

Visualizing antiquity before the digital age: early and late modern reconstructions of Greek and Roman cityscapes

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In recent years, the creation of computer-based archaeological reconstructions has become increasingly widespread. The attempt to visually “reconstruct” relics of ancient architecture, however, is not a novelty of the digital age. Although little research has been done so far in this direction, taking an historical perspective on reconstructions of archaeological evidence over the centuries offers some reflections on the use and legacy of modern 3D visualizations in archaeology. This contribution discusses a selection of archaeological reconstructions (both drawings and 3D physical models) of Roman and Greek cities in the early and late modern period, focussing especially on the motivations, the aims and the methods that guided such endeavours. By doing so, it will shed light on how much the reconstructed past was in fact the result of a re-elaboration of present needs, thoughts and beliefs. Moreover, it will trace the path towards the formation of a scientific method of archaeological inquiry, which includes the elaboration of ways to assess the reliability of the reconstruction.

1 INTRODUCTION

Over the centuries, ancient buildings in ruin have excited the imagination of viewers. Their being fragmentary has triggered artists' creativity and often caused the fabrication of legends to explain their existence. Depending on the sentiment of the beholder, ruins have become a symbol of the transience of life or of the desperate attempt to survive from the oblivion of time.¹ Even more imbued with meanings that transcend their physical appearance has been the creation of reconstruction drawings of these past relics of architecture. These visual restorations are the expressions of the mind-set and cultural milieu of their creators, which offers us a vivid documentation of the way in which the past was understood, perceived and represented at the time of their realization. As much as the archaeological evidence that they depict, reconstruction drawings also are historical products, as they are the result of the combination of several factors that need to be contextualized to ensure their correct reception.² Such factors include the state of the knowledge on the evidence represented, the drawing and survey techniques available at the moment of their creation, and the

background and cultural milieu of both the reconstruction maker and the viewer.³

As this paper will show, this type of information is crucial in order to be able to appreciate reconstruction drawings and plaster models as important sources of documentation not only about the subjects they depict, but more importantly about who made them, and the historical period in which they were produced.⁴ One may consider how naïve and fictitious some early reconstruction drawings appear nowadays since a deeper knowledge of the archaeological site under investigation has been acquired, or how outdated some of the first digital visualizations look to the eye of the present-day viewer whose expectations are high in terms of engagement, realism and interaction. Often, reconstruction drawings or images of plaster models are still being used nowadays in presentations and articles without citing the author and the correct period in which they were made, thus leading to the transmission of obsolete ideas, or to the underestimation of works that were instead ahead of their time. Little research has been done so far on this type of visual representations, although they are valuable sources of information for the history of archaeological research.⁵ Every drawing entails in fact a process of interpretation of reality, since, as well expressed by the art historian Sir Ernst Gombrich, a drawing “is not a faithful record of a visual experience but the faithful construction of a relational model (...). The form of a representation cannot be divorced from its purpose and the requirements of the society in which the given visual language gains currency”.⁶

In the next sections, I shall present a selection of archaeological reconstructions depicting Roman and Greek cities and buildings in Europe from the 15th to the 20th century.⁷ I will briefly sketch the historical framework in which such representations have been created to provide the contextual information to assess their aims and their novelty. The case studies presented will offer an insight into the variety of functions that reconstructions have fulfilled within the period taken into consideration, which provides the basis for a reflection on the use, purpose and legacy of computer-aided 3D models that have nowadays become ubiquitous in the archaeological domain. This paper will

shed light on the purpose and use of reconstructions, showing the role of reconstruction drawings as functional aids to stir emotional responses, and to support political agendas before being used as a means to present historical information. Moreover, this overview will serve to investigate the path towards the formation of a scientific method of archaeological inquiry, which includes the introduction of personal observations of the extant remains as an integral part of research, the development of a critical appraisal of earlier sources and the elaboration of ways to assess the reliability of the reconstruction.

2 THE 14TH AND 15TH CENTURIES

In the 14th century, works describing antiquities rarely used visual representations to integrate or explain the text. One of the early examples of drawings included in a manuscript is to be found in the autograph copy of the *Historia Imperialis* by the antiquarian and historian from Verona, Giovanni de Matociis (or Mansionario), who started to work on it from about 1310. On the side of some pages, he drew a number of coins and a schematic representation of a Roman circus.⁸ Although Giovanni could have easily inspected directly the architecture of a Roman circus by looking at the specimen still standing in his hometown (the famous Arena of Verona), thus comparing and integrating the textual sources with his personal observations, he relied completely on the encyclopaedia of Isidore of Seville as the primary source for his historical account (Weiss 1969, 23). As will be discussed in the course of this paper, the reverence for classical authors and the related general preference for textual documents - seen as more authoritative than knowledge gained by first-hand experience - will be longtime companions of antiquarian studies.

Most of the examples that I will mention in this section relate not surprisingly to Rome since this city has attracted many humanists that were fascinated by Roman ruins and were trying to preserve the memory of its still obscure ancient past. The humanists' engagement with architectural theory shaped a renewed interest for Roman buildings, which were studied to derive rules of construction, as exemplified by Leon Battista Alberti's *De Re Aedificatoria* (Stinger 1998, 66). During this period, the approaches of the antiquarians drawing and reconstructing ancient ruins greatly vary: some of them tried to critically look at earlier sources and treated sceptically the medieval *Memorabilia* and previous accounts that explained with mythical legends the origins of cities.⁹ Generally, however, the interpretations and reconstruction drawings of this period were still mostly based on reproducing the content of earlier textual sources and on creating fantastic explanations and depictions arising from the fascination for these otherwise inexplicable monumental buildings. The Colosseum was for example thought to have

been the biggest temple of Rome dedicated to Jupiter and its original shape was reconstructed as being surmounted by a golden dome with a golden statue on top (Günther 1997, 382).¹⁰

Rome had severely declined during the ten years' exile of Pope Eugenius IV (1383-1447), who had been forced to leave his episcopal see to escape from the unfavourable political situation in the city. Any visitor coming to Rome in those years could witness a striking contrast between the monumental ancient ruins and the humble 15th century dwellings. In a letter dated March 1443 and addressed to Giovanni de' Medici, Alberto degli Alberti gives us a testimony of this situation, writing that contemporary masonry houses were many but in bad condition, while actually the nicest things to see in Rome were the ruins.¹¹

Among the scholars that lamented the deplorable state of the eternal city, the name of the Italian humanist Flavio Biondo (1388-1463) stands out for his innovative approach to antiquities. In his *Roma Instaurata* (1444-46), Biondo assembled his first-hand observations on the ancient topography of Rome with the information that he took from ancient texts such as Pliny, Tacitus, Livy and Suetonius. Although his account is not exempt from errors, Biondo treated ancient texts, medieval sources and hagiographical accounts with a critical approach (Günther 1997, 384). Biondo's aim was to collect enough sources for an antiquarian reconstruction of Rome, in order to better inform his contemporaries, who were showing great ignorance about what the city had been like. As appears clear in the preface of the *Roma Instaurata*,¹² the interest of Biondo was however not much focused on the ruins as historical artefacts, but rather on their contribution in a programme of renewing 15th century Rome, with Pope Eugenius IV playing the principal role as its initiator. As McCahill pointed out, through his texts Biondo was indeed "determined to remind his readers, including Eugenius, that Rome's ancient grandeur is not an irrevocably distant reality but something that has been revived before and can be revived again" (McCahill 2009, 191).

