachia Nella quale con dottrina morale, politica, e militare, e col mezzo delle figure si tratta per via di teorica, e di pratica del maneggio, e dell'vso delle Armi. Ditinta in tre discorsi di Picca, d'Alabarda, e di Moschetto* (Siena: Hercole Gori, 1621). Cockle 1957, no. 742.

⁴⁰ Bartholomeo Romano, *Proteo militare . . . Diviso in tre Libri. Nel primo si describe la fabrica di detto Proteo, & in esso nuoua Istrumento, tutti gli altri Istrumenti di Mathematica che imaginar si possono. Nel secondo e terzo si tratta dell'uso di detto Istrumento etc* (Napoli: G.I. Carlino & A. Pace, 1595). Cockle 1957, no. 942.

⁴¹ Bernardino Rocca, *De discorsi di guerra . . . Libri quattro, dove s'ingegna a'Capitani & Soldati il modo di condurre esserciti, di far fatti d'arme, espugnare & difender Citt`a etc* (Venetia: Damiano Zenaro, 1582). Cockle 1957, no. 551.

⁴² Girolamo Ruscelli, *Precetti della militia moderna, tanto per mare quanto per terra . . . ne'quali si contiene tutta l'arte del Bombardiero, & si mostra l'ordine che ha da tenere il maestro di campo quando vuole accampare il suo essercito etc* (Venetia: Alessandro de'Vecchi, 1630). Cockle 1957, no. 663. First edition appeared in Venice, 1568.

Sauorgnano l'Arte militare terestre e maritima fol. Venetia 1614.⁴³

Sardi discorso contre fortezze de terra 4. Venetia 1627⁴⁴

Theti delle fortificationi fol. Vicentia 1617.⁴⁵

Tesini fortificatione e espugnatione delle fortezze fol. Venetia 1614.⁴⁶

⁴³ Mario Savorgnano, *Arte Militare Terrestre e Maritima . . . Con vn essatissimo Trattato `a parte dell'Artigliere*, etc (Venetia: S. Combi, 1614) Cockle 1957, no. 587. First edition published in Venice in 1599.

⁴⁴ Pietro Sardi, *Discorso per il quale, con vive e certe ragioni, si rifiutano tutte le fortezze ad perpetuitatem fatte con semplice terra in qualsivoglia forma e modo come inutili* (Venezia: Sarzina, 1627). Cockle 1957, no. 819.

⁴⁵ Carlo Tetti [or Theti], *Discorsi delle fortificationi, espugnationi, et difesi della città* (Vicenza: per G. de Franceschi, 1617). Cockle 1957, no. 776; Pollak 1991, no. 67.

⁴⁶ Francesco Tensini, *La fortificatione, guardia, difesa, et espugnatione delle fortezze* (Venetia: Euangelista Deuchino, 1624). Cockle 1957, no. 813, only lists an edition of 1624; Pollak 1991, no. 65.

Catalogus Librorum tam Impressorum quam Manuscriptorum, Quos ex Roma, Venetiis, aliisque Italiae locis, Selegit Robertus Martine Bibliopola Londinensis. Apud Quem Vaeneunt in Coemeterio Divi Pauli, Londini: Typis Johannis Haviland, MDCXXXV.

4to.

British Library 821.k.35 (3.)

"Libri de Architectura Machinis, & ad Bellum Spectantes," p. 44 ff..

Andrea Palladio quattro Libri dell'Architettura fol. Venetijs. 1616.

Anto: Labacco dell'Architettura folio.⁴⁷

Archille Tarducci delle Machine Antichi & Moderni 4. Ven. 1601.⁴⁸

Anto: de Villae Portus & Urbis Polae descriptio 4o

Architettura Militare di Gabriel. Busca Milano 4. 1619.⁴⁹

Anto. Sarti Dialoghi di Fortificatione fol. Venetiae 1630.⁵⁰

Anto. Lupicini Architettura Militare 4. Firenze 1582.

Aurelia Cicuta Disciplina Millitare 4. Venet. 1572.⁵¹

⁴⁷ Antonio Labacco, *Libro D'Antonio Labacco Appartenente A L'Architettura Nel Qual Si Figurano Alcune Notabili Antiquita Di Roma*, (Roma: in casa nostra, 1552 and later editions). See Ashby 1914; Fowler 1961, nos. 165, 166.

⁴⁸ Achille Tarducci, *Delle Machine, ordinanze, et quartieri antichi, et moderni, come quelli da questi possino essere imitati senza punto alterare La soldatesca dei nostri tempi, discorsi . . . Aggiuntoui dal medesimo le fattioni occorse nell'Ongaria nel 1597, et la Battaglia in Transilvania contra il Valacco 1600* (Venetia: Gio. Batt. Ciotti, 1601). Cockle 1957, no. 675.

⁴⁹ Gabriello Busca, *L'architettura militare*. (Milano: Appresso Gio. Battista Bidelli, 1619). Cockle 1957, no. 811.

⁵⁰ Antonio Sarti, *La reale et rogolare fortificatione descritta in questi et risposte* (Venetia: Evangelista Deuchino, 1630). Cockle 1957, no. 823.

⁵¹ Alfonso Adriano [Aurelio Cicuta], *Della disciplina militare del capitano* (Venetia: Lodovico Avanzo, 1572). Cockle 1957, no. 535. The second edition appeared under the name Aurelio Cicuta. The first edition was published in 1566.

- Bernardinus Baldus de Verborum Vitruvianorum significatione 4. Aug 1612.⁵²
- Barthol. Pelliciani modo per essercitare Fanteria 4. in Modona 1613.
- Bonavent. Pistofilo dell manegio & dell'Uso di Armi 4. Siena 1621.
- Brancatie della Vera & nova Arte Militare fol. Venetia 1585.
- Barthol: Romano Proteo Millitare 4. in Neapoli 1595.
- Bonajuto Lorini di Fortificatione di Citta & altri Luoghi fol. 1609.
- Cinuzzi Sanese della Disciplina militare antica 4 moderna 4. Siena 1620.⁵³
- Carlo Theti Dell'Espugnatione & Difesa della Citta & altri luoghi fol. 1617.
- Capitan: Fiamino Teatro Millitare 4. Anversa. 1617.⁵⁴
- Camillo Agrippa di Scienza D'Armi 4. Venet. 1604.⁵⁵
- Domenico Fontano Della Transportatione dell'Obelisco Vaticano fo. Ro. 1590.⁵⁶
- Eugenio Gentilini Dialogo Sopra Fortezze 4. Venet. 1626.
- Il Parfetto Bombardiero Veneto 4. Venet. 1626.⁵⁷
- Fausti Verrantij Siceni Machinae Novae fol. Venetijs.
- Fra: Tensini Guardia Difesa, & espugnatione delle Fortezze fo. Venet. 1630.

⁵² Bernardino Baldi, *De verborum Vitruvianorum significatione; sive, Perpetus in M. Vitruvium Pollionem commentarius* (Urbino, 1612).

⁵³ Imperiale Cinuzzi, *La vera militar disciplina antica e moderna* (Siena: S. Marchetti, 1620). Cockle 1957, no. 596. First edition published in 1604.

⁵⁴ Flaminio Della Croce, *Teatro militare . . . Diviso in due parti. Nell'una si tratta de i veri mezi per conseruare qualisiuoglia Piazza, con altri discorsi appartenenti alla Caualleria, Trattati doppii, & alli Generali d'esserciti. Nell'altra . . . si mostra in qual maniera . . . assicurare le Fortezze deboli* (Anversa: H. Aertssio, 1617) Cockle 1957, no. 617; Pollak 1991, no. 11. The first edition was published in Milan, 1613.

⁵⁵ Camillo Agrippa, *Trattato di scientia d'Arme, con un Dialogo di Filosofia* (Venetia: R. Meglietti, 1604). Cockle 1957, no. 745. First edition published in Rome, 1553.

⁵⁶ Domenico Fontana, *Della Trasportatione Dell'Obelisco Vaticano Et Delle Fabriche Di Nostro Signore Papa Sisto V* (Roma: Appresso Domenico Basa, 1590). Fowler 1961, no. 124.

⁵⁷ Eugenio Gentilini, *Il perfetto bombardiere. . . Discorso intorno alle fortexze* (Venetia: A. dei Vecchia, 1626). This is a later edition of *Instruttione de' Bombardieri . . . ove si contiene l'esamina usata dallo Strenuo Zaccharia Sciauina. L'Aggiunta che copiosamente dichiara, quanto nell'Esamina si comprende et vn discorso intorno alle fortexze* etc (Venetia: F. dei Franceschi, 1592). Cockle 1957, no. 669.

- Fortificatione di Cavall: Alessand: Baro: de Groote fol. Monacho 1617.⁵⁸
- Fra: Lellio Brancatie I Carici Millitari 8o Venet. 1626.
- Ferrante Gianolio Della Disciplina militare fol. Padoa 1634.⁵⁹
- Giosepe Viola Zanini della Architettura 4. Padoa 1629.
- Gio. Brauca Manuale D. Architettura 8. Ascoli 1629.⁶⁰
- ejusdem Della Machine Nove 4. Romae 1629.⁶¹
- Girolamo Ruscelli Precetti della Militia moderna 4. Venet. 1630.
- Girol: Maggi della Fortificatione della Citta fol. 1583.⁶²
- Gio: Battista Bellici nuova Inventione di Fabricar Fortezze fol. 1609.
- Gio: Altoni Della Scienza & Arte della Guerra fol. Firenze 1604.
- Giugliel: Choul sopra la Castrametation: & Bagni antichi de i Greci & Romani 8.
Ven.
- Galazzo Alghisi da Carpi delle Fortificatione fol. Venet. 1570.
- Gio: Scala della Fortificatione fol. Romae 1627.⁶³

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⁵⁸Alessandro de Groote, *Neovallia: dialogo, nel quale con nuova forma di fortificare piazze si esclude il modo di far fortezze alla regale come quelle che sono di poco contrasto* (Monaco: Vedova Berghin, 1617). Cockle 1957, no. 808; Pollak 1991, no. 28.

⁵⁹Ferrante Gianolio, *Regole et ordeni della disciplina militare in lingua italiana e greca* (Padova: Crivellari, 1634). Cockle 1957, no. 643.

⁶⁰Giovanni Branca, *Manuale d'architettura, breve, e risoluta pratica* (Ascoli: Salvioni, 1629). Wiebenson 1983, II-3.

⁶¹Giovanni Branca, *Le machine* (need full title and pub info) Discussed in Wiebenson 1983, II-3.

⁶²Girolamo Maggi, *Della fortificatione della città libri III* (Venice: Camillo Borgominiero, 1583). Pollak 1991, no. 35.

⁶³Giovanni Scala, *Delle Fortificationi . . . Nuouamente ristampate con aggiunta d' diuerse piante* (Roma: Giuseppe de Rossi, 1627). Cockle 1957, no. 818.

- Gio: Franco Fiamelli I. Quaesiti Militari 4. Romae 1606.⁶⁴
- Hieronymo Cataneo dell'arte Militare 4. Venet. 1608.
- I. Dieci Libri dell'Architettura di Vitruvio 4. Venet. 1629.⁶⁵
- Idem con Commentario di Daniel Barbaro 4. Venet. 1567.⁶⁶
- Jacomo Barozzio Regoli delli cinque ordine D'Architettura fol.
- Julius Ferretus de jure & Re Militari fol. Venet. 1575.
- Julij Roscij Hortini Elogia Millitaria 4. Romae 1596.
- Jo: Bapt: Porta de Munitione 4. Neapoli 1608.⁶⁷
- Leo Bapt: Alberto L'Architettura fol. 1565.⁶⁸
- Leo Bapt: Alberto De Re Edificatoria 4. Florentiae 1585.⁶⁹
- Le Diverse & Artificiose Machine del Capit: Agostino di Remellis fol. Parigi
1588.⁷⁰

⁶⁴Giovanni Francesco Fiamelli, *I quesiti militari di G. F. F. . . . Fattigli in diversi tempi da diversi Principi . . . e da lui risolti con esempi, e con l'esperienza fatto insù la guerra*, etc (Roma: Carlo Vullietti, 1606). Cockle 1957, no. 601.

⁶⁵Marcus Vitruvius Pollio, *I Dieci Libri Dell'Architettura Di M. Vitruvio, Tradotti, & Commentati da Monsig. Daniel Barbaro* (Venetia: Appresso Alessandro de'Vecchi, 1629). Fowler 1961, no. 416. A reprint of the text and illustrations of the 1567 edition.

⁶⁶Marcus Vitruvius Pollio, *I Dieci Libri Dell'Architettura Di M. Vitruvio, Tradotti, & Commentati da Monsig. Daniel Barbaro* (Venetia: Appresso Francesco de'Franceschi Senese, & Giouanni Chrieger Alemanno Compagni, 1567). Fowler 1961, no. 410.

⁶⁷Gio. Bat. Porta, *De munitione libri tres* (Neapoli 1608). Cockle 1957, no. 804.

⁶⁸Leon Battista Alberti, *L'Architettura Di Leon Batista Alberti, Tradotta in lingua Fiorentina da Cosimo Bartoli Gentil'huomo & Accademico Fiorentino* (Monte Regale: Appresso Lionardo Torrentino, 1565). Fowler 1961, no. 8.

⁶⁹There was not a 1585 Latin edition of Alberti's treatise, and this can only be a reference to the 1485 folio, or to a later quarto edition (Strassburg 1511, Paris 1512, Strasbourg 1541, Paris 1543). The first Latin edition is as follows: Leon Battista Alberti, *Leonis Baptistae Alberti De Re Aedificatoria Incipit Lege Feliciter* (Florentiae: Nicolai Laurentii, 1485). Fowler 1961, no. 3.

⁷⁰Agostino Ramelli, *Le diverse et artificiose machine . . . nellequali si contengono uarij et industriosi Mouimenti degni di grandissima Speculatione, per cauarne beneficio infinito in ogni sorte d'operatione* (Parigi 1588). Cockle 1957, no. 788.

- Lorenzo Sirrigatti *Architettura & Prospettiva practica* fol. Venet. 1625.⁷¹
- Leone *Trattato dell Schierare in ordinanza gli Essercitij* 4. Venet. 1586.
- Ottavio Ridolfi *Ragionamenti alli Architetti* fol. Venet. 1603.
- Oraccio Peruccio *Porte d'Architettura Rustica* fol. 1624.
- Paolo Sarti *La Simmetria della ottima fortificatione regolare* 4. Venet. 1630.
- Pietro Maria Contareni *Corso di Guerra* 4. Vinegia 1601.⁷²
- Pietro Paolo Floriani *Difesa & offeza della Piazze* fol. Maceratae 1630.⁷³
- Salvator Fabris *de lo Schermo overo Scienza D'Armi* fol. 1606.⁷⁴
- Tutte L'Opere d'Architettura & prospettiva di Sebast: Serlio 4. Venet. 1619.
- Tomaso Sperandio *breve Compendio dell'arte millitare* 4. Venet. 1628.
- Vincenzo Scamozzi *L'Idea della Architettura Universale* fol. Venet. 1615.
- Vittorio Zonca *Nuova Teatro di Machini & Edificij* fol. Padoa 1627 [sic].⁷⁵

⁷¹Lorenzo Sirigatti, *La Pratica Di Prospettiva* (Venice 1625). Cf. Fowler 1961, no. 336. First edition published in Venice, 1596.

⁷²Pier Maria Contarini, *Corso di guerra et partiti di Guerreggiare, e combattere . . . ; Ne'quali si tratta, come con minor Essercito habbi à guerreggiare, & combatter contra Essercito di gran lunga maggiore* (Venetia: Gratoso Perchacino, 1601). Cockle 1957, no. 590.

⁷³Pietro Paolo Floriani, *Difesa et offesa delle piazze* (Macerata: Giuliano Carboni, 1630). Cockle 1957, no. 825.

⁷⁴Salvator Fabris, *Sienza e pratica d'arme, . . . divisa in dui Libri*, etc (Copenhagen: Henrico Waltkirch, 1606). Cockle 1957, no. 754.

⁷⁵Vittorio Zonca, *Novo Teatro di machine et edificij*, etc (Padoua: F. Bertelli, 1627). Cf. Cockle 1957, no. 839. First edition published Padua 1607.

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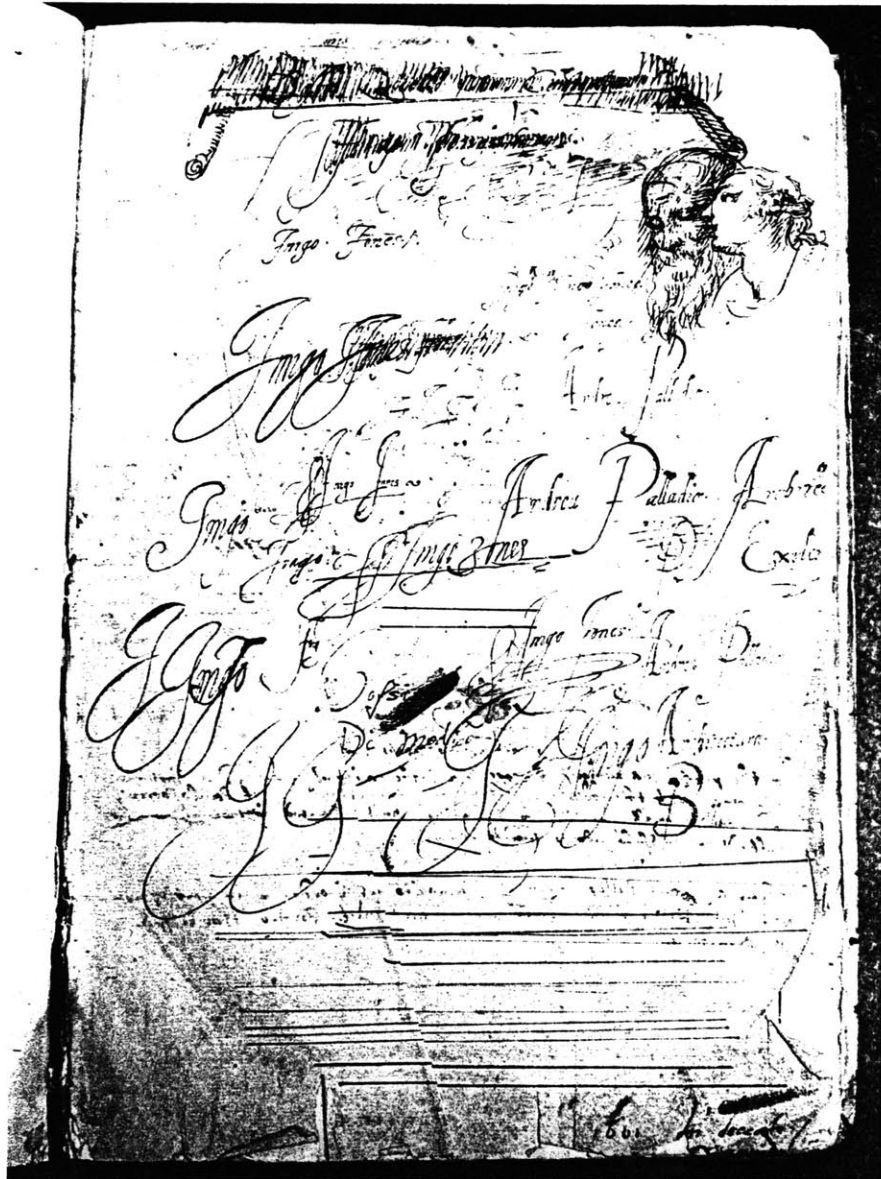
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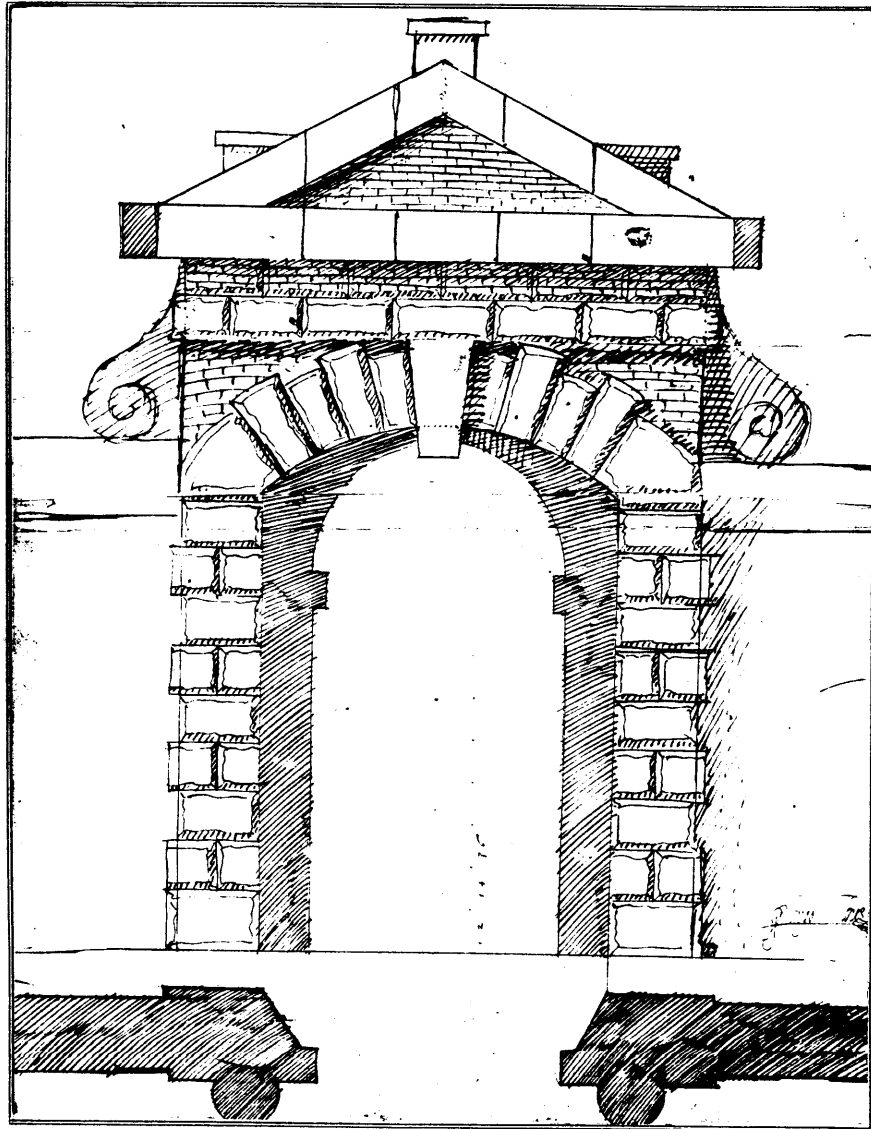
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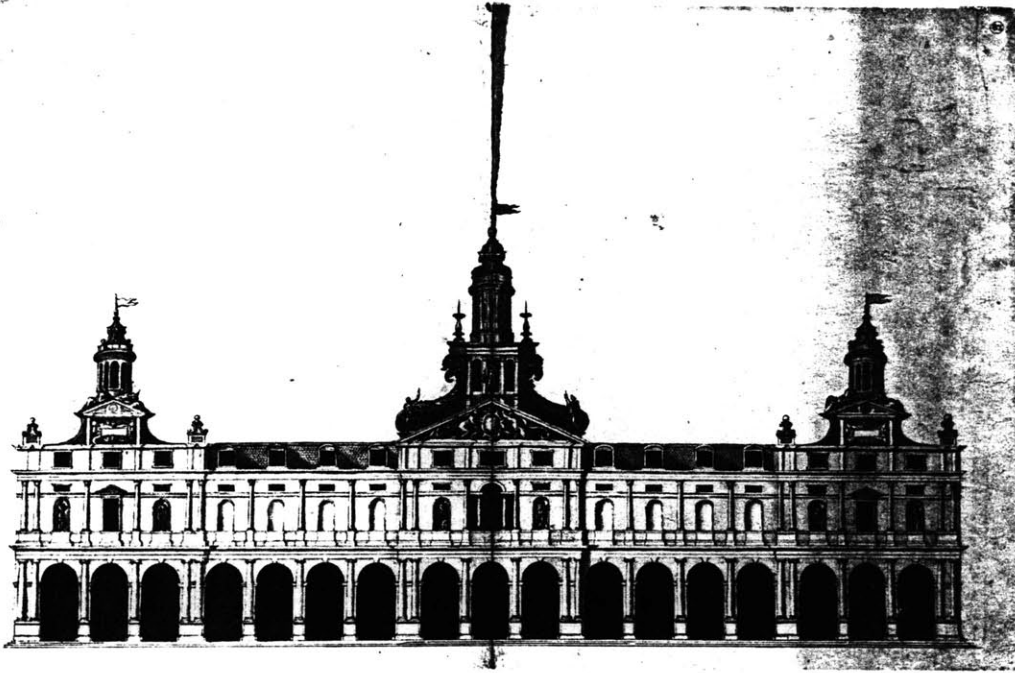
3. Inigo Jones, Roman Sketchbook, Devonshire Collection, fo. 11