The reconstruction of Rome that Biondo presents is textual, there being no maps or drawings that accompany the verbal descriptions. To find drawings of ancient Rome during the Quattrocento, one has to turn to the *Collectio Antiquitatum* by the Paduan doctor and antiquarian Giovanni Marcanova (1410/18-1467). Several manuscripts of the *Collectio* survive, the earliest being dated to 1465 and kept at the Estense library in Modena.¹³ The text, which included copies of Latin and Greek inscriptions, was composed by Marcanova, while the visual representations of ancient monuments and places of ancient Rome have been identified as copies of the drawings of Cyriac of Ancona (1391-about 1455), which were reinterpreted by the painter Marco Zoppo.

This manuscript, defined as “the most lavishly illustrated antiquarian manuscript produced in the Renaissance” (Trippe 2010, 767-99), contains in fact 18 drawings depicting reconstructed views of ancient Rome and everyday life scenes in the city. Such drawings include, for example, the city gate with towers guarded by armed soldiers, the Monte Testaccio with broken fragments of urns on the ground, the Forum crowded by sellers and buyers and with a circular temple in the centre, the Arch of Titus during a triumph, the Diocletian’s Baths, and scenes of sacrifices and games, all populated by people in 15th century clothing.¹⁴

The *Collectio* has received contrasting reviews from contemporary and modern scholars (Trippe 2010, 767), and although most have dismissed it as a production with low archaeological value, others have tried to contextualize this work within the spirit of the time in which it was produced. As Hülsen noted in his 1907 publication, which discussed the drawings in the *Collectio* for the first time, the reconstructed architecture is a mixture of ancient, Medieval, Renaissance and imaginary elements. Some drawings, in fact, seem to be derived from observations on the spot (such as the equestrian statue of the Emperor Marcus Aurelius, which is reproduced in accurate detail), while others are made by enlarging decorations on cinerary urns (such as in the depiction of the *Vivarium*), or inspired by the contemporary architecture of Bologna, the city in which the *Collectio* was written (Hülsen 1907). For example, the temple in the Forum, which has a circular plan instead of the more common rectangular one, is indicative both of the early state of the knowledge on Roman architecture, but also of the preference for circular shapes in sacred architecture during the Renaissance, as exemplified by the theories and works of Leon Battista Alberti (Hülsen 1907, 38). As usual for any depiction of antiquity during this period, these drawings had no intention to reproduce an archaeologically accurate reality; their aim was instead evocative, according to the humanist spirit of “recollection” that used images as a means to trigger the memories of the viewers, related to a specific place or experience (Trippe 2010). As Mitchell observed, “antiquity was in fact becoming an ideal of life, rather than an object of inquiry.” (Mitchell 1960, 478).

The contribution of Cyriac of Ancona (1391-about 1455) to the study of antiquities deserves to be explored further as his first-hand recording of Greek and Roman buildings earned him the title of father of modern classical archaeology (Bodnar and Foss 2003, ix). Contrary to his contemporaries, who had gained acquaintance with the subject by consulting books in libraries, Cyriac travelled extensively in Greece and Italy, where he recorded and drew in his notes several ancient monuments that he had personally seen. Cyriac was in fact accustomed to travel since an early age, when he used to accompany his uncle, a merchant, in his trade; later on in

his life, he became one of the diplomats of Pope Eugenius IV, which took him to several countries, thus allowing him to visit remote places and monuments. Cyriac’s first encounter with ancient ruins had been the arch of Trajan in his home town, which, according to Weiss, “made him realize more and more that what still remained of the ancient world was doomed to perish sooner or later, and that it was therefore his imperative duty to try to rescue, or at any rate record, its relics for posterity before it was too late.” (Weiss 1969, 138). According to Ashmole, although the drawing style of Cyriac is not sophisticated, he paid great attention to reproducing the reliefs or monuments he saw with accurate detail (Ashmole 1959, 25-6). Probably some of Cyriac’s most famous drawings are those that depict Hadrian’s temple in Cyzicus, which represent an important documentation of this monument that he could visit in 1431 and that would have been almost completely destroyed by 1444 for its intensive use as a quarry (Burrell 2002/03, 36).

Besides drawing extant remains, Cyriac drew also reconstructions of the buildings that he recorded. While his documentation drawings are considered fairly accurate, his reconstructions were on the other hand imaginative, giving again confirmation of the fascination that surrounded ancient ruins and the commonly shared intention of reconstructing them “not to deceive, but as a light-hearted fantasy” (Ashmole 1959, 27). Unfortunately, Cyriac’s autograph manuscripts have not survived, his Commentaries probably being lost in a fire that burned down the library of Alessandro and Costanzo Sforza in Pesaro where they were kept. Cyriac’s notes and drawings have been transmitted in excerpts and copies in other manuscripts, thus leading to problems of their attribution to Cyriac or to some other draughtsmen (Ashmole 1959, 28). In some cases, however, the copies still give us an idea about the type of reconstructions that Cyriac would have drawn, as in the case of the reconstruction of the Mausoleum of Hadrian (present-day Castel Sant’Angelo). The image of the reconstructed building appears on the folio 63r of the *Liber Monumentorum Romanae Urbis et Aliorum Locorum*¹⁵ that was published at the end of the 15th century and compiled by Bartolomeus Fontius (1445-1513), an important Florentine humanist (fig. 1).¹⁶

In other cases, imaginative reconstructions were created on purpose, the lack of a critical approach in analysing texts in this and later periods ensuring their fortune for several centuries. One of the most famous fabricators of stories of this time is the Dominican Annius of Viterbo (1432?-1502), who published a collection of passages of ancient chronicles and documents (*Antiquities* or *Commentaria*, 1498), which retraced the colonization of Europe to Noah and his grandchildren after the Flood. These texts, to which Annius added his erudite commentaries citing authoritative sources,

were skilfully invented by him to reconstruct the history of the Etruscans and ultimately to prove the historical importance of his home town Viterbo as the oldest city in Europe (see Weiss 1969, 125-6 and Hiatt 2004, 10-1).¹⁷ This work will be published in several editions and will have a great influence on European historiography of the 15th and 16th century, as it provided suitable stories to legitimate the national monarchies that were growing in Spain, France and England.¹⁸ The fortune of Annii's stories is due not only to the fact that they presented Europeans with "what they wanted to hear about their past" (Allen 1949, 114 cited in Stephens 2004, S203), but also that they were convincingly written mimicking the techniques and format of historical

scholarship and philology, which immediately evoked scholarly respect (Stephens 2004, S216-7).

Other texts that Annii forged are collected in the *Auctores Vetustissimi* printed in Rome in 1489. Among them, there is the *De Aureo Saeculo et de Origine Urbis Romae eiusque Descriptione* that Annii claimed was written by Quintus Fabius Pictor, a 3rd century BC Roman historiographer whose works have not survived. The chronicle describes the early urban development of Rome, described as having the shape of a bow, with the Tiber river as its rope, and highlights the Etruscan contribution to the early development of the city. In one of the editions, a large woodcut view was inserted which represents the city in this way, surrounded by walls in a typically medieval fashion, and features the "Vicus Tuscus", Viterbo, in a prominent location close to the city (fig. 2). This urban configuration of Rome, which was instrumental in Annii's celebration of Viterbo, was still taken as authentic into the 18th century (Weiss 1969, 94).

As the examples discussed in this section show, in this century illustrations of ancient ruins and reconstruction drawings were used sparsely and, when they were inserted, there was no intention or interest to create a historically accurate representation. Generally, antiquarians found satisfaction in an approach to the past based on describing, collecting and comparing ancient relics, where no analytical attempts were made to view the archaeological remains in an historical perspective (Stinger 1998, 69). Contributions such



Figure 1 Reconstruction of the Mausoleum of Hadrian, copy from a drawing by Cyriac of Ancona contained in the Codex Ashmolenis, Bodleian Library, fol. 63r (digital copy available at <http://bodley30.bodley.ox.ac.uk:8180/luna/servlet>, last accessed March 2017)



Figure 2 The large woodcut view of Archaic Rome in Annii of Viterbo's *Auctores Vetustissimi* (Rome: Eucharius Silber, 1498) (modified after <http://www.brynmaur.edu/library/exhibits/antiquity/use4c.htm>, last accessed March 2017)

as Flavio Biondo's and Cyriac of Ancona's stand out for their innovative approach, which included a critical view of previous scholarship and personal surveys. However, this changing attitude does not translate into a different approach towards visual reconstructions. In fact, if present, these drawings are generally an exercise of fantasy, expressing the fascination for the relicts of ancient buildings and a means of recollecting memories, in which contemporary elements are mixed together, without any attempt at historical veracity. In some cases, as shown by Biondo's *Roma Instaurata*, and by Annius' forgeries, furthermore, antiquities and reconstructions become instruments for political propaganda, a metaphor of a past grandeur that could be revived, or threads to weave deceiving narratives of local pride.

3 THE 16TH CENTURY

During the Renaissance, a new approach towards urban design and planning was developed. While until Medieval times there was the tendency to build a new construction by reusing an existing one, Renaissance architects and commissioners were more prone to razing the old buildings to the ground and using the stones to construct new ones (Weiss 1969, 99). This situation had a great impact on the urban appearance of Rome, which started to comply more and more with the Popes' agenda of using architecture to create a visually strong impression of their power. Construction works caused accidental discoveries of ancient buildings and sculptures. Especially these latter excited Renaissance antiquarians and led to the production of copies or triggered their imagination in creating tentative restorations of the fragmentary sculptures to their original entirety (Barkan 1999, 119–69). This combination of factors prompted an increased interest for antiquities, along with growing complaints by antiquaries against the unscrupulous destruction of ancient buildings and the call for more efforts to document and reconstruct these quickly disappearing testimonies of the past. “Roma quanta fuit ipsa ruina docet” (how great Rome was, it's very ruins tell), a phrase that was written on a drawing depicting the ruins of the Septizodium attributed either to the Dutch painter Maarten van Heemskerck or to Herman Posthumus, is the maxim that best summarizes the attitudes towards ancient ruins in this period.¹⁹

During the 16th century, the amount of visual representations that were used to integrate textual descriptions progressively increases. When antiquarians based their works on classical texts and earlier accounts, a verbal description would be the easiest and most suitable way to transmit this knowledge. However, as was evident already with works such as Cyriac of Ancona's, when a greater attention was paid to the extant remains and their documentation, the use of drawings became the most

appropriate technique to record the material evidence that had been personally inspected. This trend of including more visual material in publications as a reflection of an increased reliance on personal observations can be noticed also in other fields such as natural history and the hard sciences (Stenhouse 2012, 248). Telling examples are the richly illustrated *De Humani Corporis Fabrica* (1543) by the Belgian Andreas Vesalius (1514-1564) in the field of human anatomy, and the *De Historia Stirpium Commentarii Insignes* (1542) by Leonhart Fuchs (1501-1566) in the field of botany. This latter is especially interesting since it breaks with the traditional representations of plants that are found in earlier herbal books and presents instead drawings (made by Albrecht Meyer) based on first hand observations of the plants and seeds that Fuchs had acquired.

Fuchs' attitude matches a change of approach in an increasing number of contemporary historians and antiquarians, who dedicated their efforts to survey ancient architectural remains and to provide related documentation based on their personal examination. In Britain, the contribution of William Camden (1551-1623) stands out as a milestone in European antiquarian studies.²⁰ His *Britannia*, which was published for the first time in 1586 and would be revised and enlarged in the following editions until the 19th century, contained his observations and his study of the material he collected during his journeys in Great Britain and Ireland. This topographic work is well situated within the late 16th century and 17th century English Renaissance, in which the study of history underwent a revolution in methodology and scope and contributed significantly to the formation of the “Englishness” typical of the Elizabethan age (Richardson 2004, 108-23, esp. 112 and 120). This autoptic approach to antiquities will become more widespread in the course of the 17th century, promoted by the development of a new scientific method that encouraged empirical research over reliance on the authority of Classical authors.