5. Andrea Palladio, *I quattro libri*, 1601, Jones's copy, flyleaf



6. Inigo Jones, Elevation for Vineyard Gateway, Oatlands, 1617, RIBA 64



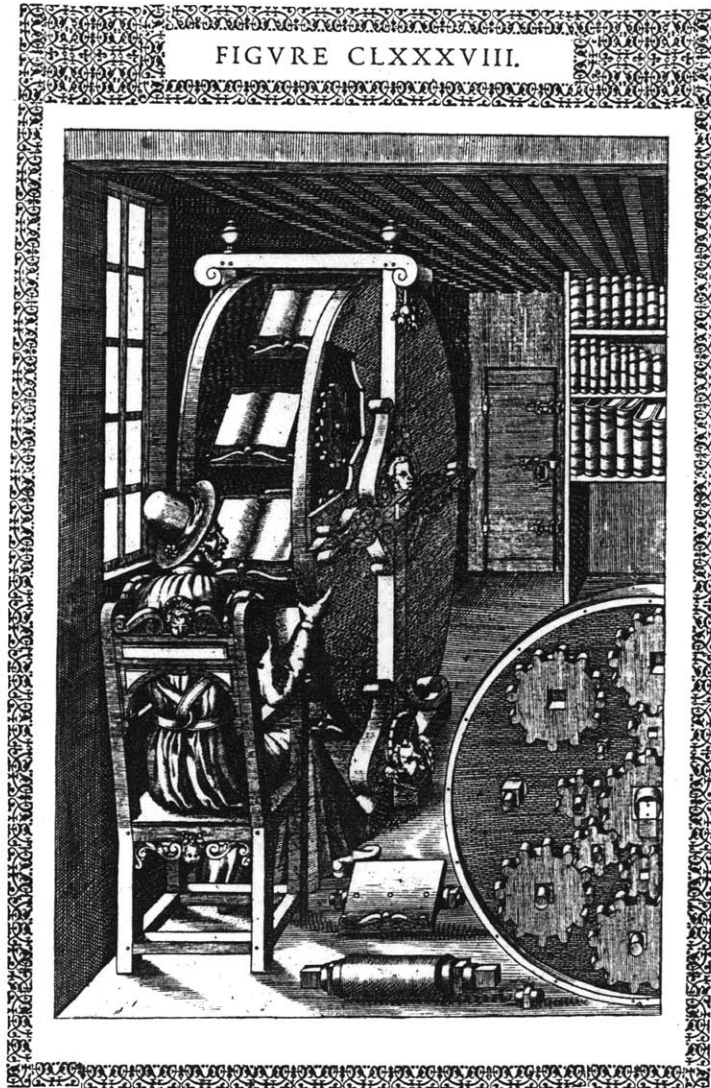
7. Inigo Jones, Elevation for the New Exchange, London, 1608, Worcester College

S E C O N D O . 69

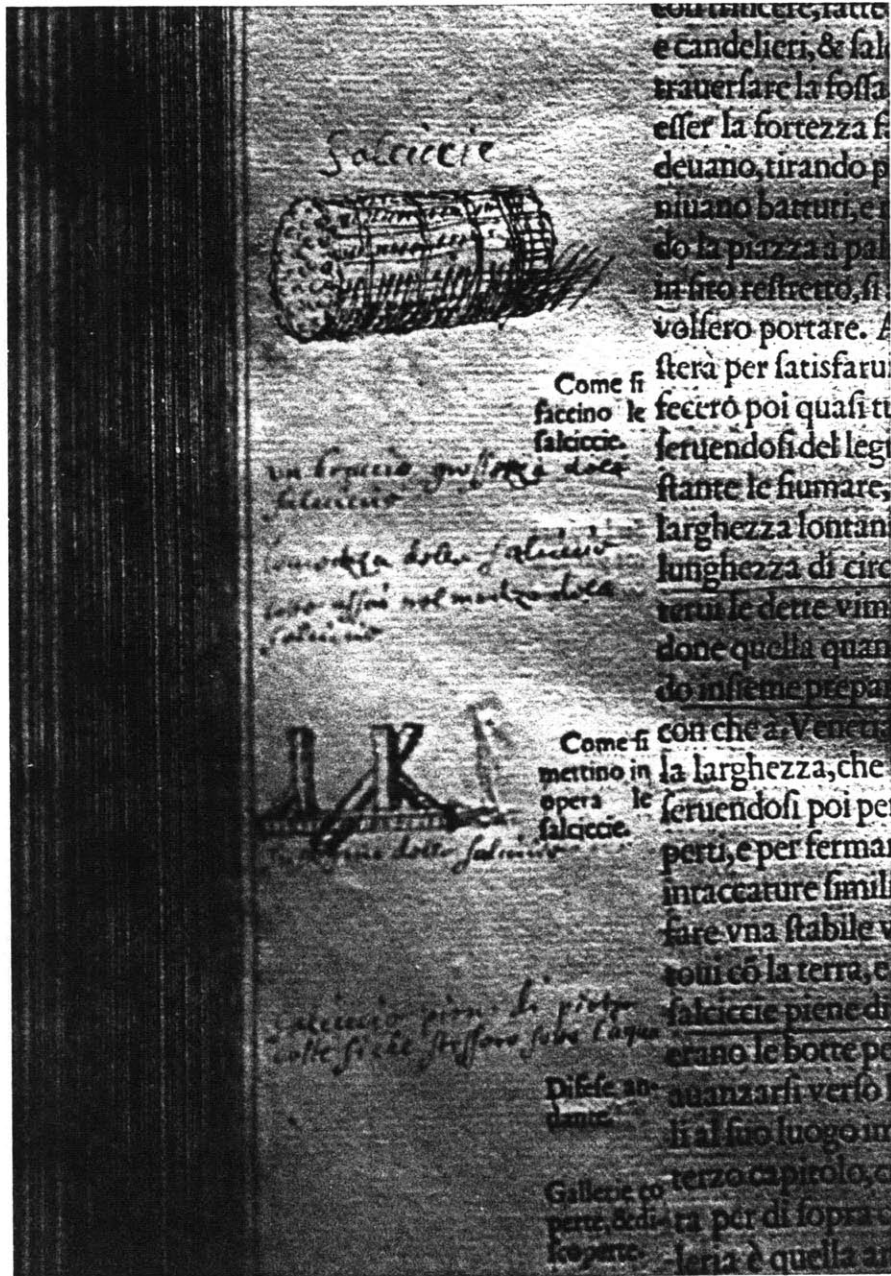
mio) dalla esperienza, fondata nella natura delle cose. Ma perche alcuno potrebbe negare, che
 tale sia stato lo ingresso dell'antica natura; Risponde Vitru. & dice.
 Ma che queste cose da que principij, che detto hauemo, siano state ordinate, in que-
 sto modo si puo conoscere: perche fin al di d'hoggi dalle nationi esterne si fanno gli
 edificij, come in Francia, in Hispania, in Lusitania, in Aquitania, di queste cose, come di
 nauole di rouere, ouero con paglie, & strame. Appresso la natione de Colchi nel Ponto
 per l'abondanza delle selue si fanno gli edificij con alberi perpetui spianati dalla destra, &
 dalla sinistra posti in terra lasciati tra quelli tanto spacio, quanto ricerca la lunghezza de
 gli alberi, ma di sopra nelle estreme parti di quelli pongono altri trauersi, i quali d'intor-
 to chiudeno lo spacio dell'habitatione, & allhora dappoi le sopraposte trau dalle quat-
 ro parti legando, & frignendo gli anguli, & in questa maniera facendo i pareti d'alberi,
 piomho di quelle di sotto, inalzano le Torri, & quelli spacij, che per la grossezza della
 materia sono trafasciati, otturano con loro, & scheggie, & anche ritagliando i tetti dalle
 intonate tramezzano con legni trauerfati di grado in grado, ristremandogli; & in questo
 modo, al mezzo delle quattro parti leuano le piramidi, le quali, & di frondi, & di loro co-
 rrendo all'ufanza de barbari fanno i colmi testuginati.

Pare a Vitru. grande argomento a provare l'origine delle fabrie che la usanza delle genti estere
 & in vero è ragionevole, che doue non è peruenuta la bellezza, & la grandezza dell'arte, si
 eda il modo naturale, & si ritenga quello, che è stato dalla natura; e i primi buomini dimo-
 strato, perche egli si puo dire, che ogni arte habbia la sua pueritia, la sua adolescencia, il fior
 ella età, & la maturità; come l'Architettura, che ne i primi secoli hebbe i suoi sgrossamenti,
 hebbe in Asia, ottenne in Grecia il suo vigore, & finalmente in Italia conseguì perfetta, & ma-
 tura dignità. Da principio adunque è ragionevole di credere, che ella hauesse quella origine,
 che la necessità dimostrò primieramente all'humana generatione, come si ha a di nostri essere nel-
 sola Spagnola, & nelle parti del mondo scoperte da i moderni, che le stanze, & le habita-
 zioni sono fatte di alberi, tessuti di canne, coperti di paglie, ma di modo, che egli si ha in confide-
 razione la dignità de gli habitanti, dandosi piu grandi & piu belle, & piu comode habitazioni,
 quelli, che fra quelle genti ottengono grado maggiore. Questo si dice, che i nostri hanno ri-
 sonato nel sopr. detto modo. Ma poi, che piu perle genti, & piu inguiose hanno cominciata
 praticare in que luoghi, piu bella, & piu artificiosa maniera di fabricare è stata introdotta,
 auorando i legnami, & facendogli molti ornamenti, che non haueuano prima, & così di gior-
 no in giorno aumentarano gli artificij, & le inuentioni delle cose, domesticando il paese per l'hu-
 mana conuersatione. Buono adunque è l'argomento di Vitruo, se bene egli non dicesse a pun-
 to il uero di quel fuoco acceso da gli alberi agitati da i venti, non sapendo egli la storia della crea-
 zione, & della origine del mondo. Ma chi pon mente alle parole di Vitruo, ritrouerà nel presen-
 te discorso un ordine merauiglioso: perche prima ha vitruuato quanto puo la necessità, & la
 natura, dicendo la cagione, che costringe gli buomini ad habitare insieme; da poi ha dimostra-
 to quanto puo la esperienza, & la consuetudine, dicendo quello, che molte genti acostumano
 a fare, per accommodarsi, & difendersi da i contrarij, con diuersi maniere di habitazioni secon-
 do l'uso de i luoghi, & delle cose. & finalmente diuidendo, quanto ha potuto l'Arte, cerca le regola-
 re inuentioni, & gli ornamenti, & pompa del fabricare. come anche al primo Capo del decimo
 libro, Vitruo. conferma dicendo, che quelle cose, che gli buomini auuertirono esser buone all'uso,
 entrarono anche con istudio di arte, & di ordinationi per uia di dottrina. Et qui si uederà co-
 me la natura humana tutta uia auanzando se stessa, di giorno in giorno dal necessario al commo-
 do, & dal commodo all'honoreuole peruiene. Bella, & degna cosa è di considerare, come l'Ar-
 te si fonda sopra la natura; non mutando quello, che è per natura, ma facendolo piu perfetto, &
 intorno. come nel presente capo Vitruo ci mostra per diuersi esempi non solamen-
 te la origine del fabricare, ma i modi, & le maniere naturali, che poi sono state pigliate dal-
 l'Arte.

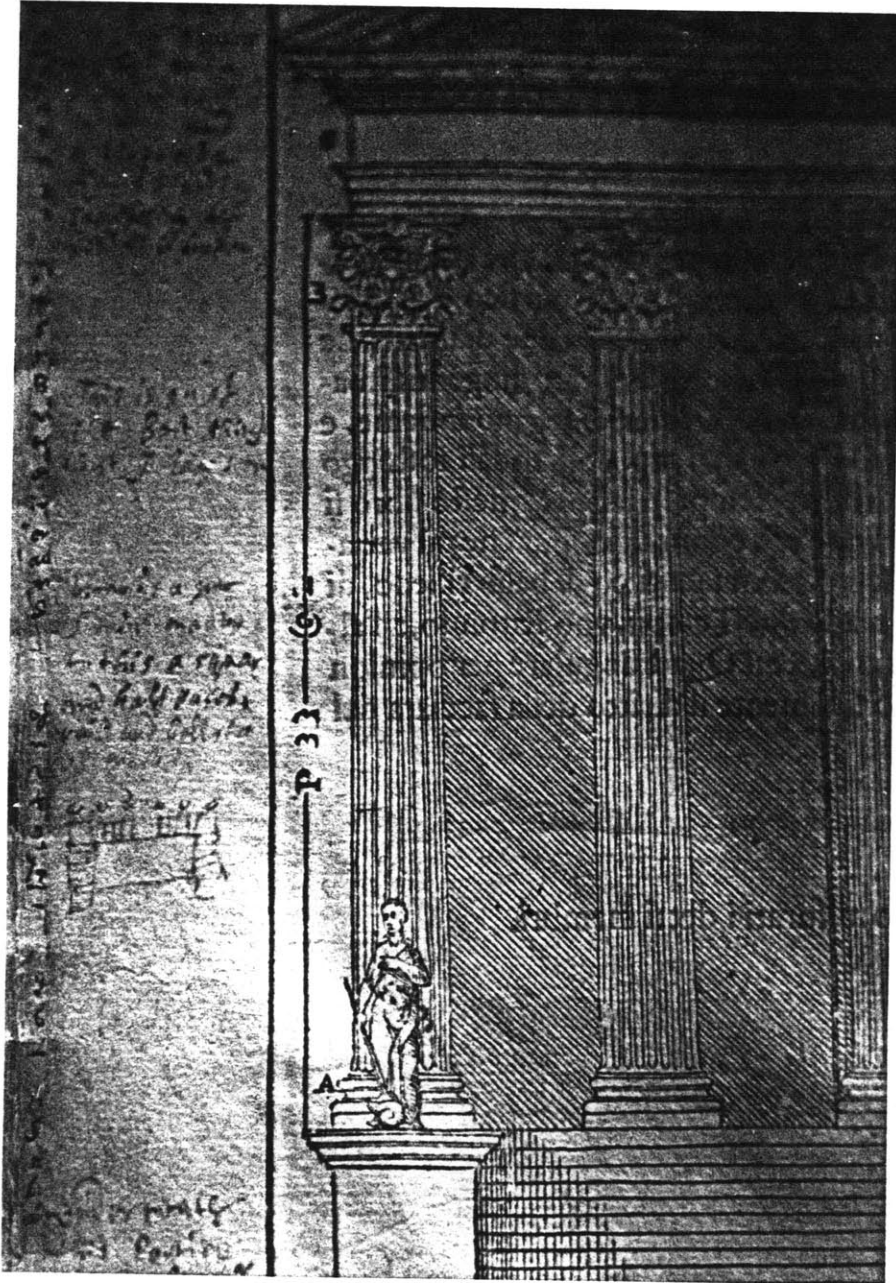
Top
Leuando
Tre progres of
Architettura



10. Agostino Ramelli, *Le diverse et artificiose machine*, 1588



11. Buonaiuto Lorini, *Le fortificationi*, 1609, Jones's copy



12. Andrea Palladio, *I quattro libri*, 1601, Jones's copy, IV, 96

Q V I N T O .

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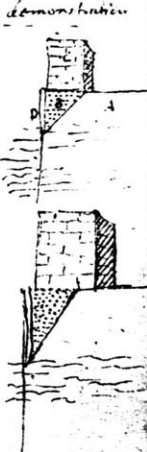
tenate le tavole fermamente, & otturate le commissure a forza si manderanno a fondo, & i di si
 tenranno ferme, & immobili. oltre di questo lo spazio rinchiuso tra li cassoni, si uoterà con ruo-
 te, & altre macchine da leuar l'acque, delle quali Vitru. ne ragiona nel decimo libro, & si farà il
 luogo piano egualmente, & netto. & stando sopra tra uicelli, o palate, o zatte comodamente, or-
 dinate queste cose mescolate, & impastate nella fossa, doue hauerai preparata la sopra detta ma-
 teria de cimenti, & delle pietre, & di tutto quel corpo cauato dalla fossa empirai tutto quello spa-
 zio purgato, che è tra i cassoni, & in questo modo farò una presa mirabile, & riuscirà l'opera
 fatta nell'acqua, & questo farai quando niuna forza di acqua l'impetirà. ma quando lo impeto
 del mare ti furbasse, odi quello che dice Vitru.

Ma se per lo corso, & per la forza dello aperto mare, non si potranno tenere a fondo i
 cassoni giu mandati, allhora subito sopra l'orlo, & geogia del mare doue termina il ter-
 reno, egli si deue fare un letto fermissimo, ilquale sia piano meno della metà, ma il restan-
 te che è prossimo al lito sia pendente, et chino, dappoi uerso l'acqua, & da i lati intorno al det-
 to letto si facciano i margini, & le sponde a liuello di quel piano, & quello, che è lasciato
 pendente oltre la metà sia empito di arena tanto, che egli sia parè al margine & al piano del
 letto. & sopra quel piano sia fabricato uno pilastro grande, & fatto, che egli sia, accioche
 possa seccarlo, & far presa bisogna lasciarlo per due mesi, dappoi sia tagliato di sotto
 nel margine, che sostiene l'arena, & così l'arena sommerfa dall'acqua farà cadere quel
 pilastro nel mare, & con questa ragione richiedendo il bisogno si potrà andare inanzi fa-
 bricando nell'acque.

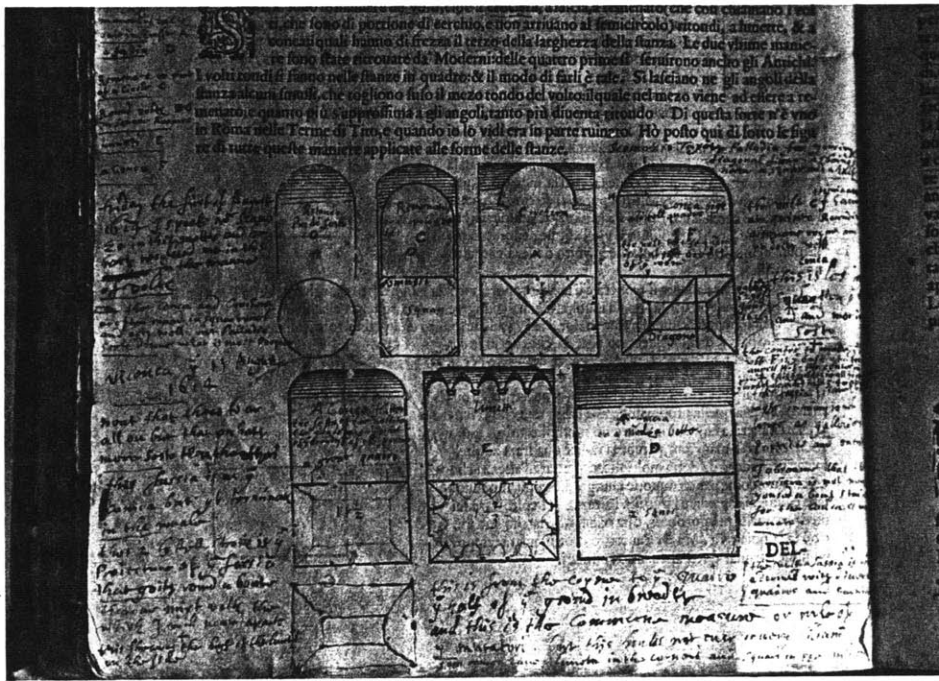
Per fare un braccio sul mare comincia a poco a poco da terra, & farai un scagno parte a li-
 uello, parte che habbia caduta: & sia la parte, che pende uerso il lito, allo scagno farai i suoi mar-
 gini ouero sponde nella testa uerso il mare, & da i lati a liuello di quello, & la parte, che pende
 empirai d'arena pareggiandola alla parte piana. sopra lo scagno farai uno grosso pilastro della
 detta materia, & lo lasciarai far presa et seccare almeno per due mesi. Taglierai poscia il mar-
 gine di sotto, & subito uederai uscire l'arena per la rottura, & mancare di sotto al pilastro, il-
 quale non potendo stare, di necessità caderà nell'acqua, & empira la prima parte prossima al li-
 to. & così uolendo andar piu in fuori, andarai di mano in mano, & questo si farà, non man-
 cando la pozzolana, o simil cosa, che sia presa nel mare. Ma quando ti mancasse questa ma-
 teria dice Vitru.

Ma in quei luoghi doue non nasce la polue, con questa ragione dei fabricare, poner si
 possono la doue ha deliberato di fondare i cassoni doppij intauolati, & concatenati, & tra
 l'uno, & l'altro sia calcata la creta insieme con i facconi fatti d'alica palustre, & poi che
 così sarà molto bene calcato, & lodissimamente ripieno quel luogo di mezzo tra il doppio
 intauolato, allhora il luogo di mezzo tra quel ferraglio deue esser uotato con ruote, con
 rampanti, & con altri strumenti da cauar'acqua, & iui poi tra quella chiusa siano cauate
 le fondamenta. & se iui sarà il terreno buono siano cauate piu grosse del muro, che uì an-
 derà sopra fino al uiuo, & empite di cimenti, calce, & arena. Ma se'l luogo sarà molle, sia
 tutta la palificata di pali d'alno, di oliuo siluestre, ouero di rduere brustolati, & em-
 pite di carboni, secondo, che detto hauemo, nel fondare de i Theatri, & delle mura. Indi
 poi sia tirata la cortina del muro di fasso quadrato con lunghiissima legatura, accioche spe-
 cialmente le pietre di mezzo siano benissimo contenute. & allhora quel luogo, che farà tra'l
 muro, sia riempito di roinazzo, ouero di muratura, perche a questo modo egli starà si for-
 te, che si potrà fabricarui sopra una torre.

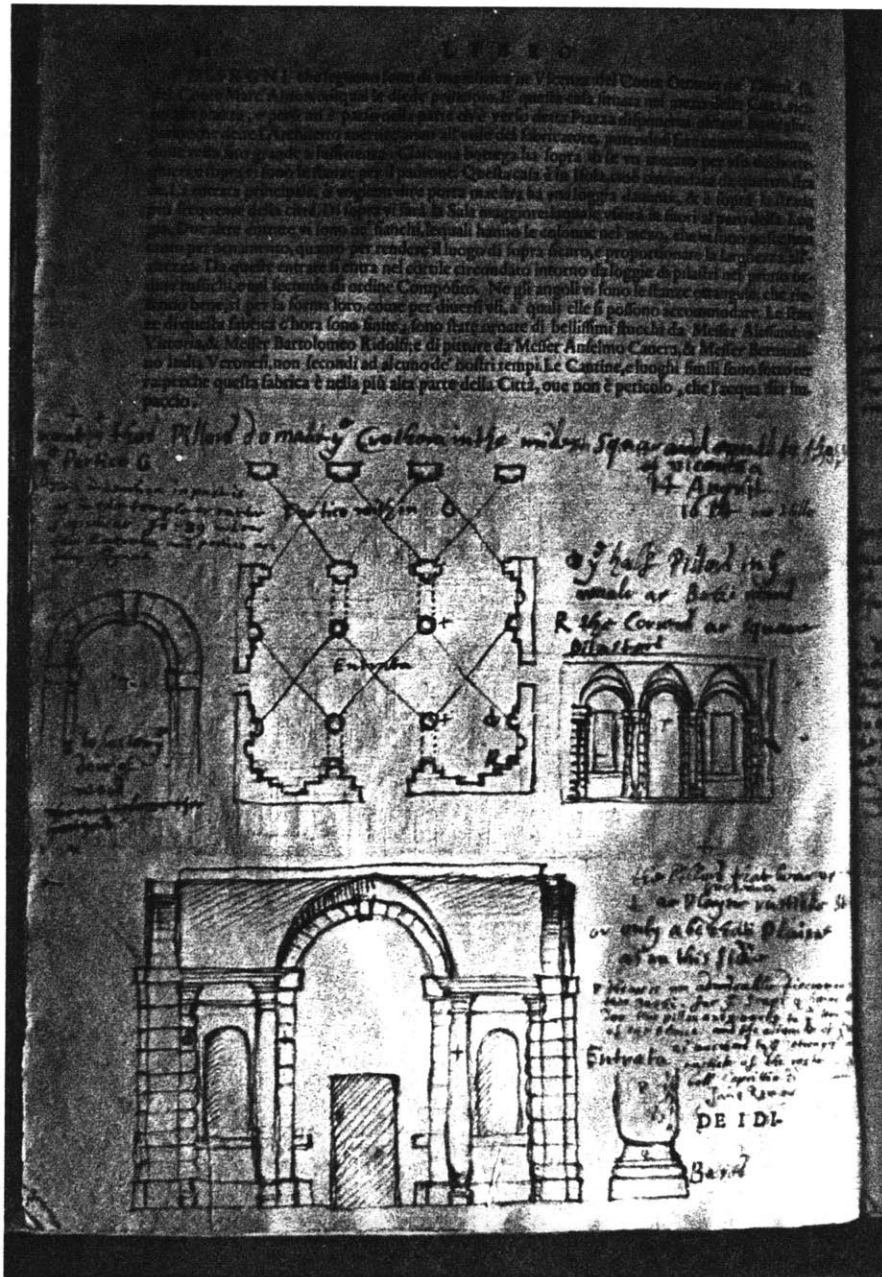
A me pare, che Vitru. si lascia intendere, & Leone nel decimo parla diffusamente del modo di
 fare le cataratte, gli argini, le palificate, i sostegni, le roste, le botte per tenere, chiudere, con-
 turre, & distornar le acque, perche si possa fabricare, o frimedi al danno, o si prouedi al commo-
 do. pero ci rimettiamo alla diligenza sua.