Regarding Roman antiquities, a noteworthy work of the early decades of this century is the *De Nola*, compiled by the physician Ambrogio Leone (1458-1525), friend to the publisher Aldo Manuzio and to Erasmus of Rotterdam. In this work, published in 1514 in Venice, Leone combines the themes of the *descriptio Urbis* and the *laudatio Urbis*, which are typical of humanistic culture, aiming to praise his hometown Nola, near Naples, that he had to leave. Among the engravings that Leone included in the text, we find a reconstruction of Nola in Classical times (fig. 3), which represents the first archaeological plan of a city outside Rome that is known to us (Weiss 1969, 129). In line with the cartographic tradition that depicted Rome as a circular town,²¹ the drawing represents Roman Nola as having a circular plan, extending much beyond the town in Leone's

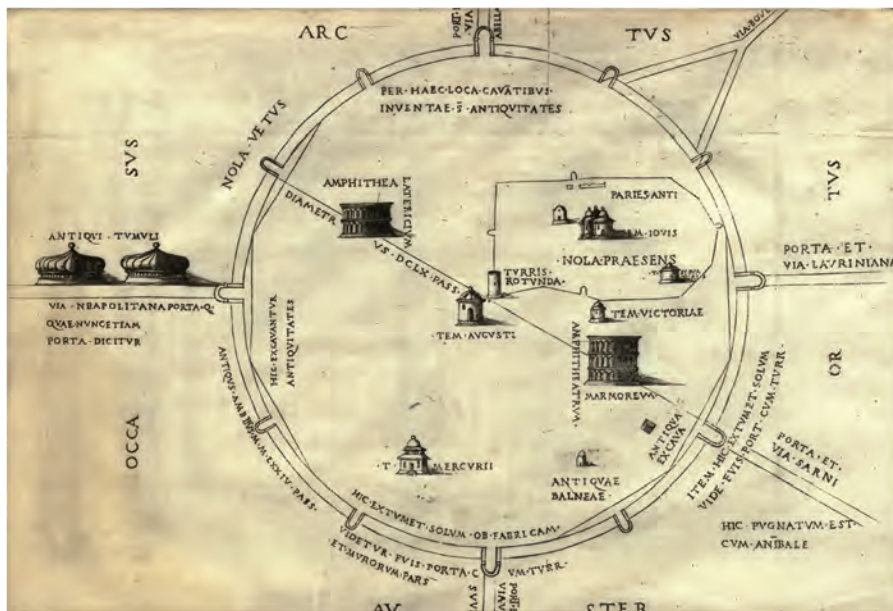


Figure 3 Map of ancient Nola (engraved by Girolamo Micetto) in the *De Nola* by Ambrogio Leone (copy from the John Adams Library at Boston Public Library digitised by Internet archive and available at <https://archive.org/details/denolaopusculumd00leon>, last accessed March 2017)

time and surrounded by a fortification with twelve regularly spaced gates. A temple of Augustus stands in the middle of the circle, on the same axis as two amphitheatres, one of marble and one of brick. Leone describes the buildings of which the ruins were still visible at his time, providing fanciful reconstructions for the extant remains, again in line with the traditional way of depicting Roman monuments at that time.²² Noteworthy, moreover, is the effort to contextualize Nola in its territory (“*De Agro Nolano*” is discussed in the first chapter of the book and mapped in an engraving), although the fact that this work is mainly based on inscriptions and ancient texts led Leone to suggest various wrong identifications in attempting to relate ancient names with modern topography.

Around the same years, a project of a much larger scale was designed by the painter and architect Raphael (1483-1520). Pope Leo X (1475-1521), son of Lorenzo the Magnificent, had in fact commissioned him to prepare the first visual reconstruction of Rome in antiquity, which had to be created from measuring and recording the ancient buildings. Although Raphael died before having completed his plan, a surviving letter that he and his friend, the humanist Baldassarre Castiglione, wrote to the Pope in 1519 gives an insight about his view on antiquities, on their destruction, and on the method that he was applying to complete the project.²³ In this letter, Raphael blames the

time, the Vandals, the Goths, but more than these, he holds the predecessors of Pope Leo X accountable for the destruction of the ancient buildings in Rome, since they allowed the pillage of ancient temples and sculptures to produce mortar for the construction of new buildings.²⁴ He says that he has been measuring with great care the ancient buildings, reading “good writers” (Vitruvius among others) and comparing the ancient texts with the structures, which gave him a good knowledge of ancient architecture.²⁵ Moreover, he is convinced that he can unerringly relate the ruins to their original shape, by integrating the missing information with the knowledge of the still standing examples.²⁶ A long section of the letter is filled with the description of the instruments that he intended to use in order to precisely measure and draw sections and perspective views of the buildings, and gives specific indications on how to operate them (Golzio 1936, 87-92). Raphael’s attitude is characteristic of this period in which scholars never doubted their capability of reconstructing ancient remains without making mistakes (“infallibilmente”, unerringly, to use Raphael’s words). Until this period, the reliance on ancient authoritative authors, the collection of several sources, and personal surveys among the ruins were deemed enough to provide an accurate reconstruction of ancient ruins. This approach will start to be put into question in the 17th century, when the scientific methods of Galileo and Descartes spread

a new awareness that started to influence also the study of antiquities, and scholars became more conscious of all the unknowns that had to be catered for through conjectures.

Some of the artists that were part of Raphael's circle attempted to finish his project, but the results were not comparable to the extent of Raphael's vision. Among the works that were published with this intention, there were the *Antiquitates Urbis* (1527) by Andrea Fulvio, who used to accompany Raphael in his surveys and showed him the buildings in ruins that were worthy to be documented, and the *Antiquae Urbis Romae cum Regionibus Simulachrum* (1527) by Marco Fabio Calvo, who had translated Vitruvius' *De Architectura* for him. Calvo's book contains a brief text and a series of woodcuts depicting, among others, views of Rome's ancient plan, regions and landmarks, which are randomly mapped and imaginatively reconstructed. The drawings show the urban development of the city, changing its plan in different geometric shapes: a square with four gates when it was founded by Romulus, an octagon under Servius Tullius, a circle divided in sixteen regions with a matching number of portals under Augustus, and a larger urban fabric cut by the Tiber in Pliny's time (fig. 4).²⁷ Calvo was inspired by the descriptions of classical authors, such as Livy, Dionysius of Halicarnassus, Pliny the Elder, and Vitruvius, and by the images of buildings appearing on Imperial coins, but he drew also on Late Antique land-survey treatises such as the 6th century *Codex Arcerianus*, depicting Roman military colonies as geometrically planned settlements (Jacks 1990, 459).