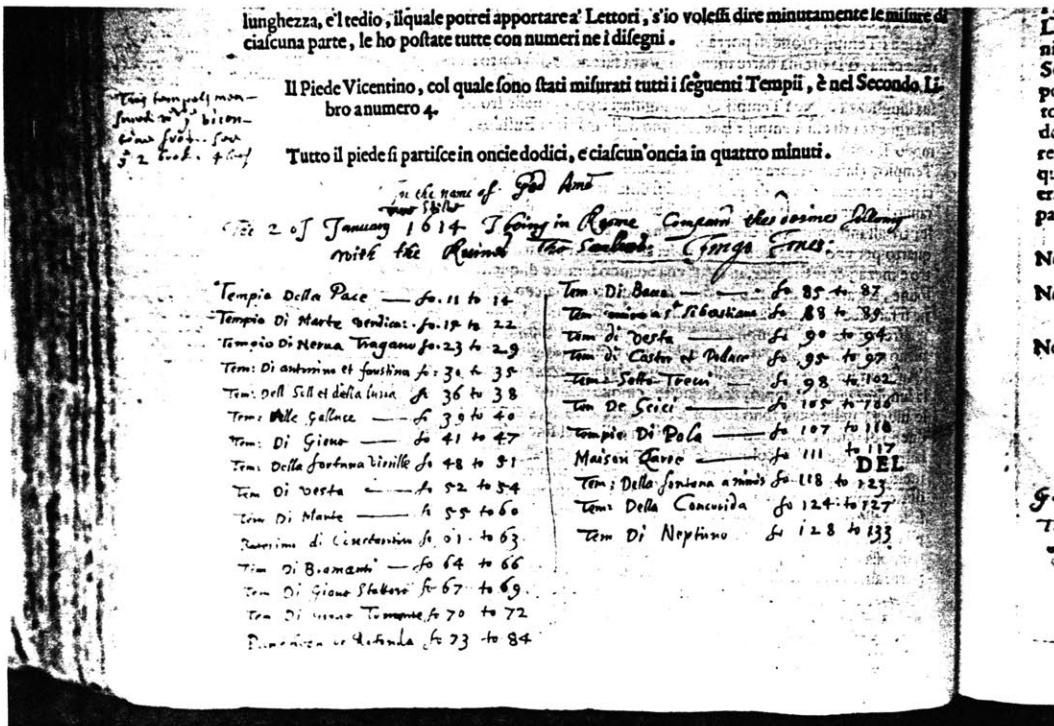
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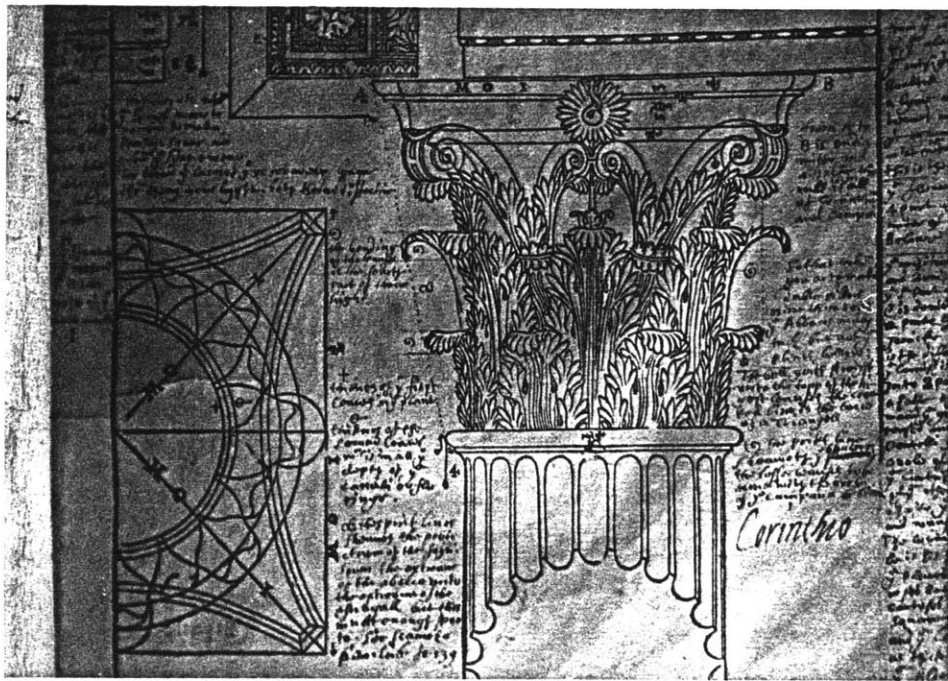
15. Andrea Palladio, *I quattro libri*, 1601, Jones's copy, I, 54



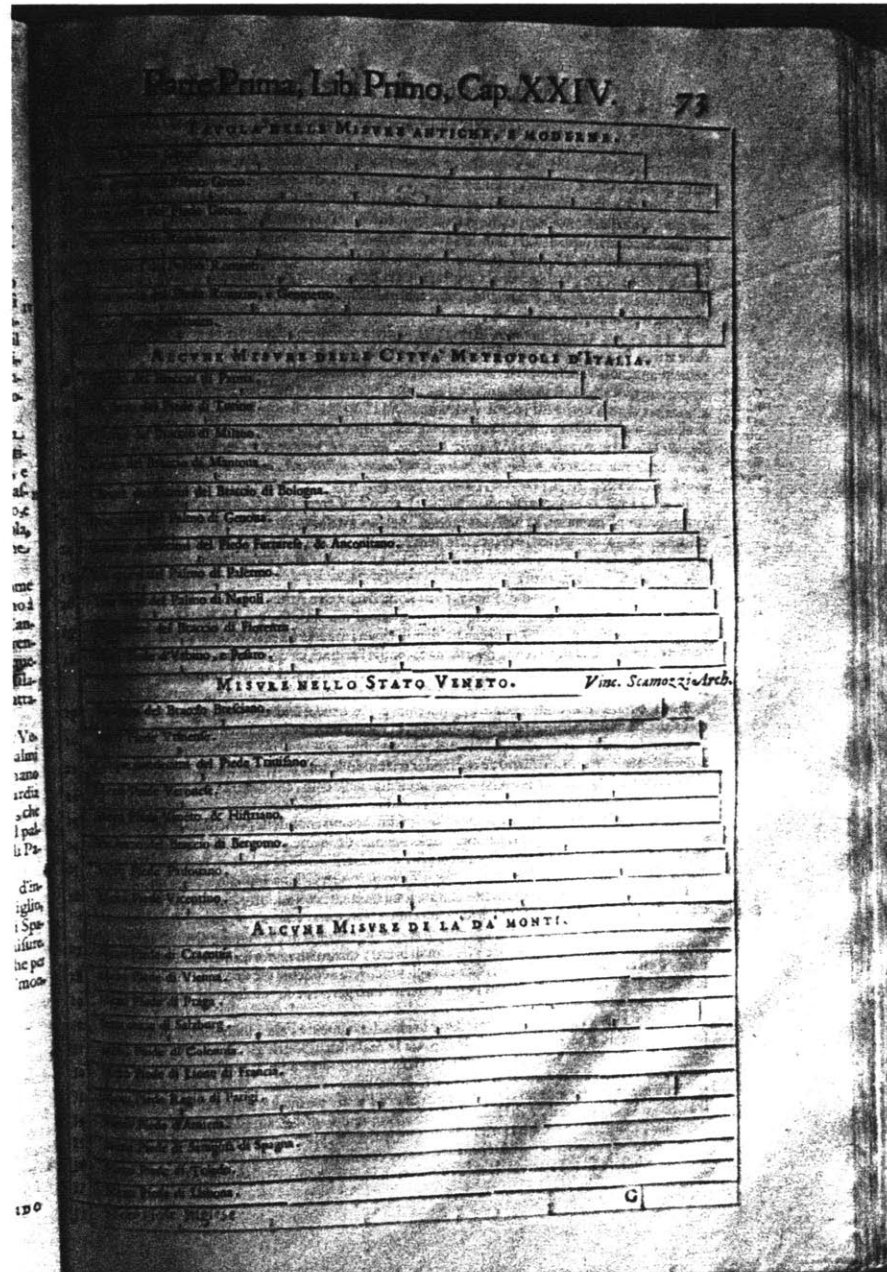
16. Andrea Palladio, *I quattro libri*, 1601, Jones's copy, II, 12



17. Andrea Palladio, *I quattro libri*, 1601, Jones's copy, IV, 10



18. Andrea Palladio, *I quattro libri*, 1601, Jones's copy, I, 43



19. Vincenzo Scamozzi, *L'idea dell architettura universale*, 1615, Jones's copy, I, 73

The length of the great court at Windsor is 300 ft. the breadth is 200 ft. and
 the depth of the great court is 100 ft. the breadth of the
 court is 80 ft. the depth of the court is 100 ft.
 The front of the court is 160 ft. the court is 80 ft.
 The front court at Hatton Court is 166 ft. square
 The front court at Hatton Court is 92 ft. broad and 100 ft. long
 The front court is 108 ft. broad and 116 ft. long. the
 or it is the contrary way. Sept. 23. 1611.

20. Andrea Palladio, *I quattro libri*, 1601, Jones's copy, front flyleaf



21. Vitruvius, *I dieci libri dell' architettura*, 1567, Jones's copy, titlepage

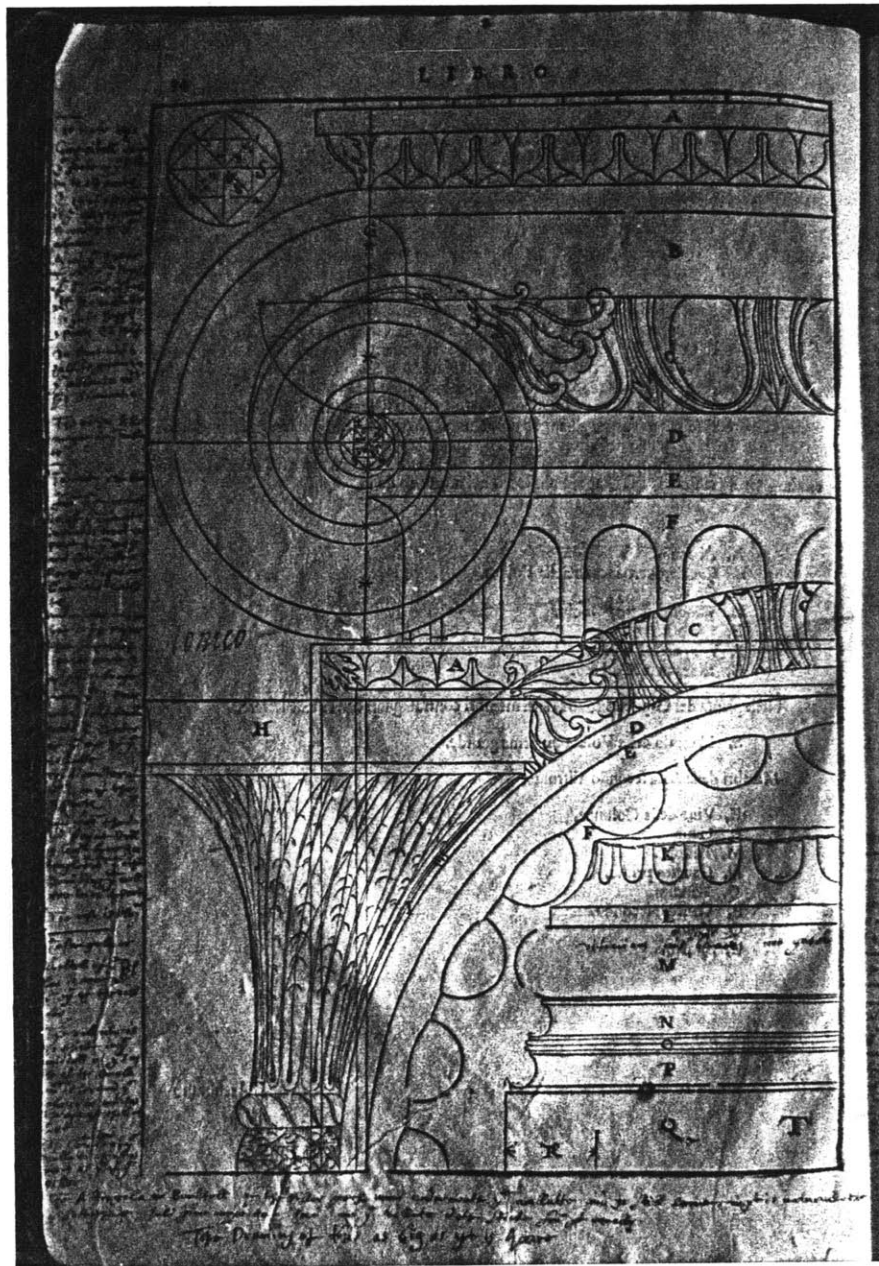
DELLE ANTICHITA CAP. IIII. 50



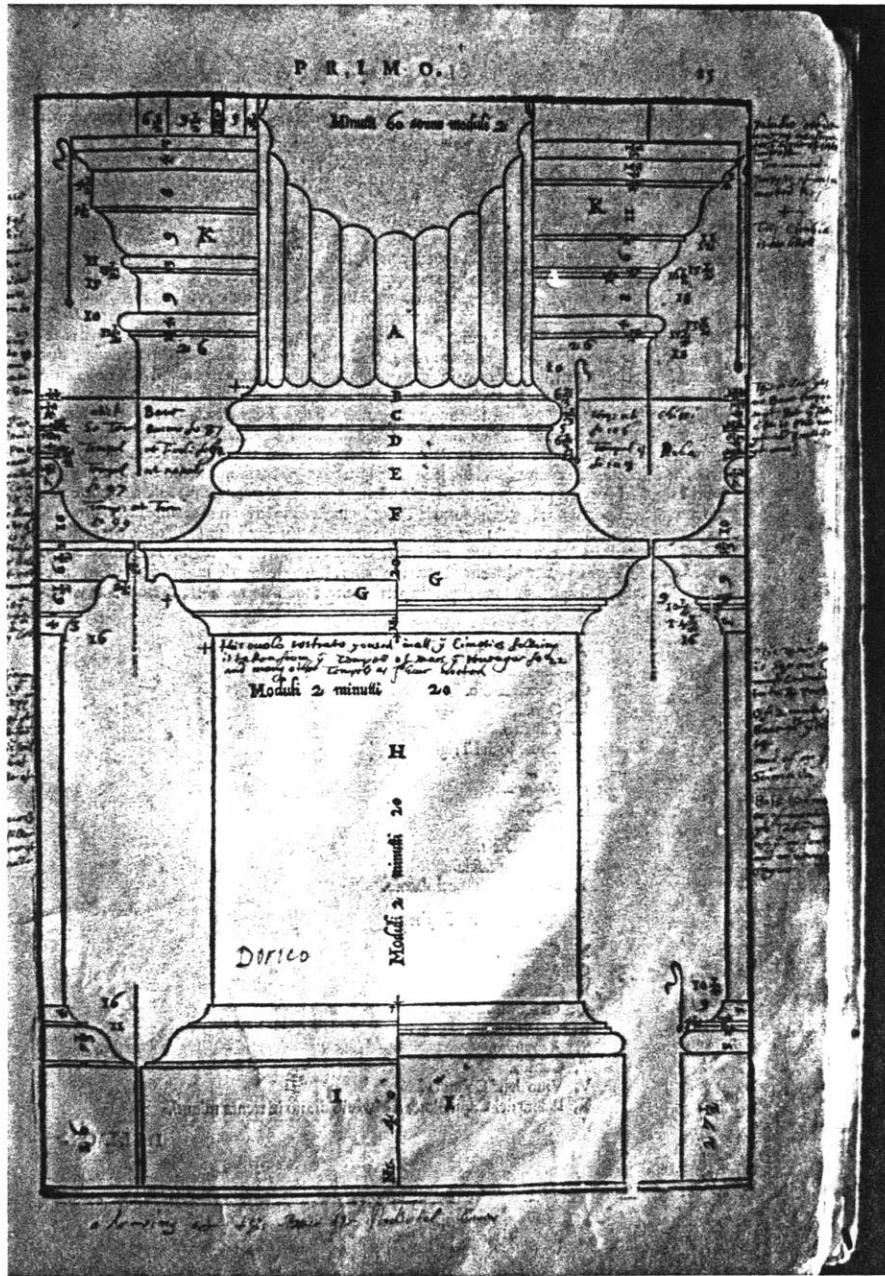
RA gli antichi edifici che si veggono in Roma, il primo che il Pantheon per vn corpo solo sia veramente il piu bello, il piu integro, & il meglio inteso: & è tanto piu marauiglioso de gli altri, quanto che hauendo egli molti membri; così ben tutti corrispondono al corpo, che qualunque persona vedendo tal corrispondenza ne riman satisfatto. & questo auiene, che quel prudente Architetto, che usò in uentore, fece elezione della piu perfetta forma, cioè della rotondità, onde volgarmente se gli dice la Rotonda: per cioche nella parte interiore tanto è l'altrezza sua, quanto la sua larghezza. & forse il prefato Architetto considerando

che tutte le cose che procedono ordinatamente, hanno vn principale, & sol capo, dal quale dipendono gli altri inferiori, volse che questo edificio hauesse vn lume solo: ma nella parte superiore, accioche per tutti i luoghi si potesse ugualmente dilatare, come in effetto si vede che fa. perche oltre le altre cose che hanno il suo perfetto lume, le sei capelle, le quali per essere nella grossezza del muro doueriano essere tenebrose; hanno nondimeno il suo lume conueniente per vn uoce d'alcune finestre sopra le dette capelle, che gli porgono il lume secondo, tolto dall'apertura di sopra, sì che non ci è cosa, per minima che sia, che non habbia la sua parte del lume. Et non solamente le cose dell'edificio materiali, e stabili hanno vna gratia mirabile: ma le persone che si veggono quini dentro, ancora che habbino mediocre aspetto & presenza, se gli accresce vn non so che di grandezza, & di uenustà: il tutto nasce dal lume celeste, che da cosa alcuna non è impedito: & ciò non è fatto senza gran giudicio, perche essendo questo Tempio anticamente stato dedicato a tutti li Dei, onde ci intrauenivano molte statue, del che ne san fede diuersi tabernacoli, nichì, & finestre, bisognaua che tutte hauessero la loro accommodata luce. Et però quelli che si dilettano di tenere diuersi statue, & altre cose di rilieuo, deueniano hauere vna stanza simile, chi riceuesse il lume di sopra; per cioche non accaderia mai andar mendicando il lume alle cose, ma in qualunque luogo fossero poste, dimostreriano la sua perfezione. Sarebbe ancora molto al proposito per le pitture, per che fossero state dipinte a tal lume. Il che suol fare la maggior parte de' giuditosi pittori, che mentre vogliono dare gran forza, & rilieuo alle figure, pigliano il lume da alto: ma le pitture fatte in cotal maniera vogliono essere guardate da huomini intendenti, che altrimenti done fossero degne di lode, sariano biasimate: perche le ombre oscure offendono quelli che non intendon l'arte: benchè le pitture del gran Titiano siano pur fatte a che lume si voglia, hanno nondimeno tanta dolcezza, & son così ben colorite, che satisfano a tutte le persone, & hanno grandissimo rilieuo. Hor per tornare al mio primo ragionamento dico, che essendo il Pantheon, secondo il giudicio mio, la meglio intesa Architettura di tutte l'altre che io ho vedute, & che si veggono, mi è parso metterlo nel principio, & per capo di tutti gli altri edifici, & massimamente essendo Tempio Sacro, & dedicato al culto diuino per Bonifatio Pontefice. Il fondatore di questo Tempio, per quanto mette Plinio in piu d'vn luogo, fu Marco Agrippa, adempiendo però la volontà di Augusto Cesare, che interrotto dalla morte non lo puote fare. & su questo Tempio edificato circa all'anno di Christo quattordicesimo, che viene ad essere gli anni del mondo cinquemila & dugento & tre, in circa. nel detto Tempio (come scrive Plinio) li capitelli erano di rame. Il detto scrive che Diogene Scultore Atheniese fece le Cariatide nelle colonne molto approbate, & che le statue poste sopra il frontespicio erano molto lodate, benchè per l'altrezza del luogo non fossero celebrate. Questo Tempio fu percosso dalli fulmini, & si abbeniuo circa l'anno duodecimo di Traiano Imperatore, che viene ad essere l'anno di Christo cento tredecì, & del mondo cinque mila trecento undici. Et Lucio Settimio Senero, & Marco Aurelio Antonino lo ristorarono con tutti li suoi ornamenti, come

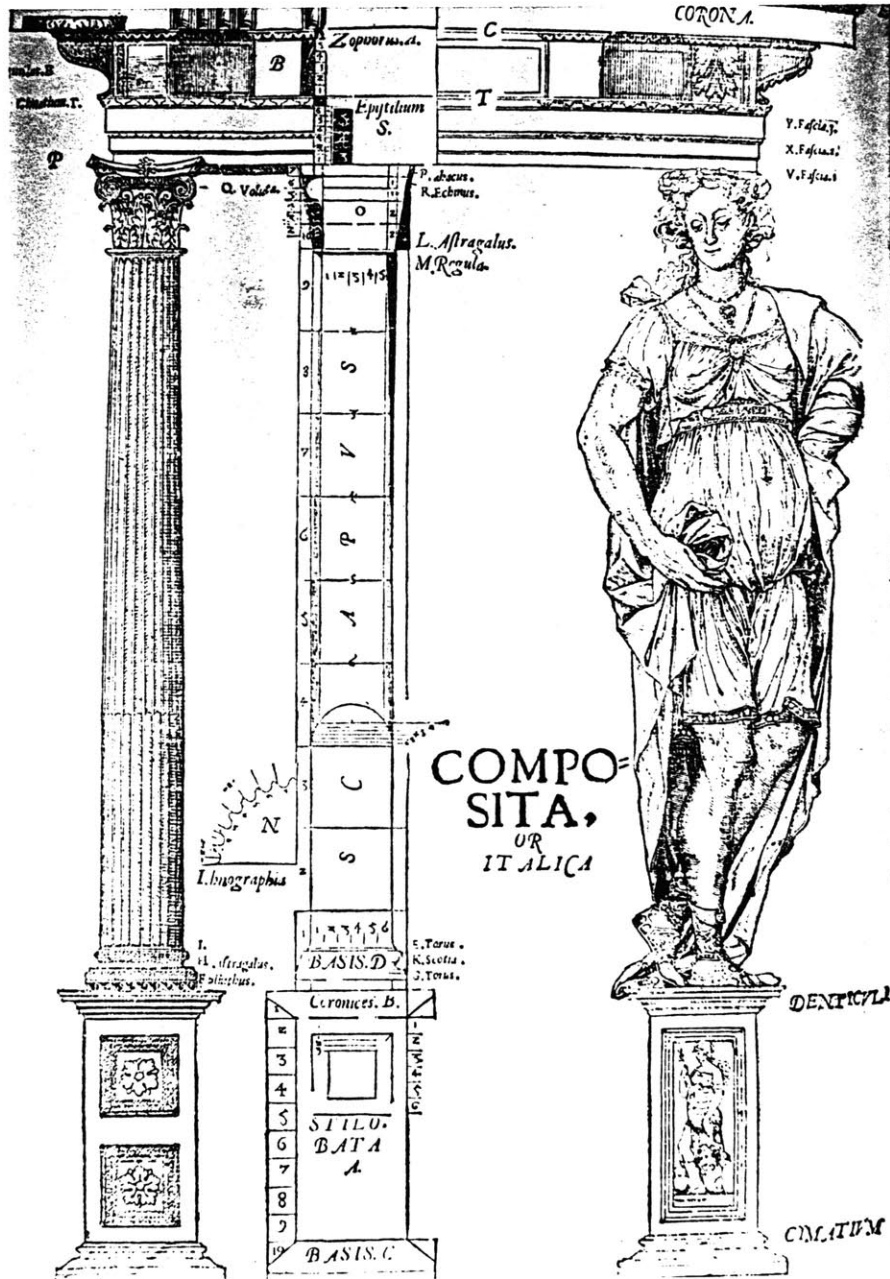
22. Sebastiano Serlio, Tutte l'opere, 1600, Jones's copy, III, 50r.



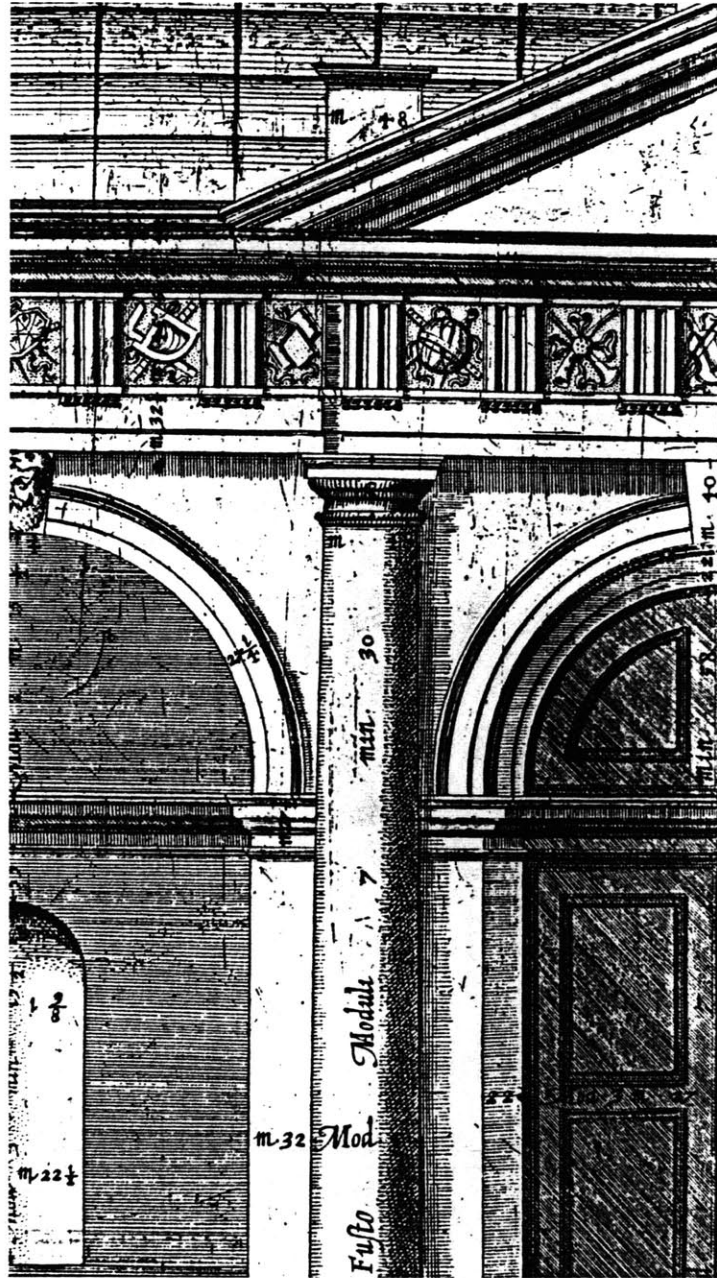
23. Andrea Palladio, *I quattro libri*, 1601, Jones's copy, I, 34



24. Andrea Palladio, *I quattro libri*, 1601, Jones's copy, I, 25



25. John Shute, *The First and Chief Groundes of Architecture*, 1563, Composite order

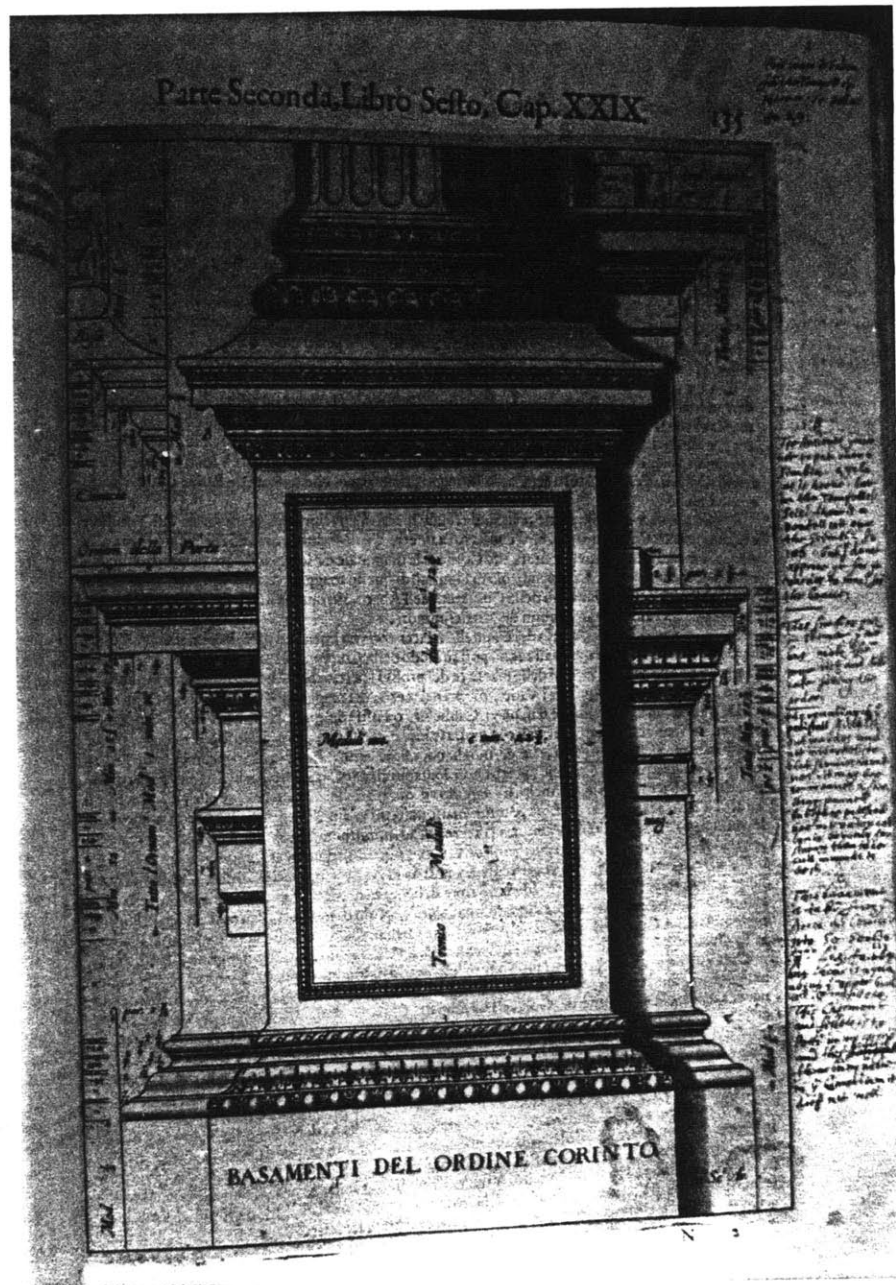


the diameter
and height is
9 1/4 of the height
and the height
in height is
as the diameter
is 10

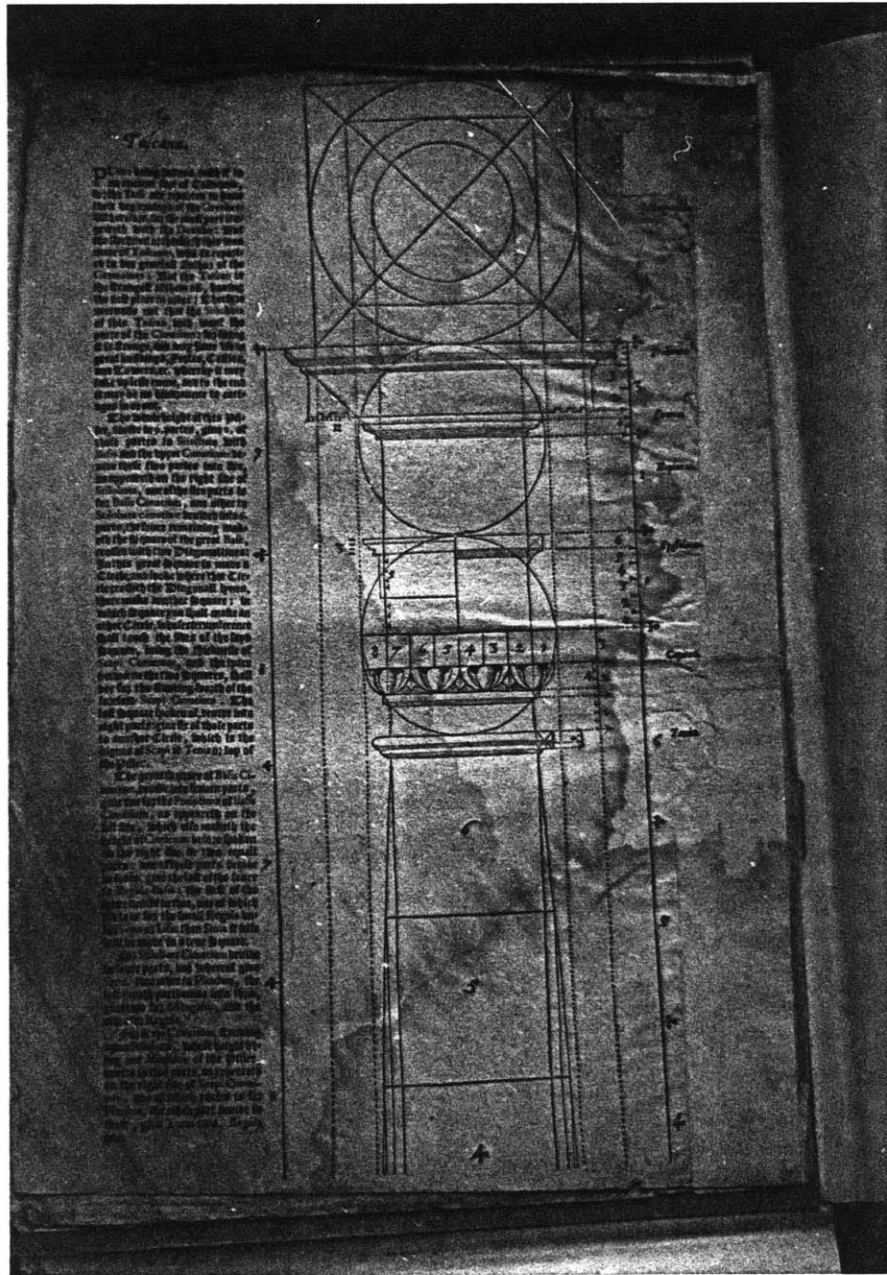
Chozz
The plants of
the capital
return about
of the capital
to answer with
the plant below
of the pillar:
but do not app
rove it for
the pillar on
at the impost of
arch. the arch
is inscribed in
palcato in 2
fo. 9.

for the top of
capital of the pillar
the top of the
plant (diameter)
and the diameter
of the pillar of
the diameter

26. Vincenzo Scamozzi, *L'idea dell'architettura universale*, 1615, Jones's copy, II, 75
27.



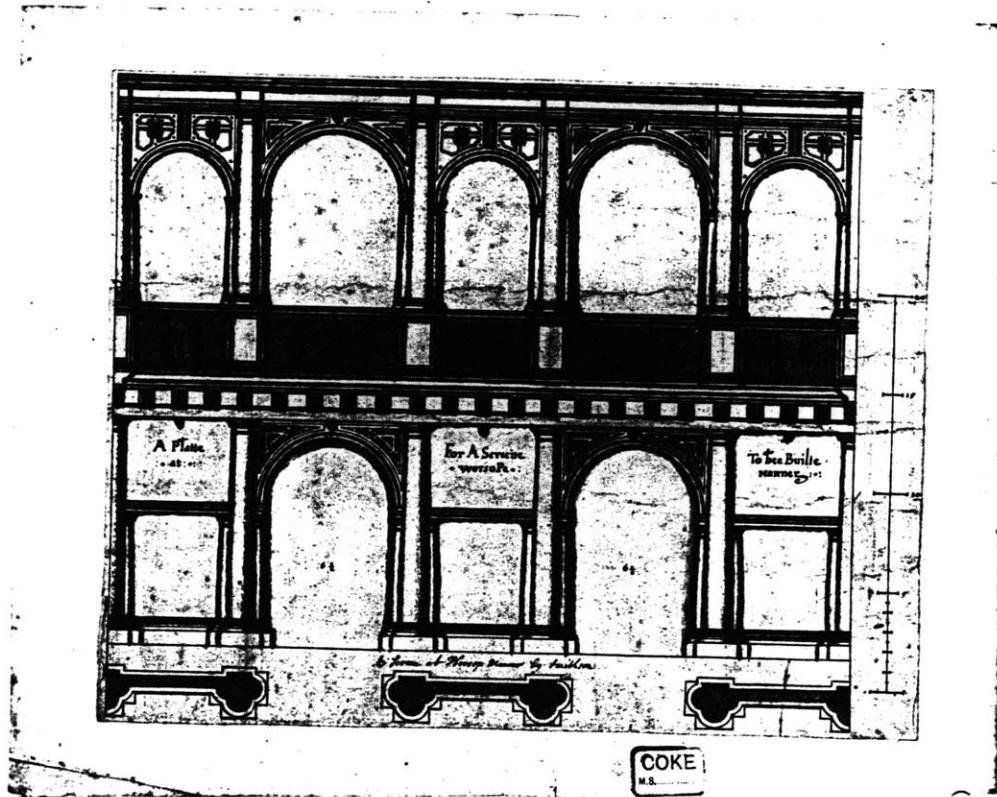
27. Vincenzo Scamozzi, *L'idea dell'architettura universale*, 1615, Jones's copy II,



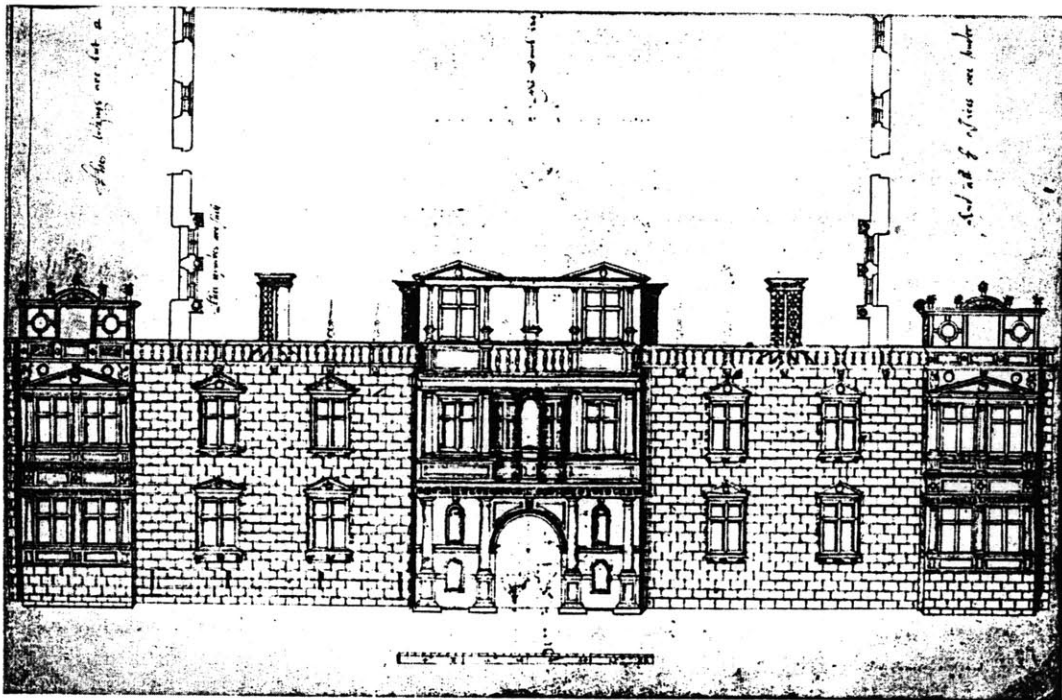
28. Hans Blum, *The Booke of Five Collumnes*, 1601, Tuscan



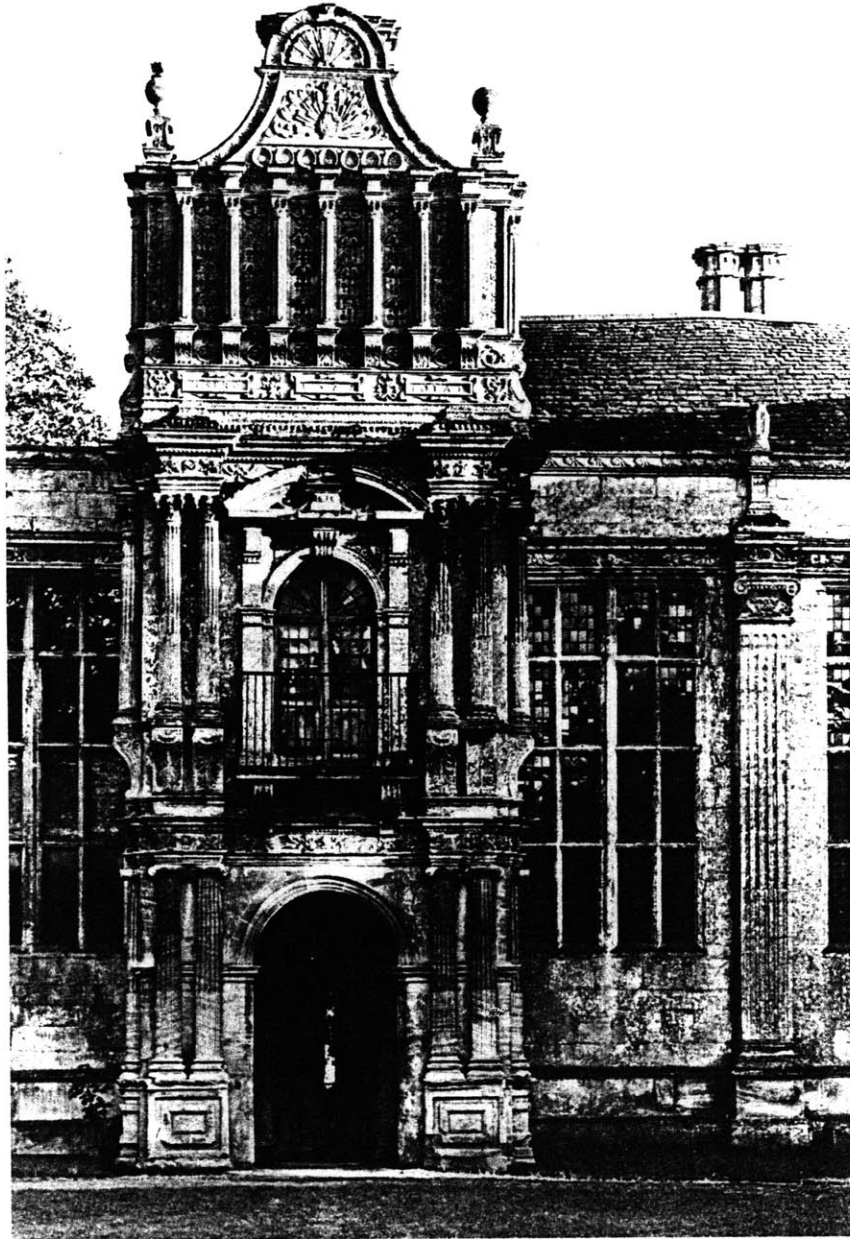
29. Banqueting House, London



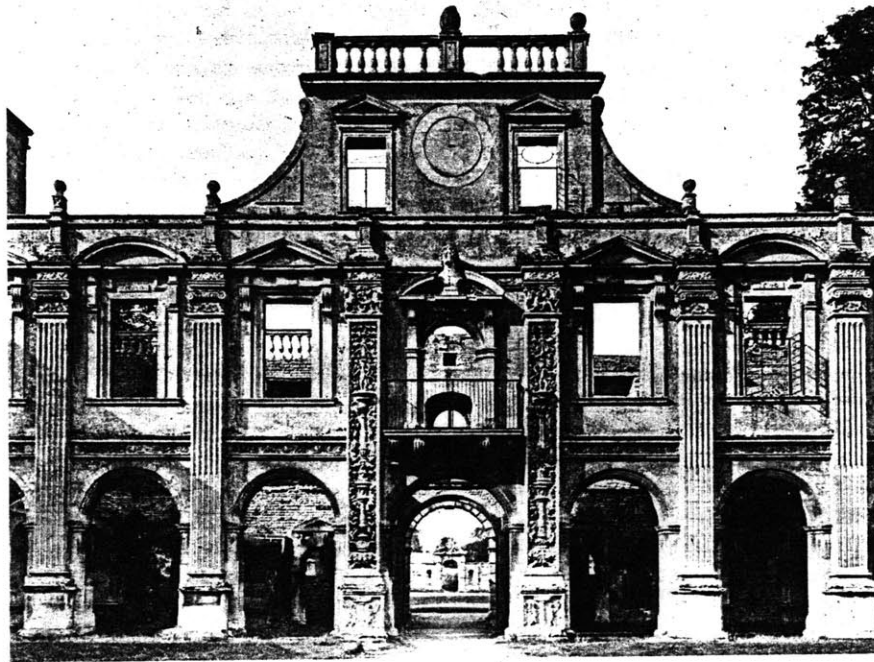
30. Robert Smythson, Elevation of screen for Worksop Manor, RIBA Smythson Coll.



31. John Thorpe, Strand entrance gateway for Somerset House, Sir John Soane
Museum



32. Kirby Hall, Northants, porch



33. Kirby Hall, Northants, courtyard

The Pillar, Pillaster or Cillinder.

The Pillar is a figure among all the rest of the Geometrical most beautifull, in respect that he is tall and vpright and of one bignesse from the bottom to the toppe. In Architecture he is considered with two accessarie parts, a pedestall or base, and a chapter or head, the body is the shaft. By this figure is signified stay, support, rest, state and magnificence, your dittie then being reduced into the forme of the Pillar, his base will require to beare the breath of a metre of fix or seuen or eight fillables: the shaft of foure: the chapter egall with the base, of this proportion I will giue you one or two examples which may suffice.

Her Maiestie resembled to the crowned pillar. Ye must read upward.