Later scholarship has judged negatively Calvo's imaginative reconstructions, which were labelled "une barbarie incroyable!" at the end of the 19th century (Muentz 1880, 306-7, cited in Jacks 1990, 463), and more recently "so naive as to be little more valuable than the plan invented by Annius of Viterbo" (Weiss 1969, 96-7). Similarly to the reconstructions in Marcanova's *Collectio*, these drawings are surely not historically accurate representations of Roman architecture and city planning, but as Jacks has shown they offer instead a great testimony of both the attitude towards Classical antiquities that permeated the Renaissance, and of the state of the knowledge in this domain by scholars of the time (Jacks 1990). Calvo's reconstructions are indeed a blend of his interpretations of both archaeological evidence and the current architecture "all'antica", which had found new forms of expression reinterpreting classical authors and monuments (Jacks 1990, 474).

In this period, a critical appraisal of earlier and contemporary works starts to be more common in the antiquarians' publications. Inconsistencies and inaccuracies in epigraphic transcriptions and monuments' identifications were found in the works previously written (for example by Fulvio and Flavio) and denounced by a number of scholars.

Among them was the architect Pirro Ligorio, who was born in Naples in about 1513 and moved to Rome some twenty years later. He was in charge of several construction works in Rome and, after the death of Michelangelo, was appointed supervisor of the works at St. Peter's for a short period. In 1549, Cardinal Ippolito d'Este gave him the responsibility to carry out some excavations at Hadrian's villa at Tivoli.²⁸ His interest in antiquities led to the publication in 1553 of his *Libro delle Antichità di Roma*,²⁹ which was composed of two treatises, one where he described the chief antiquities of Rome focusing on circuses, theatres and amphitheatres, and the other (the *Paradosse*) where he contradicted some of the identifications that previous scholars had suggested.³⁰ Ligorio, who was also trained as a painter, drew several reconstruction drawings of the structures that he had included in the book.

In the *Paradosse*, he points out that his predecessors have made many mistakes in their interpretations and identifications, like people who walk blindly and stumble into false impressions because they have not spent sufficient time in making acquaintance with the words of the ancient authors.³¹ Particularly interesting for our purposes is Ligorio's exposition of his method of investigation. His conclusions were largely based on his surveys in which he carefully observed and measured the remains, integrated them with what he knew from classical authors, and compared them with similar structures that were still standing. The section describing the Circus Flaminius is particularly telling about Ligorio's purpose and methods: his aims were to keep the memory of antiquities alive and to satisfy those that were interested in them; to do so, he says to have tried "with every possible care" to show the original shape of the circus by studying and measuring each portion of the surviving structure and comparing them with what other authors have written about Roman circuses. Later on, Ligorio explained that often he had to make use of "conjectures" to integrate the parts that were missing, in order to visually reconstruct the building in its original shape. These integrations, however, were always based on comparisons with other structures, and on the opinions that he exchanged with other scholars.³² For this reason, Ligorio hopes for the good disposition of his readers, since he underlines that he has been the first person who has undertaken such a cumbersome work.³³ Ligorio's studies led him to complete Raphael's project forty years after its conception: in 1561 he drew a map of Rome that the brothers Michele e Francesco Tramezzino published in six sheets in 1561 with the name *Antiquae Urbis Imago Accuratissime ex Vetusteis Monumenteis Formata*.³⁴

Another antiquarian that would leave his mark on this century was the Augustinian Onofrio Panvinio (1529-1568), who became librarian of Cardinal Alessandro Farnese and



Figure 4 Reconstruction drawings of Rome in Fabio Calvo's *Antiquae Urbis Romae cum Regionibus Simulachrum*. Top: Romulus' square city, bottom: Rome in Pliny's time (digitised copy available at <http://arachne.uni-koeln.de/books/FabioCalvo1532>, last accessed March 2017)

had at his disposal the vast collection of books of the Vatican Library for consultation. Cardinal Farnese had involved Panvinio in his plans to decorate his Villa Caprarola, near Viterbo, with iconographic motifs, which triggered his interest in visual representations of ancient monuments and scenes (Stenhouse 2012, 244). In fact, Panvinio became very famous for his knowledge of antiquities and published in 1571 the *De Triumpho Commentarius*, a description of how triumphs were celebrated in ancient Rome, with illustrations that depicted reconstruction drawings of the processions. Panvinio underlined the accuracy of his work (“monumentis accuratissima descriptio”) and cited extant remains, coins and ancient authors among the sources that he used (Stenhouse 2012, 241).

Another work of Panvinio which provides insights in his methods and in his aims is the *De Ludis Circensibus Libri II*, which was printed posthumously in Venice in 1600. In these volumes, Panvinio inserted a number of drawings (made by the French architect Étienne Dupérac) of coins, reliefs, and several reconstructions depicting, among others, the Circus Maximus, a scene of a sacrifice and a *naumachia*, which he drew based on extant remains and coins. Moreover, Panvinio included what he defined a “very accurate” map of ancient Rome,³⁵ which was largely based on Ligorio’s (Bajard 1992, 579).³⁶ The chapter of the first book, which relates to the Circus of St. Sebastianus on the Via Appia, gives us a glimpse of Panvinio’s target audience and purpose for including visual representations in his text: he writes in fact that he included the topography of the circus, a reconstruction and a drawing of the current state of the ruins in the two plates depicting the circus, in order to increase the understanding of the building and “to follow his habit of satisfying the interest of eager scholars, who are passionate about Roman antiquities”.³⁷

As one might expect, antiquarians, architects and artists looked at the ruins and created reconstructions with different purposes in mind. While antiquarians were progressively sharpening their intellectual tools of scientific inquiry, artists were more engaged in creating powerful and appealing scenes that responded to the current fascination for the past, paying little attention to the archaeological documentation. This perception of the past is visible in the set of imaginative drawings depicting the Seven Wonders of the World plus the Colosseum in ruin made by the already mentioned Dutch painter Maarten van Heemskerck and printed by the Dutch publisher and engraver Philip Galle in 1572. These drawings show the artistic intention to create an imaginative interpretation of ancient monuments. The reconstruction of the temple of Artemis in Ephesos, for example, far from being an archaeologically accurate attempt, is inspired by the canon of Renaissance architecture (fig. 5).