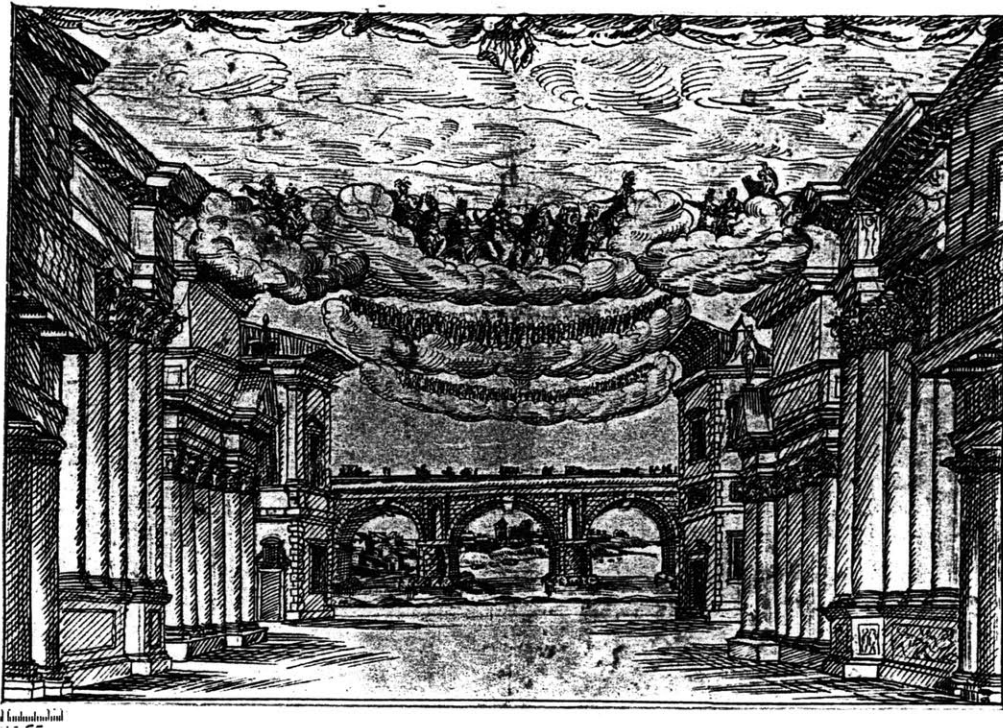
*Is blisse with immortalitie.
Her trymest top of allyesse,
Garnish the crowne
Her iust renoune
Chapter and head,
Part that maintain
And womanhead
Her mayden raigne
In te gri tie:
In ho nour and
With ve ri tie:
Her roundnes stand
Strengthen the state.
By their increase
With out de bate
Concord and peace
Of her sup port,
They be the base
With stedfastnesse
Vertue and grace
Stay and comfort
Of Albi ons rest,
The sounde Pillar
And seene a farre
Is plainly exprest
Tall stately and strait
By this no ble pour trayt*

Philo to the Lady Calia, sendeth this Odolet of her prayse in forme of a Pillar, which ye must read downward.

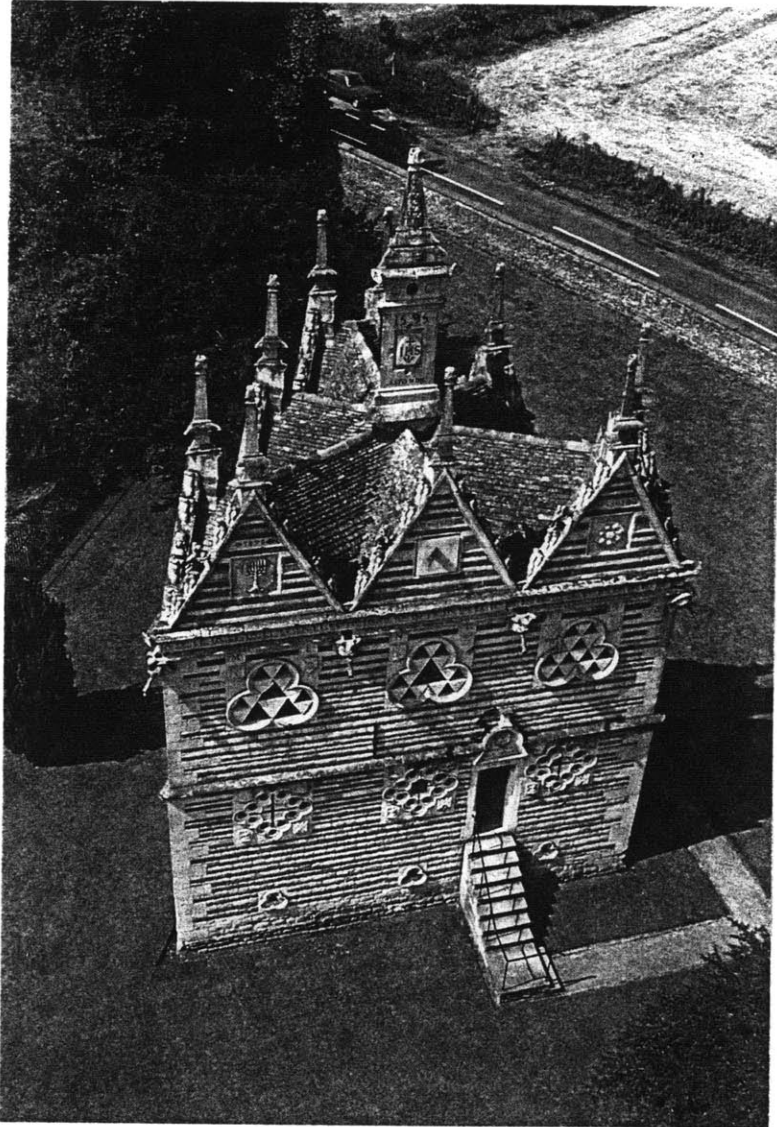
*Thy Princely port and Maiestie
Is my ter rene dei tie,
Thy wit and sence
The streame & source
Of e lo quence
And deepe discours,
The faire eyes are
My bright loadstarre,
Thy speache a dartie
Percing my harte,
Thy face a las,
My loo king glasse,
Thy loue ly lookes
My prayer bookes,
Thy pleasant cheare
My sunshine cleare,
Thy ru full sight
My darke midnight,
Thy will the stent
Of my con tent,
Thy glo rye flour
Of myne ho nour,
Thy loue doth giue
The lyfe I lyue,
Thy lyfe it is
Mine earthly blisse:
But grace & fauour in thine eyes
My bodies soule & souis paradise.*

The Roundell or Spheare.

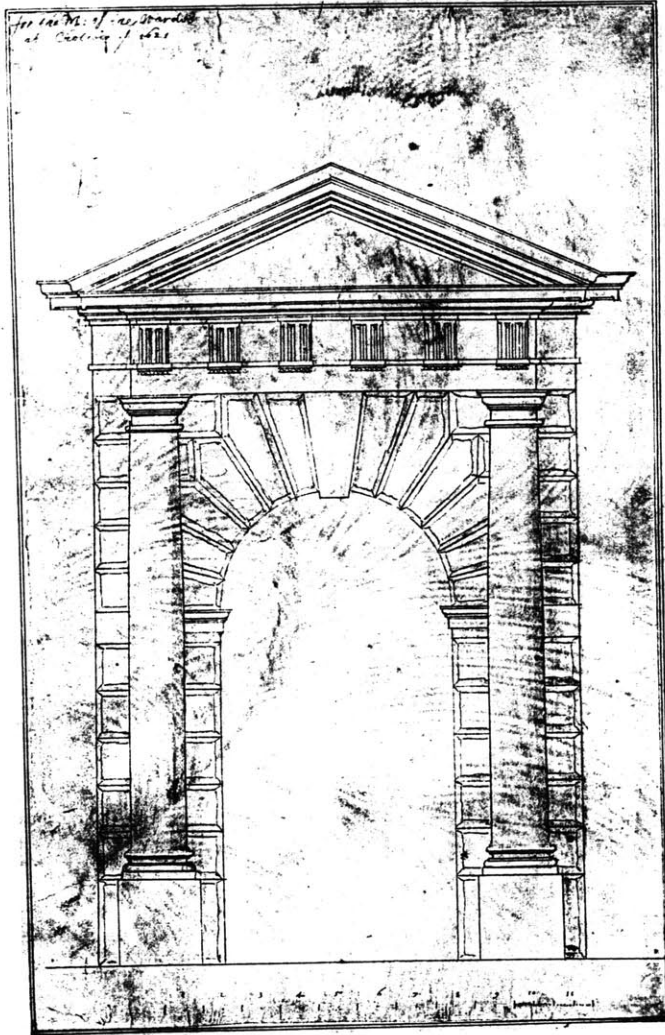
The most excellent of all the figures Geometrical is the round for his many perfections. Firft becaufe he is euen and smooth, without any angle, or inter-



35. Inigo Jones, scene design for *Salmacidia Spolia*



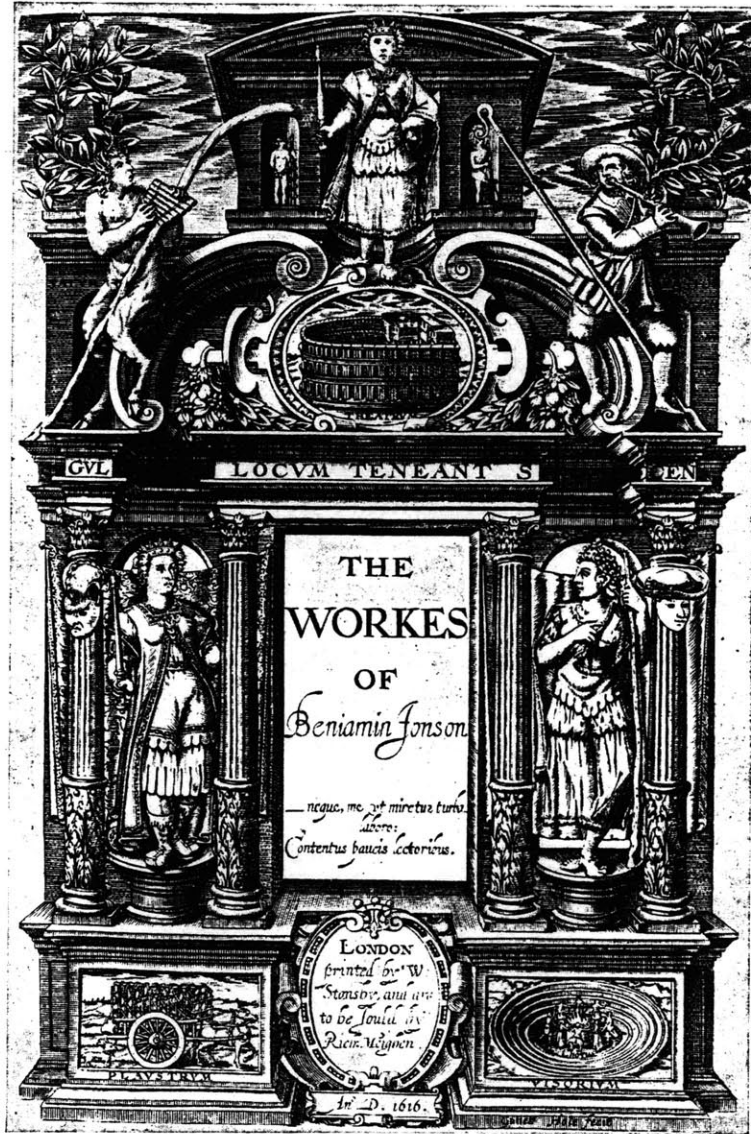
36. Triangular Lodge, Rushton



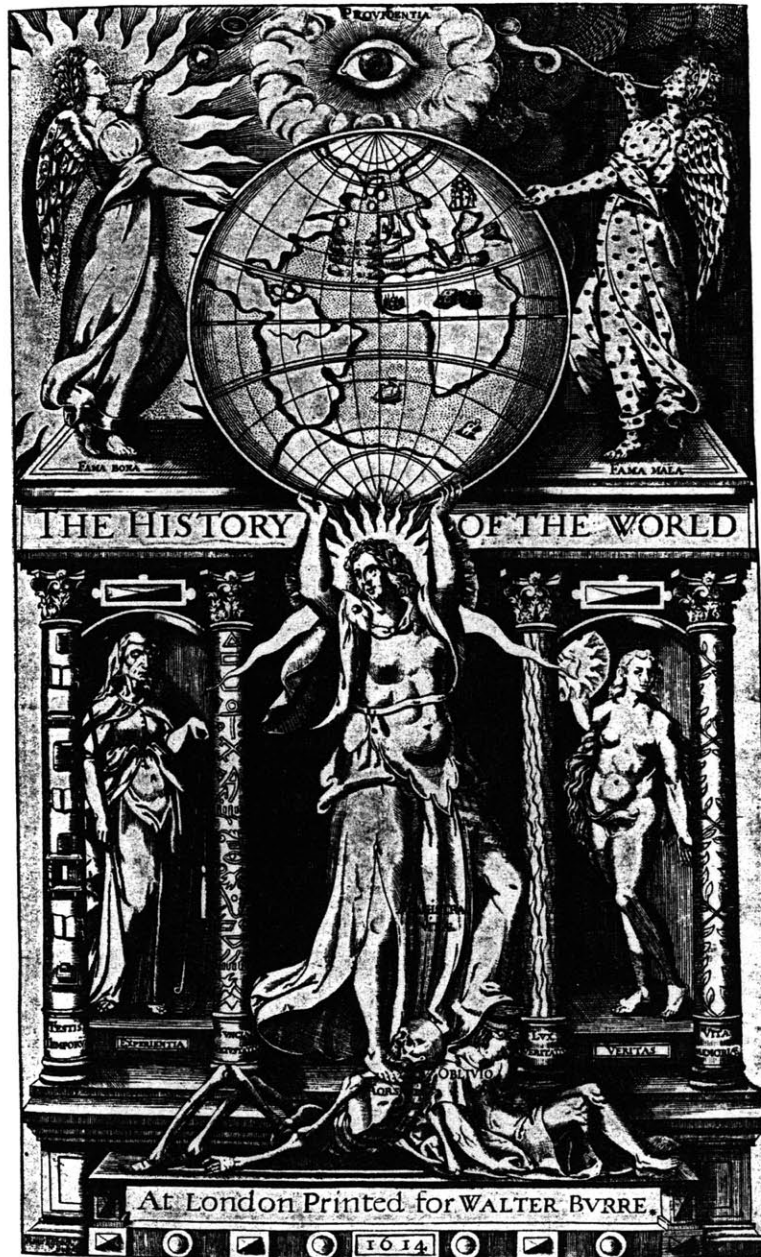
37. Inigo Jones, doric gateway for Beaufort House, 1621, RIBA 8



38. Francis Bacon, *Sylva Sylvarum*, 1627, titlepage



39. Ben Jonson, *Works*, 1616, titlepage



40. Sir Walter Raleigh, *The History of the World*, 1614, titlepage



41. The tower of the orders, School's Quadrangle, Oxford



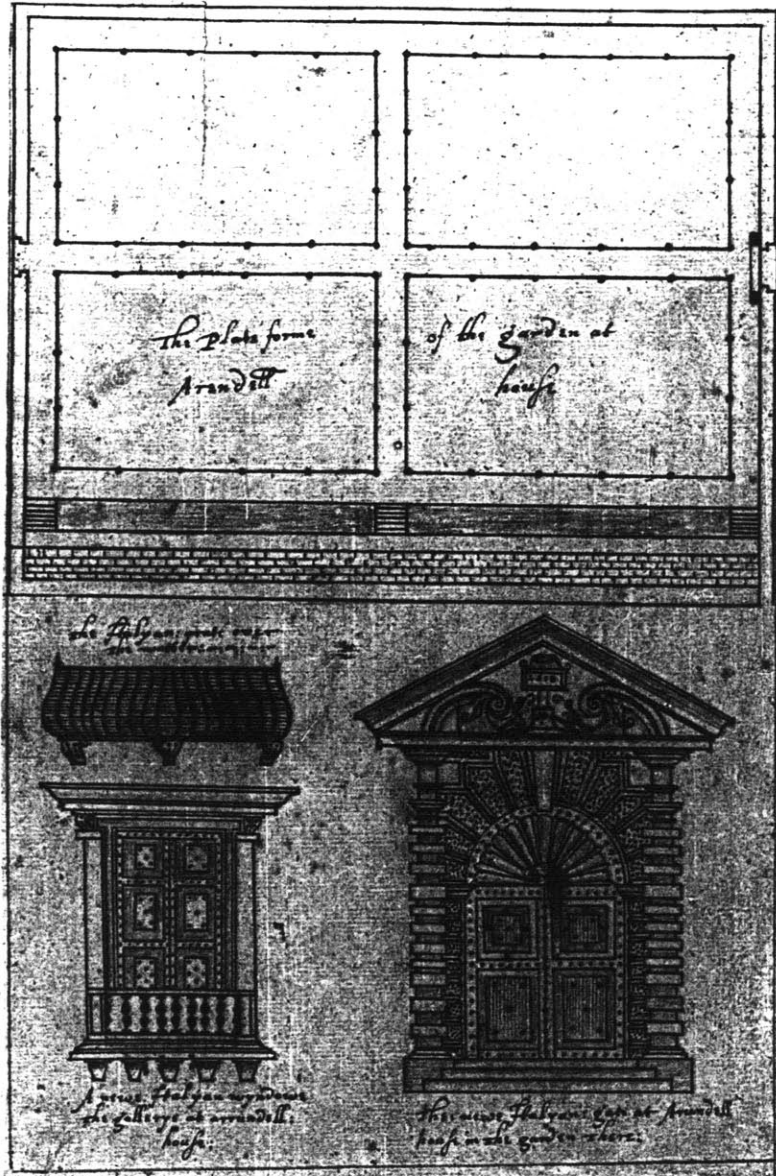
42. Nicholas Stone, Tomb of Sir Thomas Bodley, Merton College, Oxford



44. Cesare Vecellio, *Habiti antichi et moderni*, 1598, polish habit



45. Inigo Jones, costume design for polish knight, before 1613



46. John Smythson, Jones's renovations for earl of Arundel's house, London, RIBA Smythson coll.

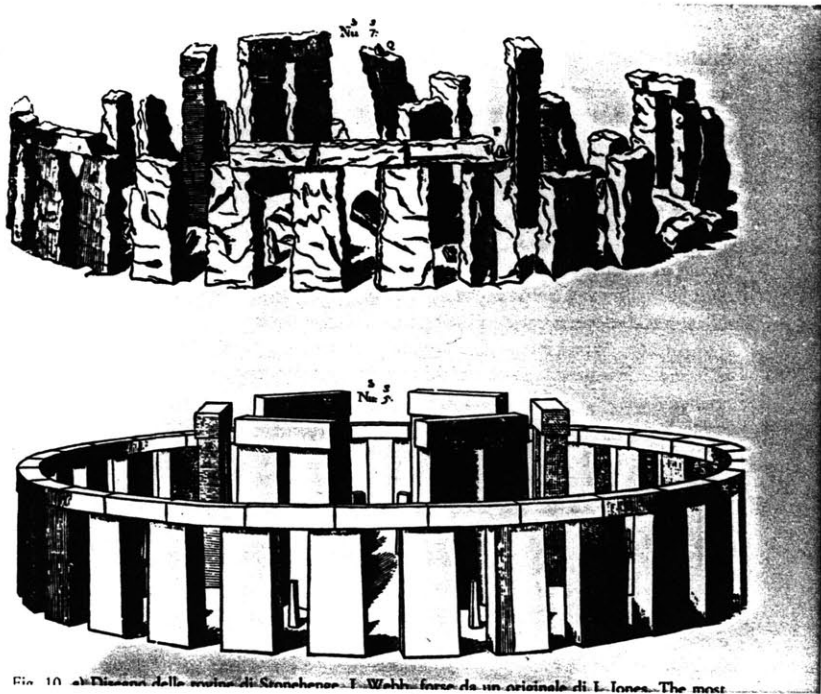
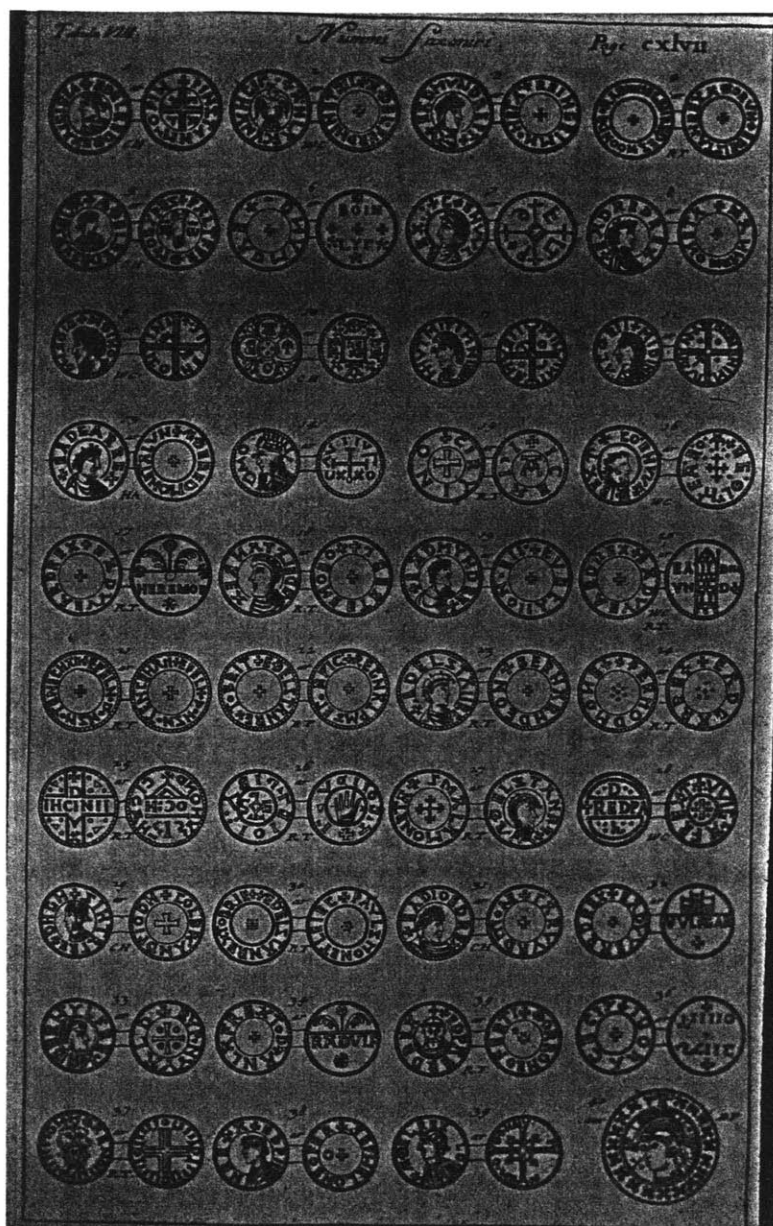
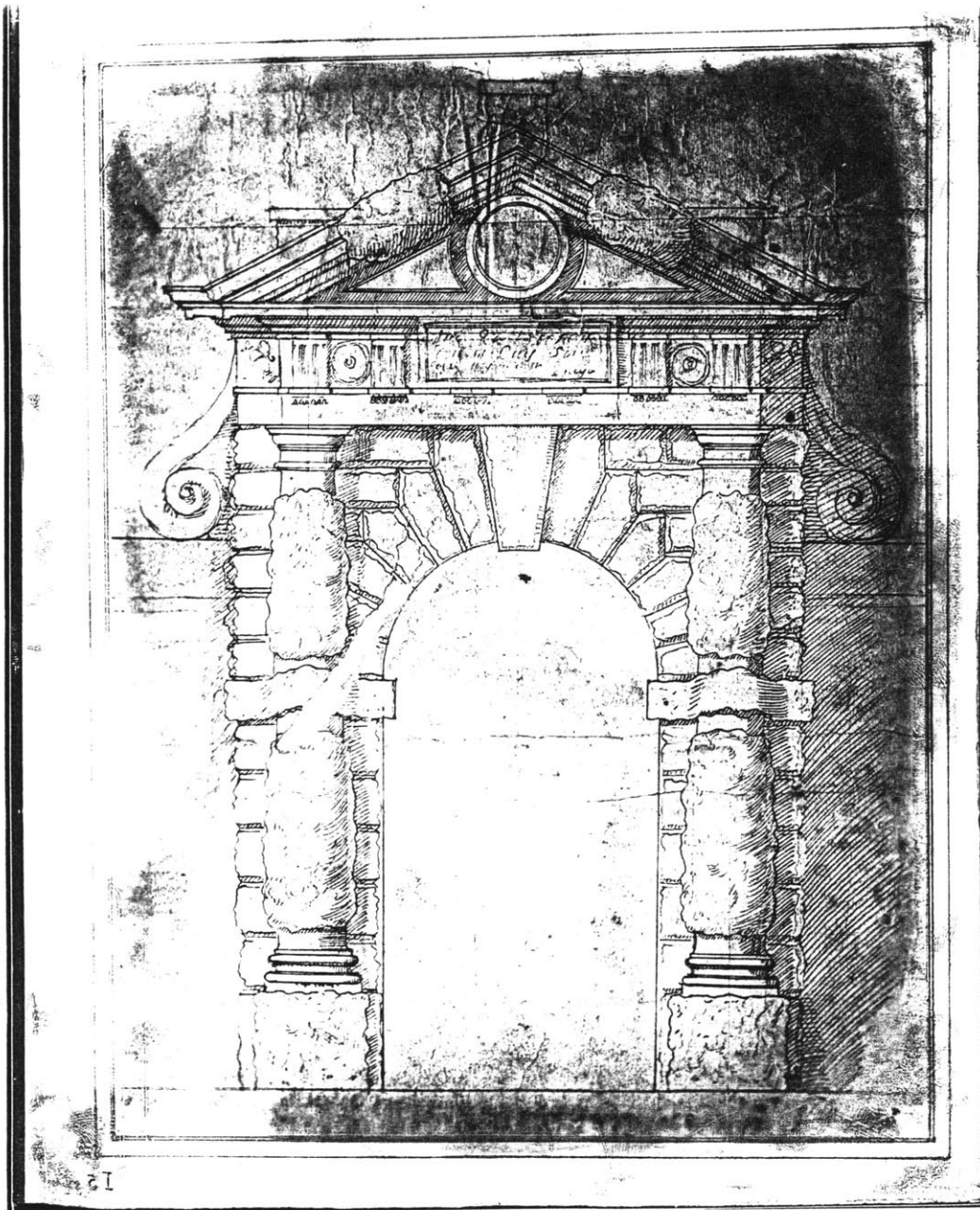


Fig. 10. ab Disegni delle rovine di Stonehenge. F. Webb fece da un originale di L. Jones. The most

47. John Webb, *The Most Notable Antiquity of Great Britain called Stone-Heng, Restored*, 1655



48. William Camden, *Brittania*, 1607



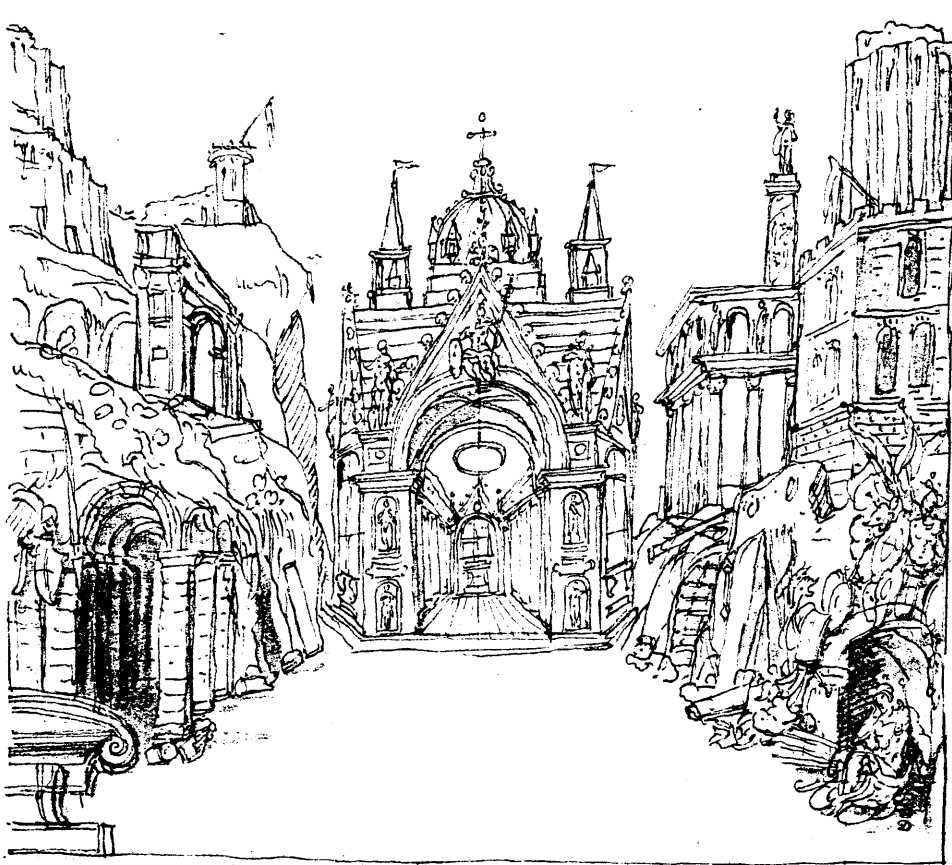
49. Inigo Jones, gateway design, RIBA Burlington-Devonshire Collection II/3
(1)



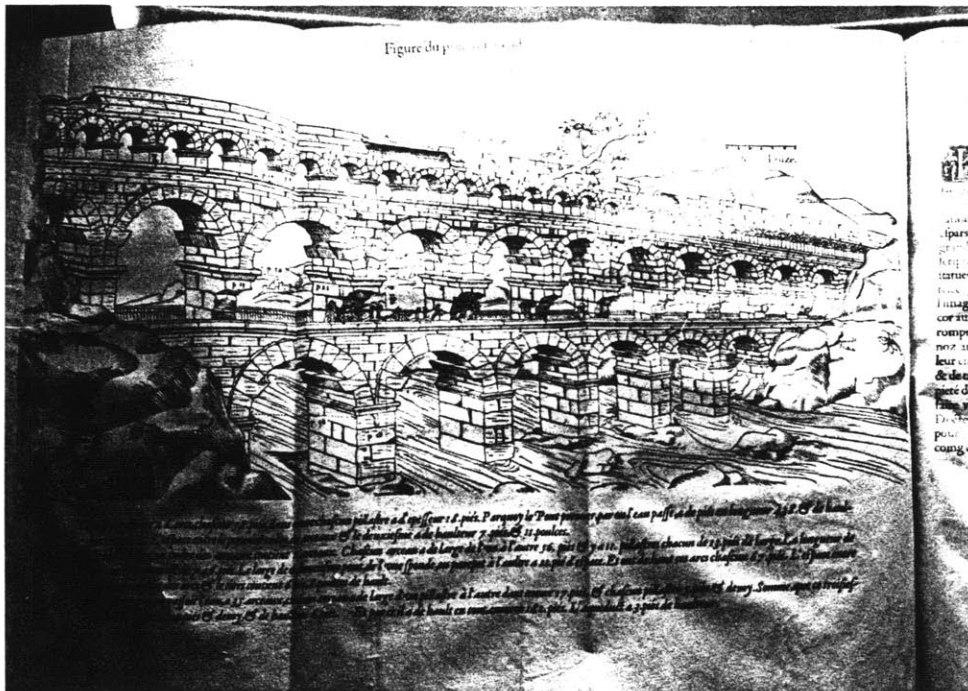
50. Isaac Oliver, *Henry Frederick, Prince of Wales*, c.1610



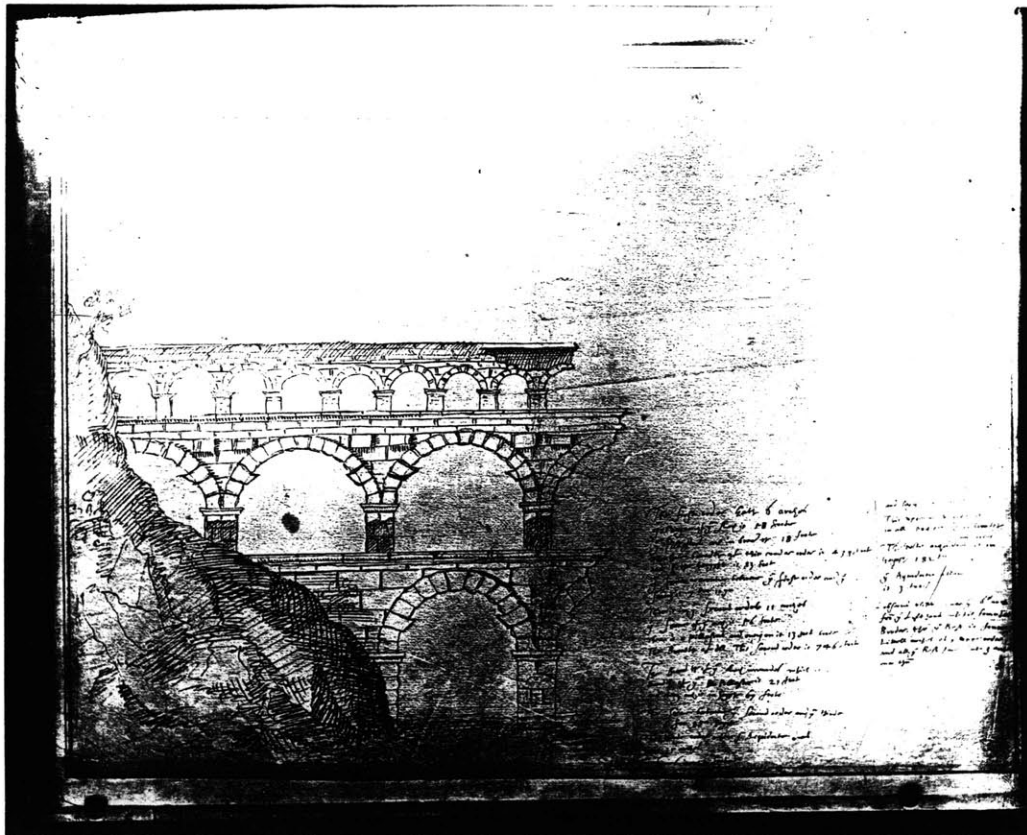
51. Inigo Jones, *Prince Henry's Barriers*, House of Chivalry, Chatsworth



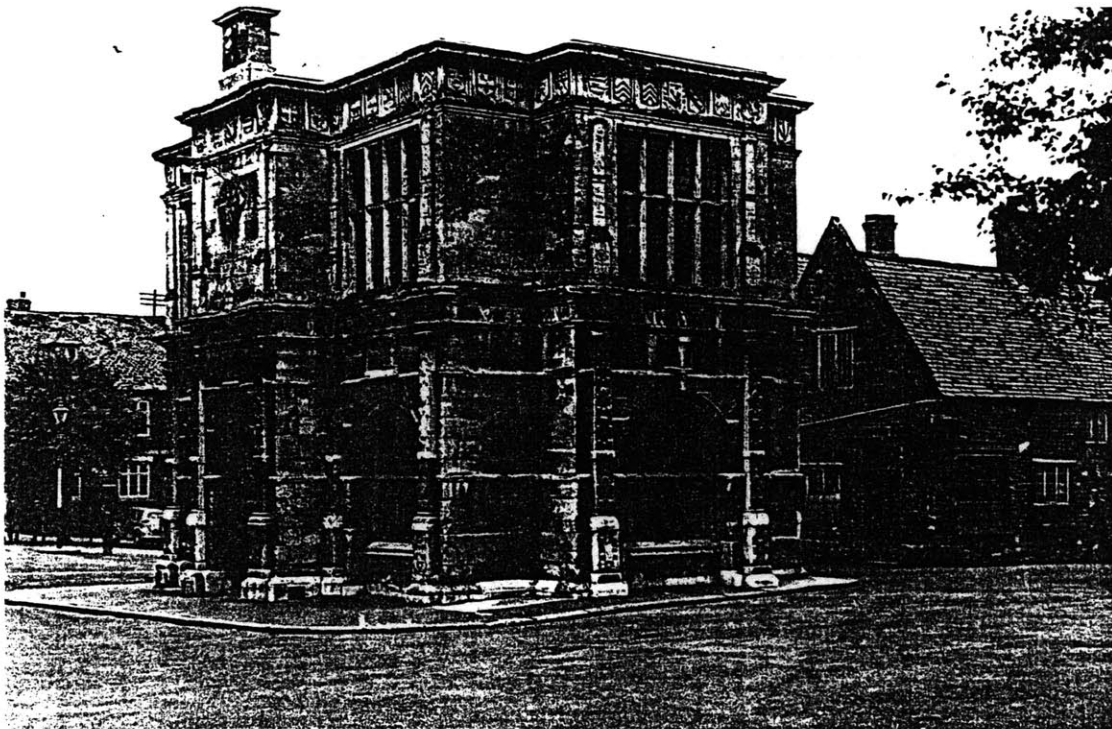
52. Inigo Jones, *Prince Henry's Barriers*, St. George's Portico, Chatsworth



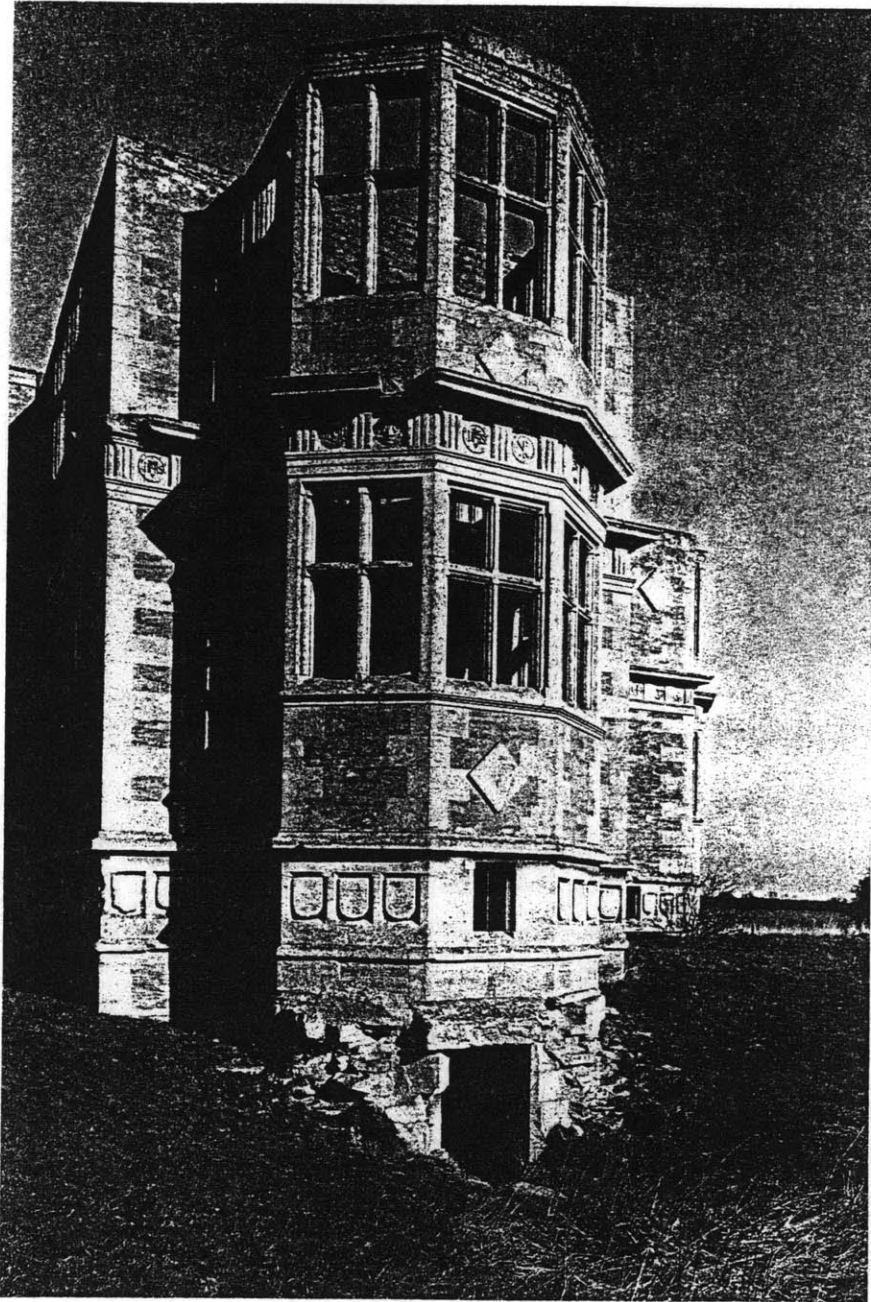
53. Poldo d'Albenas, *Discours historial de l'antique et illustre cité de Nismes*, Pont du Gard



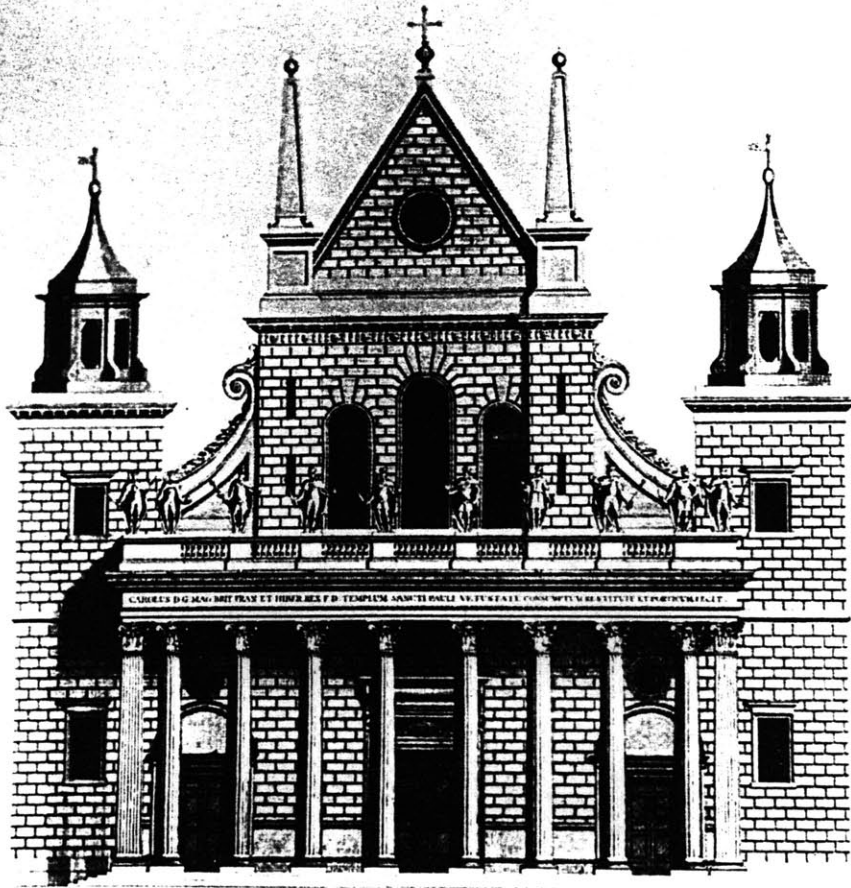
54. Inigo Jones, drawing of Pont du Gard, 1609, RIBA 102



55. Market House at Rothwell



56. Lyveden New Bield



58. St. Paul's West facade, William Kent, *Designs of Inigo Jones*, London 1727,

DES ANCIENS ROMAINS. II

VESPASIAN.
BRONZE.

TITVS.
BRONZE.

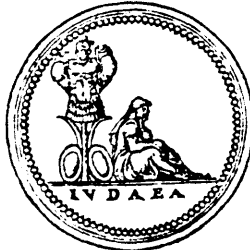


Ce font ces bons Princes Vespasian le pere & le fils, qui prirent & triompherent tous deux de la Iudée, & qui la remirent en l'obeyssance du peuple de Rome: cōme bien au long l'a mis par escrit Iosephe au liure qu'il a fait de la guerre des Iuifs, où pourra veoir le Lecteur le miserable feu du saint temple de Ierusalem.

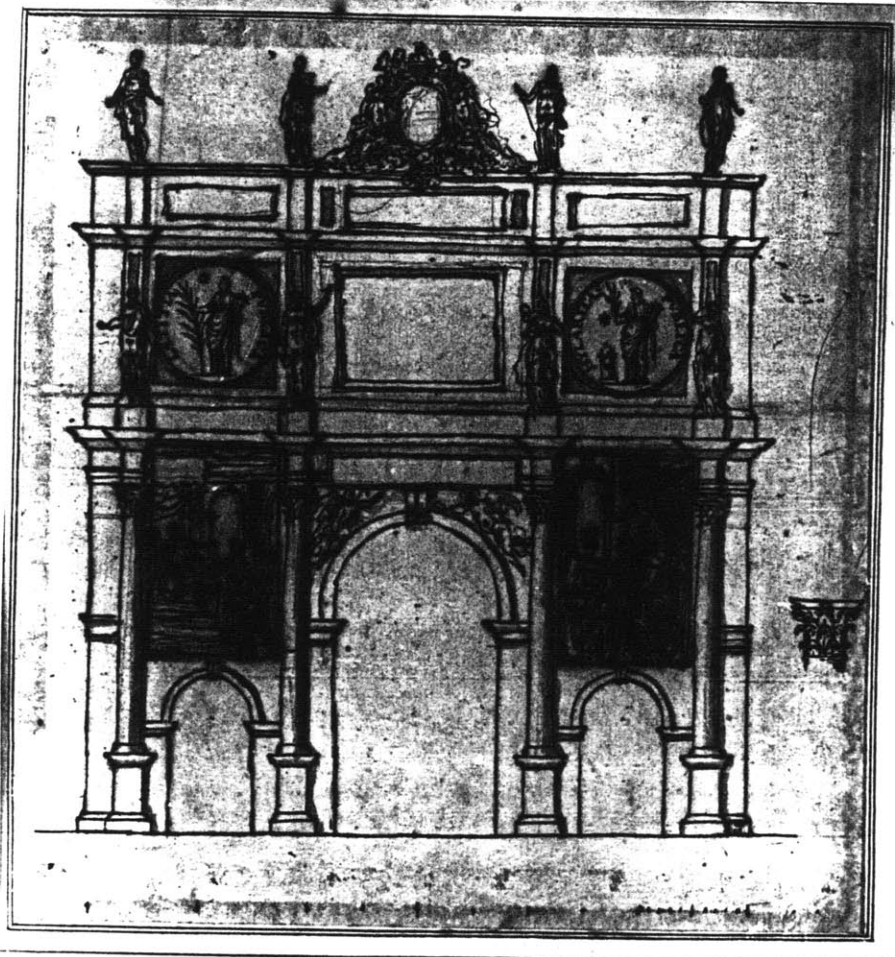
*Vespasian
& Titus son
fils triompherent de la
Iudie.*

VESPASIAN.
ARGENT.

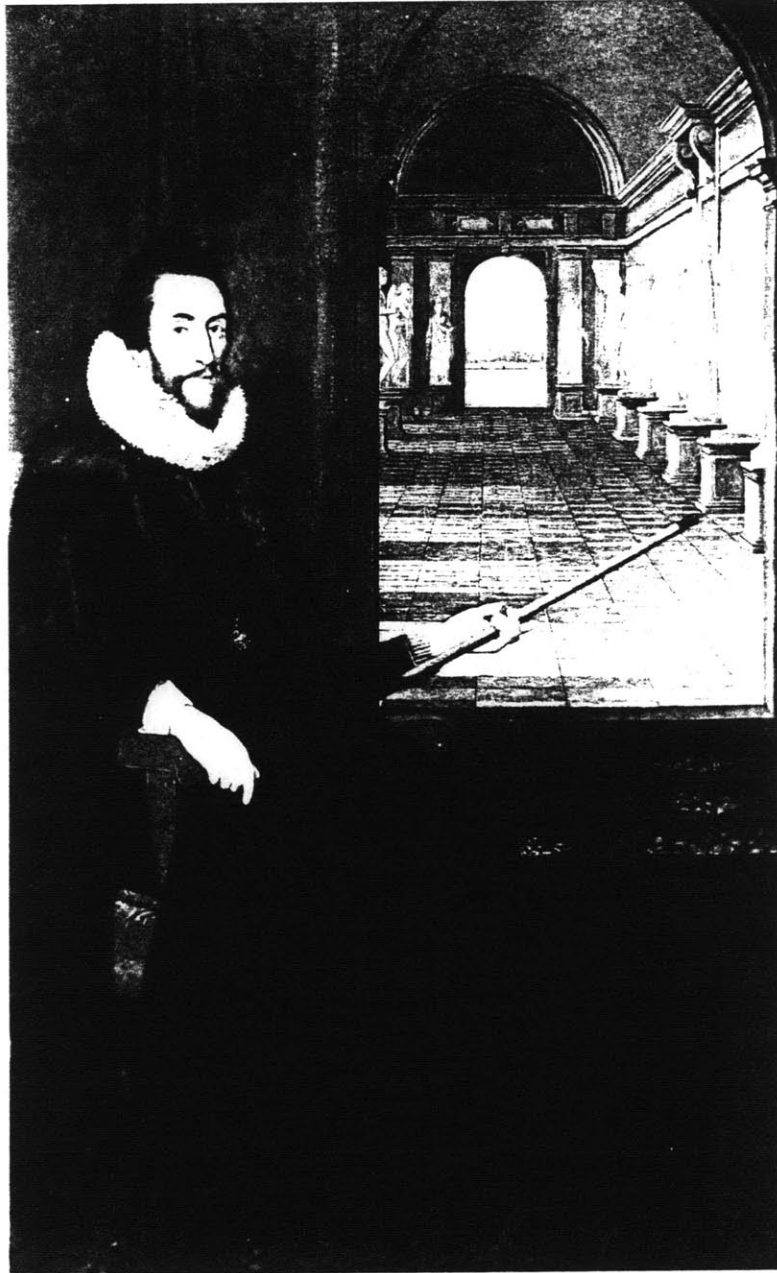
TITVS.
BRONZE.