Architects, on the other hand, were interested in studying ancient architecture for the knowledge that they could gain about ancient construction techniques and proportions, which they could then apply to their contemporary projects. During the Renaissance, in fact, ancient architecture was seen as a source of inspiration and comparison for the creation of modern pieces (Curran 2012, 37). This last purpose is well expressed in the preface of the *Livre des Edifices Antiques Romains* (1584), a collection of reconstruction drawings of several buildings in Rome written by the French architect Jacques Androuet du Cerceau, the founder of an important family of artists.³⁸ In Cerceau’s intention, the book could be useful to those that are curious about antiquities and even more to the architects that could be inspired by them.³⁹

Over this period, illustrations start progressively to be seen as pleasant additions to texts and publishers pushed for their insertion in books to embellish them and make them more appealing to buyers. Some scholars were however very cautious about which illustrations they wanted to insert in their books, such as the Dutch philologist and antiquarian Justus Lipsius (1547-1606), who applied the same philological approach he used to interpret and reconstruct texts to the study of ancient ruins. Lipsius stayed in Rome from 1568 to 1570 where he worked as secretary to Cardinal Antoine Perrenot de Granvelle and “diligently sought out many libraries, statues, inscriptions, coins, and whatever was relevant to the understanding of antiquity” (Papy 2004, 103). He walked in Rome, admiring and making notes of the ruins with the company and guide of the historian and antiquarian Fulvio Orsini, who had built up a vast knowledge of Roman



Figure 5 The imaginative reconstruction drawing of the temple of Artemis in Ephesos (1572) by the Dutch painter Maarten van Heemskerck (source: https://commons.wikimedia.org/wiki/File:Temple_of_Artemis.jpg)

history together with a collection of antiquities and a well-furnished library (Papy 2004, 104-5).

A passage of Lipsius' second edition of the *Polioreticon sive de Machinis, Tormentis, Telis Libri Quinque* (1599), in which reconstruction drawings of *ballistae* were inserted to better convey the textual explanation on the functioning and appearance of this Roman weapon, is particularly interesting for our purpose to investigate the role and development of reconstruction drawings over the centuries. The reason why visual representations are important in Lipsius's view is clearly expressed in a dialogue with his friend Dominicus Lamponius that he reports in the *Polioreticon*: "Lamps.: Forgive me, Lipsius, but we shall accomplish little, if you present information about these machines to the ears only. Lips.: What can we do further? Lamps.: You should present it to the eyes as well. These can understand and judge more quickly at a single glance, than the ears can after much listening."⁴⁰ Lipsius, however, was a severe judge of the accuracy of the illustrations that he included in his texts, to the point that in the opening of the second edition of his *Saturnalium Sermonum Libri Duo* (1585) he alerts the reader that he did not agree with the insertion of the illustrations that were included by the publisher. Likewise, in another passage of the second book, he notes that the drawing of the gladiatorial games contained some invented elements that are the product of artistic license and not historical truth.⁴¹ The "veritas" that Lipsius advocates in his illustrations corresponds however to the state of knowledge of his time, with the result that anachronisms can be found, such as the presence of typically Medieval walls protecting the Boeotian city of Plataea depicted under siege in one of the illustrations of the *Polioreticon* (fig. 6).

As this overview has showed, in this period scholars had not yet developed what could be called a scientific method in modern terms and their approaches towards the study of antiquities and the making of reconstruction drawings of ruins greatly vary in relation to their personality, interests and background. There are however some elements that emerge as common shared values among scholars, which include a more marked reliance on personal surveys, and hence on primary sources, a more critical approach towards previous scholarship, a conscious use of conjectural integrations based on comparisons and exchange with peers, and a more defined idea about the role of reconstruction drawings in explaining and clarifying concepts otherwise difficult to grasp. These considerations contribute to a reassessment of the antiquarians' approaches to antiquities in line with recent scholarship which has aimed to re-contextualize them in their historical and cultural period.⁴² The traditional rendering of antiquarian endeavours as amateurish and unscientific has been in large part overemphasized and generalized to underline the contrast



Figure 6 Reconstruction drawing of the siege of Plataea in Justus Lipsius' *Polioreticon* (1596), 66 (copy digitized by Google books)

with the scientific and modern approach of the developing discipline of archaeology in the 19th century (Marchand 2007, 248-85). In this view, antiquarianism was therefore dismissed as a "wrong-turning on the pathway to archaeological enlightenment" (Murray 2007, 14).⁴³ As the next section will further confirm, antiquarian production of the 16th and 17th century should not be discarded as naïve, as it in fact sets the basis for the revolution of the historical method that will impact modern day archaeology. Its analysis in fact enriches the discussion about the roots and methodologies of this discipline.

4 THE 17TH CENTURY

In the 17th century wars, pestilences and famine invested Europe. Especially devastating was the Thirty Years' War (1618-1648) which ended with the peace of Westphalia, but had long term repercussions on the social and political balance of the European powers. Against this background, the cultural panorama was very dynamic and the conceptual and practical developments, which were maturing in the last decades of the previous century, consolidated. Philosophers such as Francis Bacon (1561-1626), Thomas Hobbes (1588-1679), René Descartes (1596-1650), and Benedict Spinoza (1632-77) all contributed to create a vibrant intellectual scene; science made important advances thanks to the observations and theories by Galileo Galilei (1564-1642), Johannes Kepler (1571-1630), Blaise Pascal (1623-1662), and Isaac Newton (1642-1727); art and architecture flourished in the Baroque style with the achievements of artists and architects such as Caravaggio (1571-1610), Gian Lorenzo Bernini (1598-1680), and Francesco Borromini (1599-1667).

During this period, a new way of researching is conceived, which originated primarily from relying on empirical

observation and on the use of reason, as expressed in the ideas and writings of Bacon, Galileo and Descartes. In 1637, Descartes published his *Discours de la Méthode* where he explained his view on the method that he thought necessary to be applied to study and research. The key elements were a rational and critical approach towards traditionally accepted knowledge: everything had to be doubted, while the only certainty was the existence of the being who conceives the doubt, which is summarized in his famous proposition “cogito ergo sum”: I think, therefore I am. Empiricism and rationalism promoted the development of a scientific method based on original observations and first-hand experience, and on a deductive reasoning to reach knowledge. Especially towards the end of the century, these principles would start to impact more profoundly also the study of antiquities, by reinforcing the emphasis on the self-inspection of ruins and on a critical approach towards tradition, both in the form of Classical authors and of previous generations of scholars.