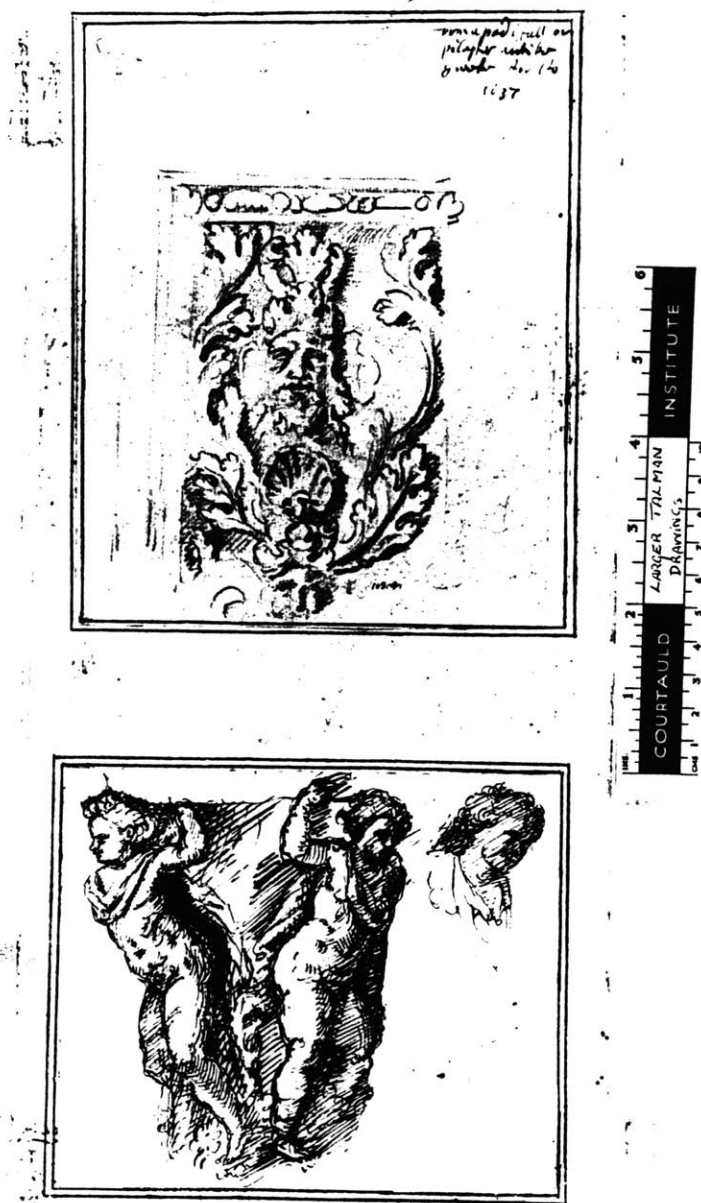
b 2



60. Inigo Jones, Design for Temple Bar, 1636, RIBA 52



61. Daniel Mytens, Thomas Howard, Earl of Arundel, c. 1616, Arundel Castle



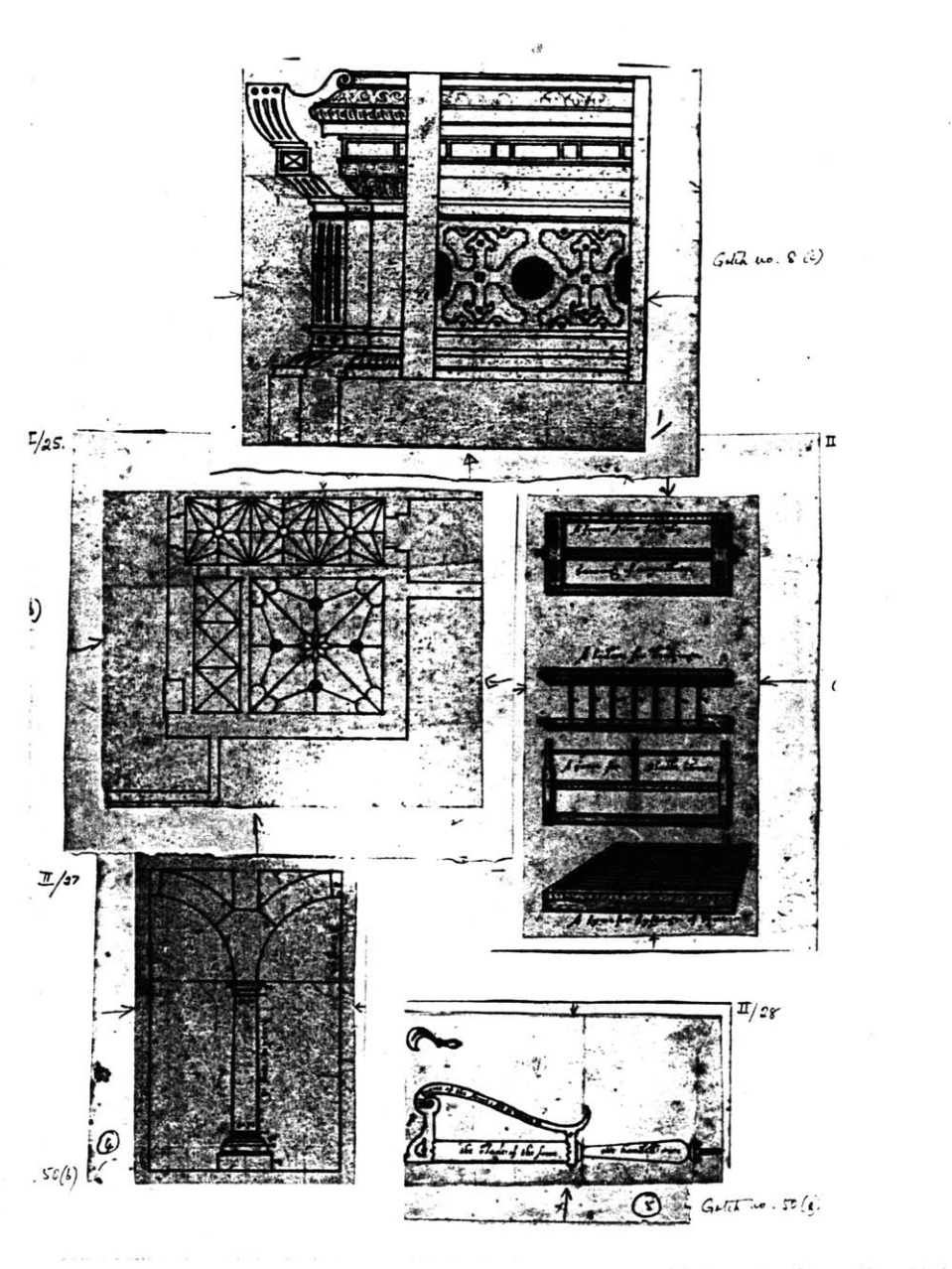
62. Inigo Jones, drawing after Arundel marble, 1637, Ashmolean Museum



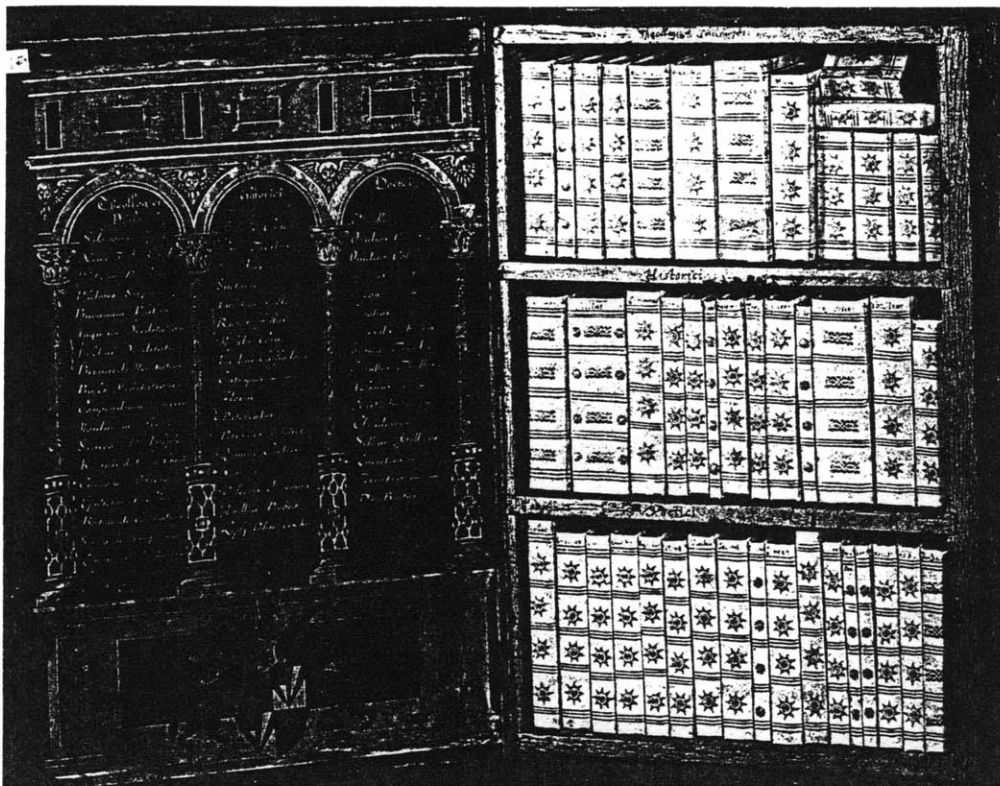
63. Wenceslaus Hollar, *Arundel House looking North*, London, 1646, British Museum



64. Nicholas Bacon's *sententiae*, British Museum Ms. Royal 17A XXIII, fol. 5



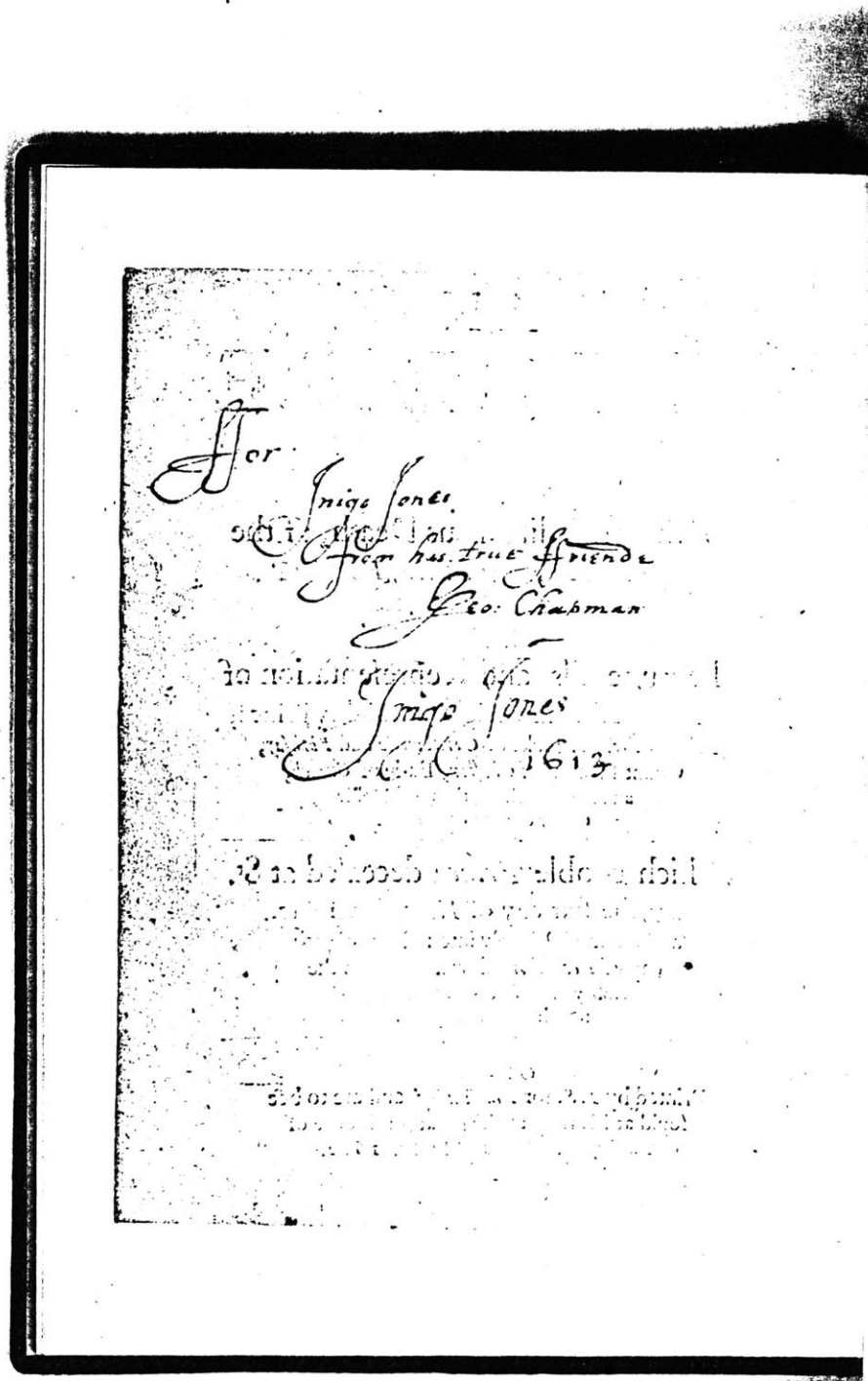
65. Drawings for tools, portfolio of Robert Smythson, RIBA Smythson Collection
II/24-8



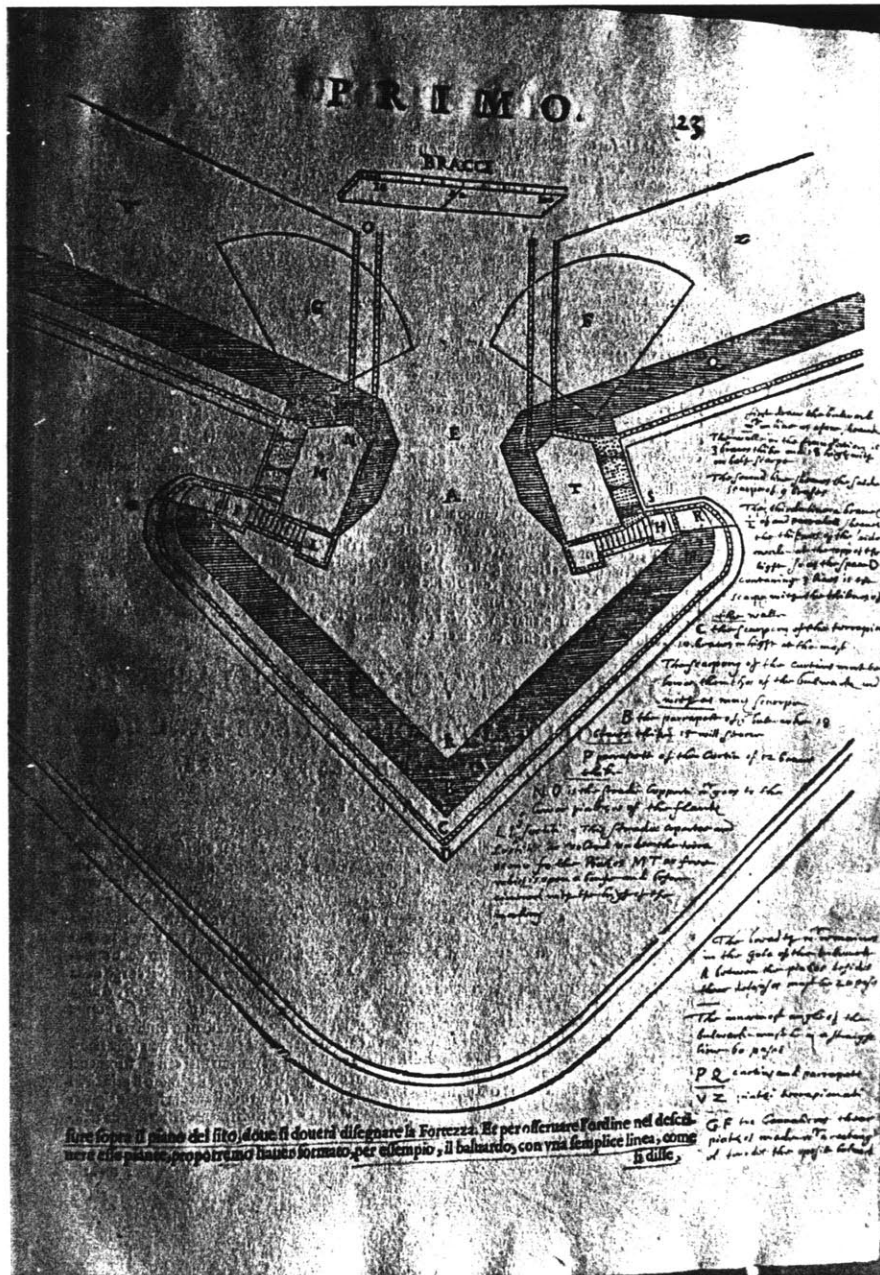
66. Traveling library of Sir Thomas Egerton, Lord Ellesmere, Huntington Library



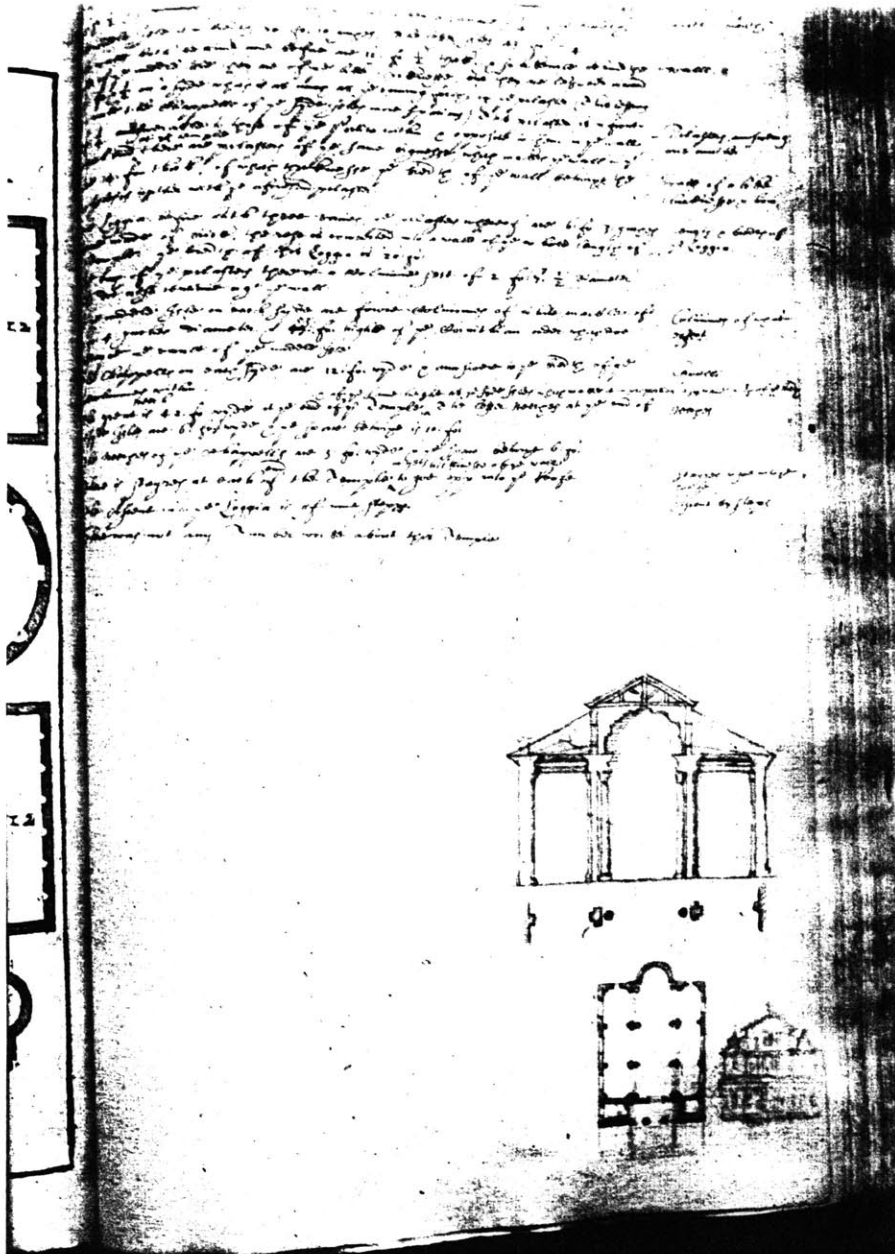
67. John Webb, drawing on front pastedown of Pietro Cataneo, *L'architettura*,
1567, Worcester College, Oxford



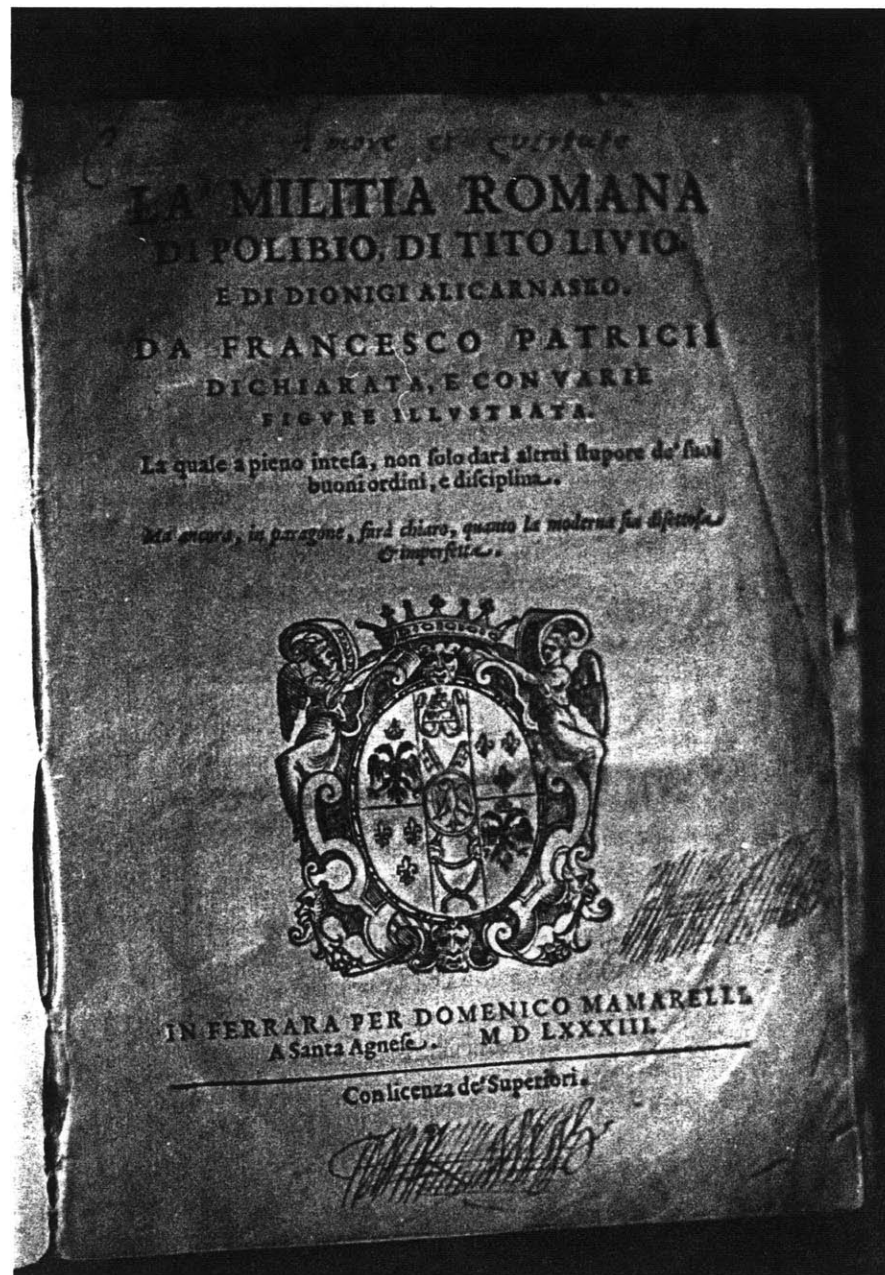
68. George Chapman, *An Epicede or Funerall Song*, 1612, Jones's copy, front flyleaf