The interest in antiquities and the collection of small finds, coins and inscriptions continued to rise in the course of this century. The antiquary became a figure which was enough defined to be satirised in 1628 in the collection of characters by the British bishop John Earle as a man “that hath that unnaturall disease to bee enamour’d of old age, and wrinkles, and loves all things, (as Dutchmen doe cheese) the better for being mouldy and worme-eatern”.⁴⁴ In his caricature, Earle presents the antiquarian as a great admirer of past relics, which he seeks, inspects and collects with much passion, to the point that he disdains all his contemporary products, even printed books which “he contemnes, as a novelty of this latter age”.⁴⁵

In Italy, the fascination for Rome continued to inspire antiquarian works, one of the most famous being the *Antiquae Urbis Splendor* by Giacomo Lauro. Lauro, born most likely in Rome at an unknown date in the second half of the 16th century, started to work on the *Antiquae Urbis Splendor* probably around 1586. The four volumes came out between 1610 and 1628, after which they were reprinted in several editions until the very end of the 17th century. As the title promises, Lauro’s aim was not to create an accurate reconstruction of Rome; instead, he wanted to represent the glory and splendour of the ancient city, which he conveys through a series of reconstruction drawings of monuments and views of ancient Rome and nearby places of interest, such as Portus, the ancient harbour of Ostia. These representations were appreciated by artists such as Bernini and Borromini as models and source of inspiration (Del Pesco 1984, 418-9; Di Calisto 2005), and were popular among travellers and visitors that came to Rome, serving as a sort of tourist guide. In the 1625 edition, in fact, descriptions of the represented buildings in Italian, German and French were added to the original Latin text to make this

work more appealing for a broader audience.⁴⁶ The editions published in 1637 and 1641, moreover, were sponsored by the Swiss Guard Hans Gross (under the pseudonym of Giovanni Alto), who was working in his spare time as a tourist guide in Rome.

As we can gather from Alto’s dedication to the reader, 17th century tourists, especially German and French, wanted to better understand the buildings in ruins and to have some visual souvenirs to take home. Lauro’s reconstruction drawings were therefore meant to serve this very purpose by providing those visiting Rome with a visual memory of the monuments they saw, that they could show to relatives and friends at home. Gross is himself portrayed in one of the drawings, while he is showing the *Meta Sudans* between the Colosseum and the Arch of Constantine to a group of German nobles (fig. 7). The explanatory text under this drawing well illustrates the idea that these encounters with the distant past held an educational value. They were perceived not only as an honest and recreational way to spend the time, but also as an opportunity to reflect upon the “vicissitudes of all things, on how now lies what previously had flourished.”⁴⁷

The dedication to the reader at the beginning of the volume and the explanations of the drawings give us also an indication of the method and sources that had been used to create such representations: accurate recording of the extant remains that were compared to the buildings engraved in medals, marbles and metals, ancient writers (most notably Vitruvius, Varro, Livy, Suetonius), and modern authors such



Figure 7 Drawing of the Meta Sudans in Lauro’s *Antiquae Urbis Splendor*. On the left, Hans Gross with a group of German tourists (Savannah College of Art and Design Digital Collections)

as Ligorio,⁴⁸ Dupérac, Biondo, Marliani, Fulvio, Panvinio and Lipsius.⁴⁹ It must be noted, however, that Lauro was mainly an engraver and had little knowledge of architecture. He therefore relied much on the visual models that were known at the time, supplying with coherent fantastic elements the missing pieces in his reconstructions (Del Pesco 1984, 426).

As previously noted, the expertise of the drawing-maker has a great influence on the drawing method, the choices about which elements to draw and the final aim of the work. This difference is clearly visible when comparing the reconstructions included in Lauro's work, which were mainly aimed at tourists visiting Rome, with the drawings made by the French architect Antoine Babuty Desgodetz (1653–1728) and published in *Les Edifices Antiques de Rome: Dessinés et Mesurés Très Exactement* (1682), which were meant instead to create a reliable documentation of the buildings for French architects interested in Roman architecture. Desgodetz's treatise, which remained a reference work on Roman antiquities in the following century, is organized in chapters, each one describing one monument (mainly temples, arches, and theatres) that was illustrated with plans, sections, details, and reconstruction drawings. The reconstruction drawings are purely geometric and report accurately the measurements of each part of the structures. Buildings are drawn either from the front or from one side, without a perspective view or any attempt to insert vegetation or people, to make them more engaging to the viewers as Lauro had done in his drawings.

The predominance of works on Roman antiquities in the previous paragraphs is a reflection not only of the prevalent interest of antiquarians and tourists in the 17th century, but also of the options of travellers in that period. Greek antiquities were in fact more challenging to visit, as the Ottoman conquest of Greece in the 15th century had closed the frontiers of the empire, making Greece difficult to enter from this period onwards. Cyriac of Ancona was indeed one of the last travellers that could freely move in Greece, at least until 1687 when the Venetians invaded Greece and took possession of Athens even if only for a short period. In the meantime, sparse information over Greek antiquities was coming from diplomats, traders or missionaries who came back also with some ancient artefacts (Sánchez Hernández 2010, 11).

The political situation in Greece has had an impact also on the state of the scholarship on Greek antiquities. The isolation of Greece and the reduced accessibility of its monuments made the books on this subject an appealing reading for both scholars and non-specialists. Given the difficulty to reach the country, publications on Greek antiquities were mainly based on descriptions offered in ancient sources, such as the 2nd century AD Greek traveller Pausanias. For example, the Dutch Johannes Meursius

(1579-1639), professor of Greek and History in Leiden in the second decade of the 17th century, wrote his *Athenae Atticae* (1624) without having ever visited Athens, but by relying on the material he found in the well-furnished Leiden University library.⁵⁰ The inaccessibility of Greek antiquities made moreover possible the circulations of unverified information and allowed publications such as Guillet de la Gulletière's book *Athènes Ancienne et Nouvelle* (Paris, 1674) that were not substantiated by any personal encounter with the ruins described and reconstructed. Although the frontispiece of the second edition of this book (1675) promises that the treatise was "augmentée en plusieurs endroits, sur les memoires de l'auteur", de la Gulletière, historiographer of the Royal Academy at Paris, had never been to Greece himself and had based his work on Meursius' and on the information that he could access because of his appointment at the Royal Academy. The book contained a map of ancient Athens that was completely fanciful. De la Gulletière's forgery was disproved some years later when the French doctor Jacob Spon wrote the accounts of his journeys in his *Voyage de l'Italie, de Dalmatie, de Grèce et du Levant* (1678) and was able to prove the unreliability of Guillet's map and correct also some of the inaccuracies and errors in Meursius' text (Sánchez Hernández 2010, 11).