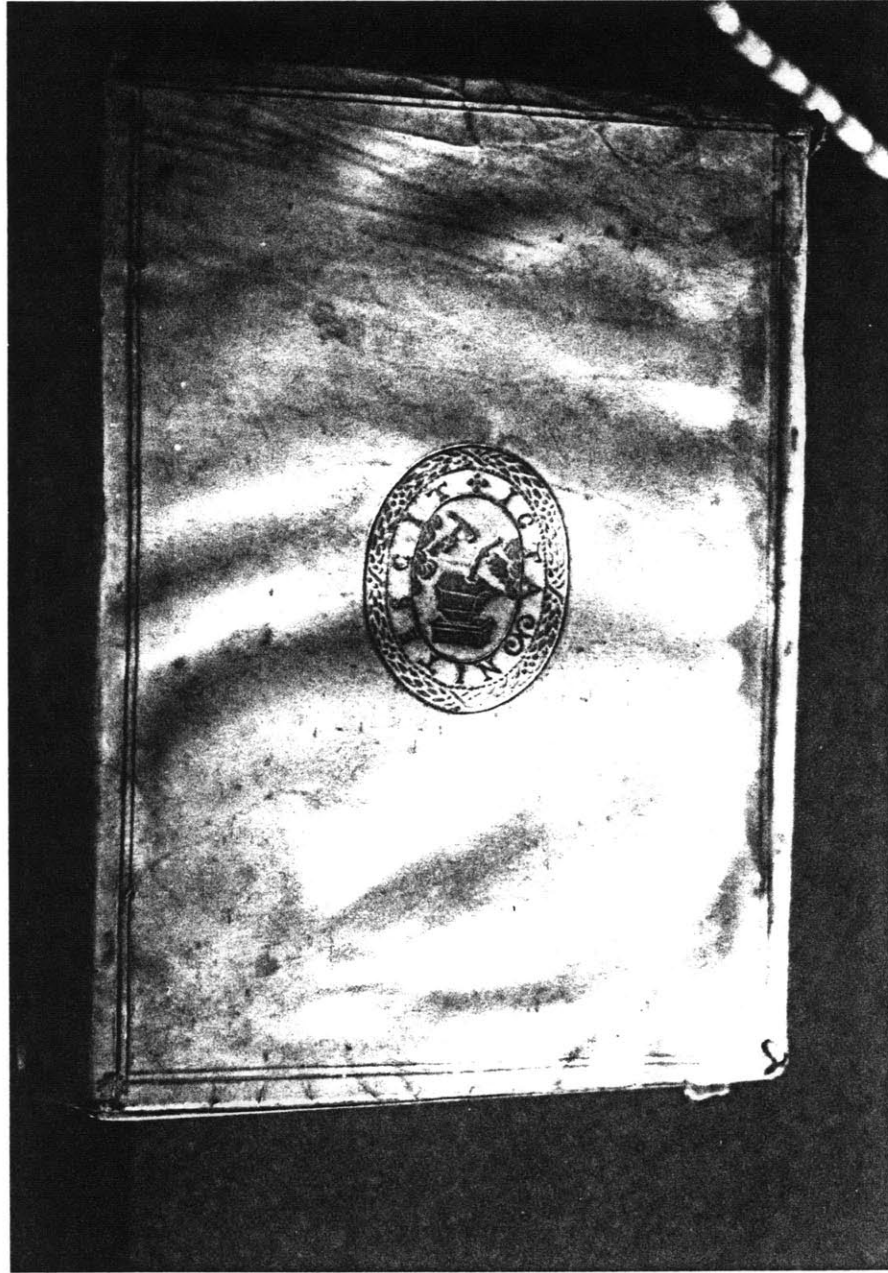
71. Buonaiuto Lorini, *Le fortificationi*, 1609, Jones's copy



74. Andrea Palladio, *I quattro libri*, 1570, manuscript translation, Worcester College



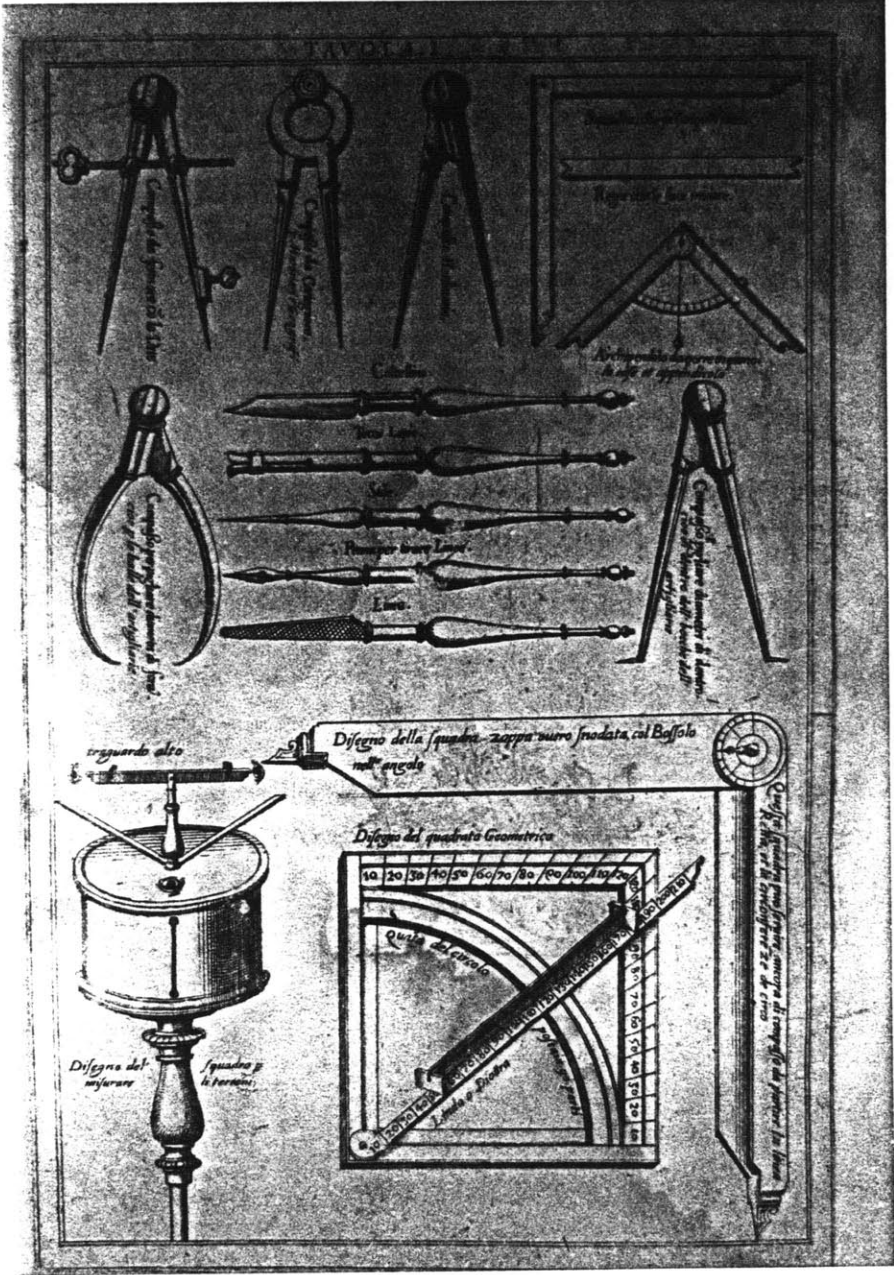
75. Francesco Patrizi, *La militia romana di Polibi*, 1583, Jones's copy



76. Claudius Ptolemaeus, *La geografia*, 1561, Jones's copy, binding



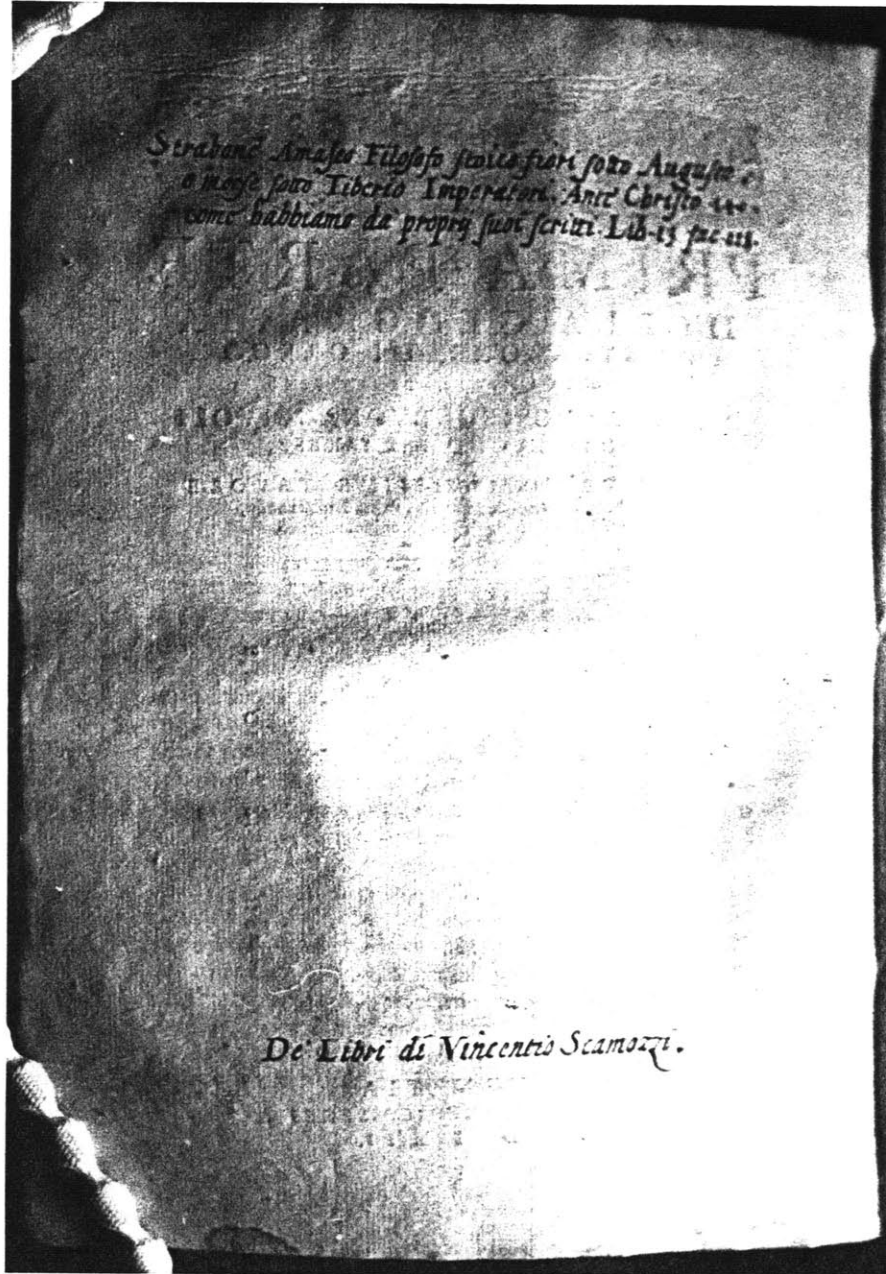
77. Giovanni Rusconi, *Della architettura libri dieci*, 1590, Jones's copy, III, 6



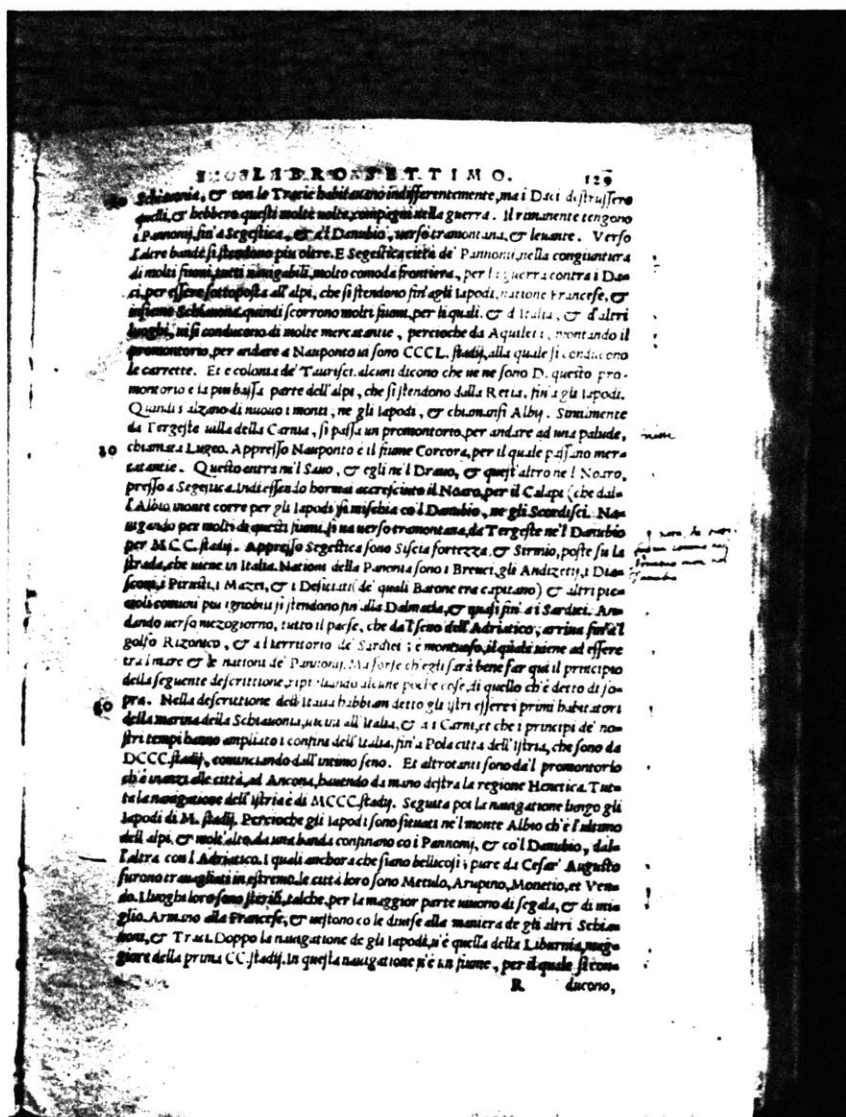
78. Giovanni Scala, Geometria pratica, 1603, Jones's copy



79. Vincenzo Scamozzi, *L'idea della architettura*, 1615, Jones's copy, titlepage



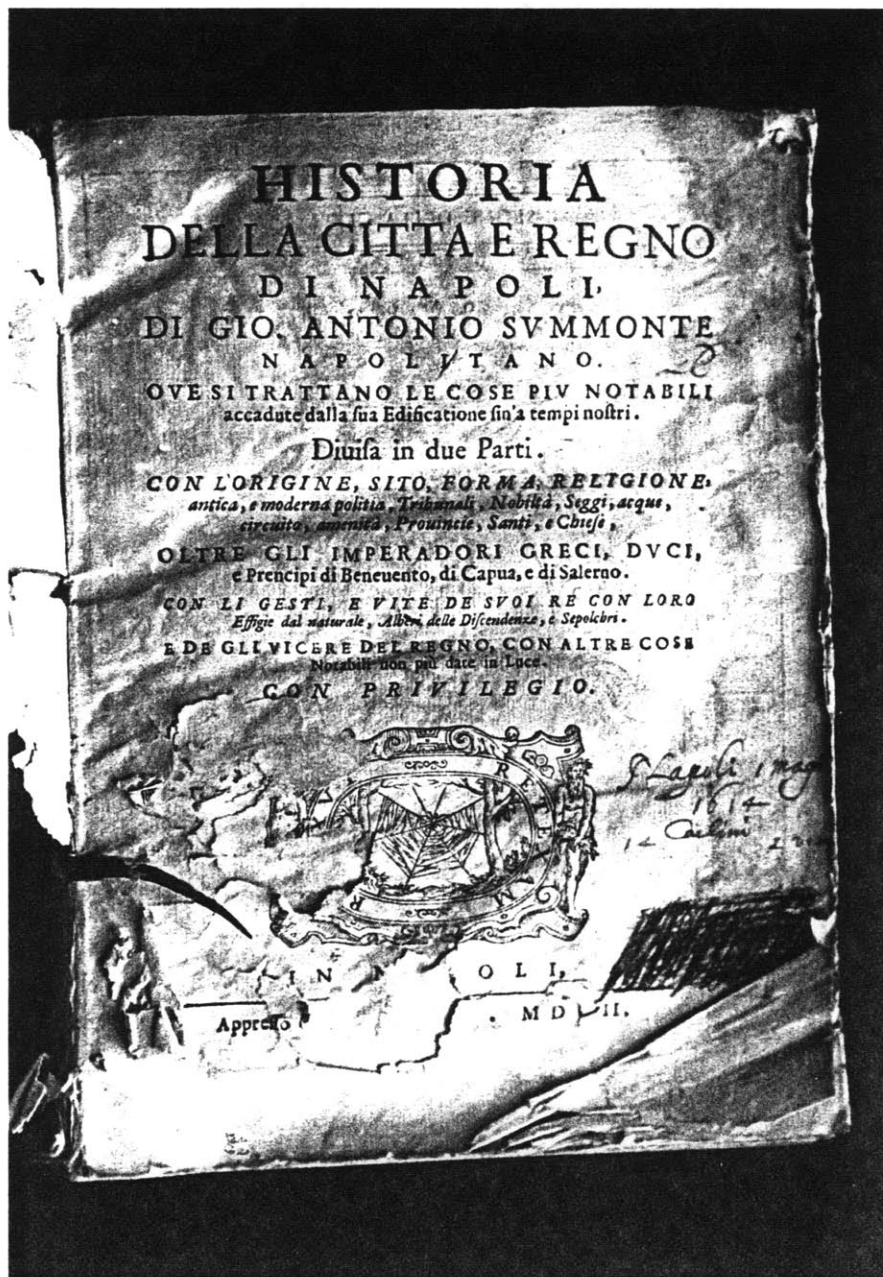
80. Strabo, *La prima parte della geographia*, 1562, Jones's copy, Scamozzi annotations



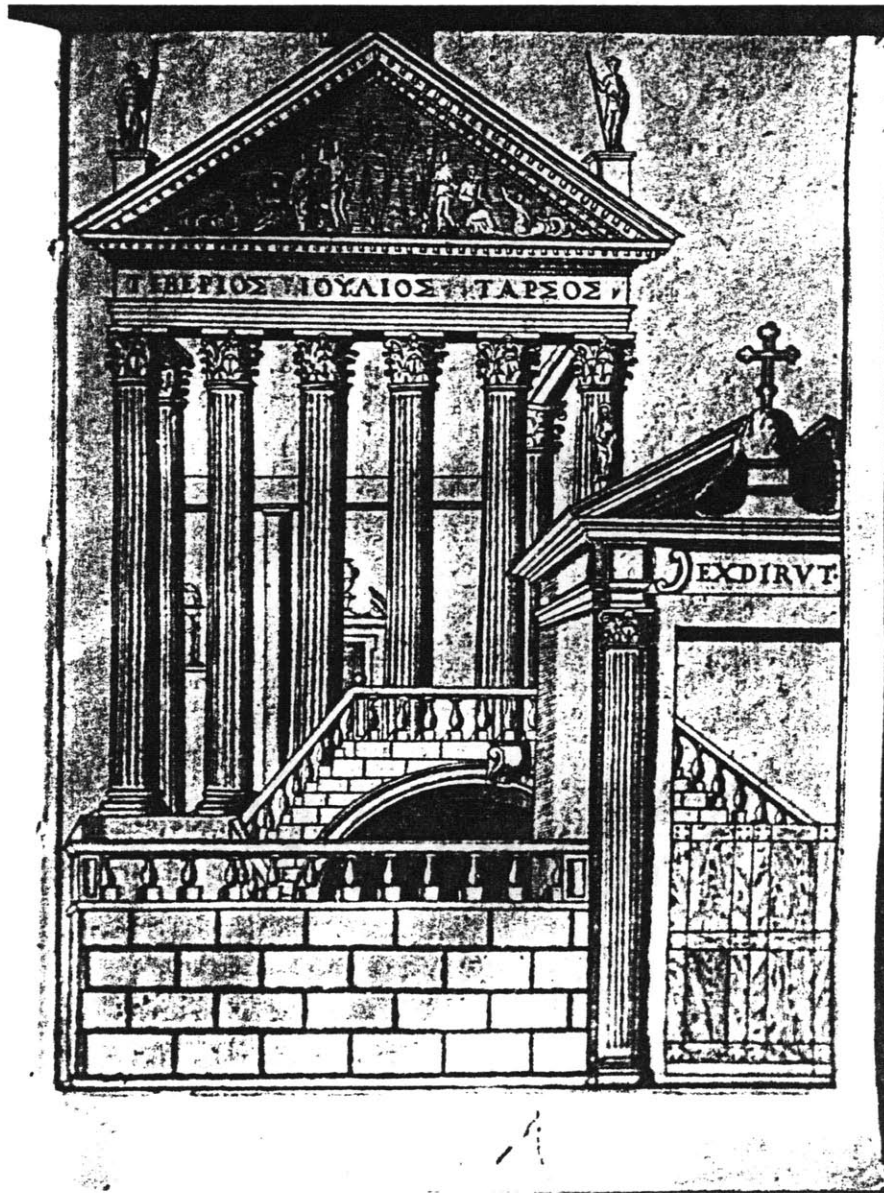
81. Strabo, *La prima parte della geographia*, 1562, Jones's copy, Scamozzi
 annotations

DE ARCHITECT. LIB. VII. 303

redigitur, ut sui generis proprias uideatur habere qualitates. Itaq; tectoria quæ recte sunt facta, neq; uetustatibus sunt horrida, neq; cum exergentur, remittunt colores, nisi si parum diligenter, & in arido fuerint inducti. Cum ergo ita in parietibus tectoria facta fuerint (uti supra scriptum est) & firmitatem, splendorem, & ad uetustatē permanentem uirtutem poterunt habere. Cum uero unum corium arenæ, & unum minutum marmoris erit inductum, tenuitas eius minus ualendo facile rumpitur, nec splendorem politionibus, propter imbecillitatem crassitudinis, proprium obtinebit. Quemadmodum enim speculum argenteum tenui lamella ductum, incertos & sine uiribus habet remissiores splendores: quod autem e solidi temperatura fuerit factum, recipiens in se firmis uiribus politionem, fulgentes in aspectu, certasq; considerantibus imagines reddit. Sic tectoria, quæ ex tenui sunt ducta materia, non modo sunt rimosa, sed etiam celeriter euanescent. Quæ autem fundata arenationis & marmoris soliditate, sunt crassitudine spissa, cum sunt politionibus crebris subacta, non modo sunt nitentia, sed etiam imagines expressas aspicientibus ex eo opere remittunt. Græcorum uero tectores non solum his rationibus utendo faciunt opera firma, sed etiam mortario collocato, calce & arena ibi confusa, decuria hominum inducta ligneis uectibus pinant materia, et ita ad certam subacta tunc utuntur. Itaq; ueteribus parietibus nonnulli crustas excidentes pro abacis utuntur: ipsaq; tectoria abacorum, & speculorum diuisionibus, circa se prominentes habent expressiones. Sin autem in cratijs tectoria erunt facienda, quibus necesse est etiam in arrectarijs, & transuersarijs rimas fieri. (Ideo quod luto cum linuntur, necessario recipiunt humorem, cum autem arefcunt extenuati, in tectorijs faciunt rimas,) id ut non fiat, hæc erit ratio. Cum paries totus luto inquinatus fuerit, tunc in eo opere cannæ clauis muscarijs perpetuæ figantur, deinde iterum luto inducto si priores transuersarijs arundinibus fixæ sunt, secundæ erectis figantur: & ita (uti supra scriptum est) arenatum, & marmor, & omne tectorium inducatur. Ita cannarum duplex in parietibus ordinibus



83. G. A. Summonte, *Historia della città e regno di Napoli*, 1602, Jones's copy, titlepage



84. G. A. Summonte, *Historia della citta e regno di Napoli*, 1602, Jones's copy,
Church of S. Paolo Maggiore



85. Inigo Jones, drawing of Correggio, in his copy of Giorgio Vasari, *Delle vite de' piu eccellenti pittori scultori et architettori*, 1568, 17.