At the turn of the century, the signs of a changing approach towards the study of antiquities can be seen in the work of the Florentine antiquarian Filippo Buonarroti (1661-1733). In 1698 Buonarroti published his *Osservazioni Storiche Sopra Alcuni Medaglioni Antichi* ("historical observations over some ancient medallions"), a treatise on the coins and medals from the collection of Cardinal Gasparo di Carpegna, which he illustrated with several drawings of his study material. Although this iconographic work does not contain any reconstructions, it is worth mentioning since it is quite telling on a changed perception towards the study of antiquities that will become more marked in the 18th century.⁵¹ In the preface of his work, Buonarroti confesses the many doubts that he felt in studying this material, insomuch as to define his treatise a "stodgy collection of doubts, instead of one of certain and digested observations".⁵² Casting doubt on his observations is quite remarkable and stands out from the prevalent approach of antiquarians claiming to present "accuratissimae descriptiones" of the documented and reconstructed antiquities. Buonarroti explains the reasons for his doubts, saying that the study of antiquities greatly differs from any other, and requires a more complex method of investigation. Its premise was a sincere confession that one does not know what ancient painters and sculptors have had in their minds ("il confessar sinceramente di non sapere tuttociò che ha potuto venir' in capo a tanti pittori e scultori antichi"),⁵³ and the acknowledgment of the challenging task that is set out

for a scholar studying antiquities, facing the difficulty to identify the correct information among the many previous works on this topic instead of simply reporting what others had written before, thus behaving “like sheep that leave a closed space, one following the others”.⁵⁴

5 THE 18TH CENTURY

The beginning of the systematic excavations at Herculaneum in 1738 is traditionally taken as the starting date of the discipline of Classical archaeology. In previous years, excavations had been carried out on the Aventine (1705), on the Domus Flavia on the Palatine (1720) and on the graves along the Via Appia (1726) directed by the antiquarian from Verona Francesco Bianchini.⁵⁵ These, and the excavations that started in 1748 in Pompeii,⁵⁶ gave a great impetus to a widespread interest in Roman antiquities in the 18th century that was nourished by young savants visiting the ruins during their *Grand Tour*.⁵⁷ Even the models and vocabulary of the French Revolution came from the classics, and Rome, Greece and Egypt were seen as the cradle of civilisation (Díaz-Andreu 2007, 67-78). Illustrations were by now seen as an integral part in the study of antiquities, as confirmed by the words of the British antiquarian William Stukeley (1687-1765), who stated that “without drawing or designing the Study of Antiquities or any other Science is lame and imperfect”.⁵⁸

The new discoveries created an even more pronounced need to document and represent the monuments and their decorations in their context, with a visual language that was appropriate for presenting them to the public (Barbanera 2010, 33-4). The first museum of antiquities started to be established growing out the antiquarians’ private collections and opened to visitors, the first being the Capitoline Museums in Rome (1733) that was followed by other similar initiatives all over Europe, such as the British Museum (1759) and the Louvre (1792) (Díaz-Andreu 2007, 46-7). After the mid-18th century, an interest for landscape started to increase, encouraged by the ideas on nature by Jean-Jacques Rousseau (Dubini 2002). This new way of looking at landscape was of great importance for the contextualization of ancient buildings, that started to be seen not in isolation any more, but as part of their surroundings.

Works on antiquities started to be systematically collected in larger publications such as the *Thesaurus Antiquitatum*. At the turn of the 17th century, the famous *Thesaurus Antiquitatum Romanarum* (Utrecht/Leiden, 1694-1699) edited by the German scholar Johannes Georgius Graevius in twelve volumes and the *Thesaurus Antiquitatum Graecarum* (Leiden, 1697-1702) by the Dutch Jacobus Gronovius appeared in print in The Netherlands.⁵⁹ The aim of these collections was to reprint and make available to a wider audience works that had been previously published or that

were difficult to access. However, the works that were published or republished in these years varied greatly in terms of the accuracy and reliability of the material presented. In one of the 1712 issues of the *Giornale de’ Letterati d’Italia*, an important Italian literary journal founded in 1710, an article by the intellectuals Pietro Caterino Zeno, Scipione Maffei, and Giusto Fontanini criticized the fact that many histories of Italian cities were still being published even though they were not based on historical documentation but on myths and legends (Gallo 2007, 111-2).⁶⁰

In the second half of the century, in Germany Johann Winckelmann published his *Geschichte der Kunst des Alterthums* (1764) where he considered ancient artistic productions from the point of view of their style to establish their chronology and not only from the point of view of their iconographic motifs, as was the prevalent approach in the circles of antiquarians.⁶¹ Winckelmann is considered the founding father of art history and had a great impact on the development of German Hellenism with his studies on Greek art. The German scholar, in fact, sustained the superiority of Greek art over Roman, which he saw as always attempted to imitate the Greek original,⁶² and was one of the leading intellectuals who saw the roots of European identity in Greece (Morris 2006, 258). The influence of Winckelmann’s writings impacted in various degrees on the study of antiquities in the other European countries. In Italy, for example, his contribution was not absorbed much by Italian antiquarians, not only because of the linguistic barrier posed by reading the German text, but also for the diffidence of erudite circles towards a foreigner’s opinion (Gallo 1999, 841).

In France, the Comte de Caylus (1692-1765) stands out among his contemporary antiquarians.⁶³ The mutual antipathy with Diderot and with the “Encyclopédistes”, caused not least by Caylus’ aristocratic lineage, resulted in a sort of *damnatio memoriae* of Caylus in France (Fumaroli 2007, 168).⁶⁴ From the 19th century onwards, however, several studies have reassessed his contribution to the development of a scientific method, to the point that he has been paired with Winckelmann as a founder of Classical archaeology (Gran-Aymerich 2001, 40).⁶⁵ His most important work, the *Recueil d’Antiquités Égyptiennes, Étrusques, Grecques et Romaines*, was published in six volumes and a supplement between 1752 and 1767, and contained explanations and drawings of the materials that he personally owned and inspected. De Caylus’ reliance on the comparative method allowed him to go beyond the taxonomies that had been established by Classical authors (e.g. Varro), thus contributing to the elaboration of the typological method based on his observations and comparisons between the artefacts that were part of his large collection (Warin 2011).

On the other side of the English Channel, the comprehensive *History of the Decline and Fall of the Roman Empire*, written by the historian Edward Gibbon (1737-1794) and published in six volumes between 1776 and 1788, will influence the historical method of the 19th century for its reliance on primary sources and will become a reference work on the subject for following generations (Momigliano 1954, 450-63).

In Italy, one of the most controversial figures of this period, not least for his reconstruction drawings, is Giovanni Battista Piranesi (1720-1778), a troubled and restless architect who was fascinated by Roman architecture. Like the architects of the previous century, he was convinced that ancient buildings should be the starting point for the modern

architect to “reshape the good taste in architecture, which was twisted by the barbarian coarse and ill-fated way of construction”.⁶⁶ Some of the publications of the archaeologist Bianchini were the starting point for the composition of Piranesi’s *Antichità Romane*, a treatise on Roman antiquities that he published in 1756. In the preface of this work in four volumes, he stated clearly the purpose of this publication in trying to preserve the memory of the ancient buildings of Rome with his prints: “And since I’ve seen that the remains of the ancient buildings of Rome, that are scattered in gardens and other cultivated fields, are decreasing in number day after day, either because of the harm committed by time, or for the greed of their owners who are surreptitiously digging them up to sell their parts to construct new buildings,

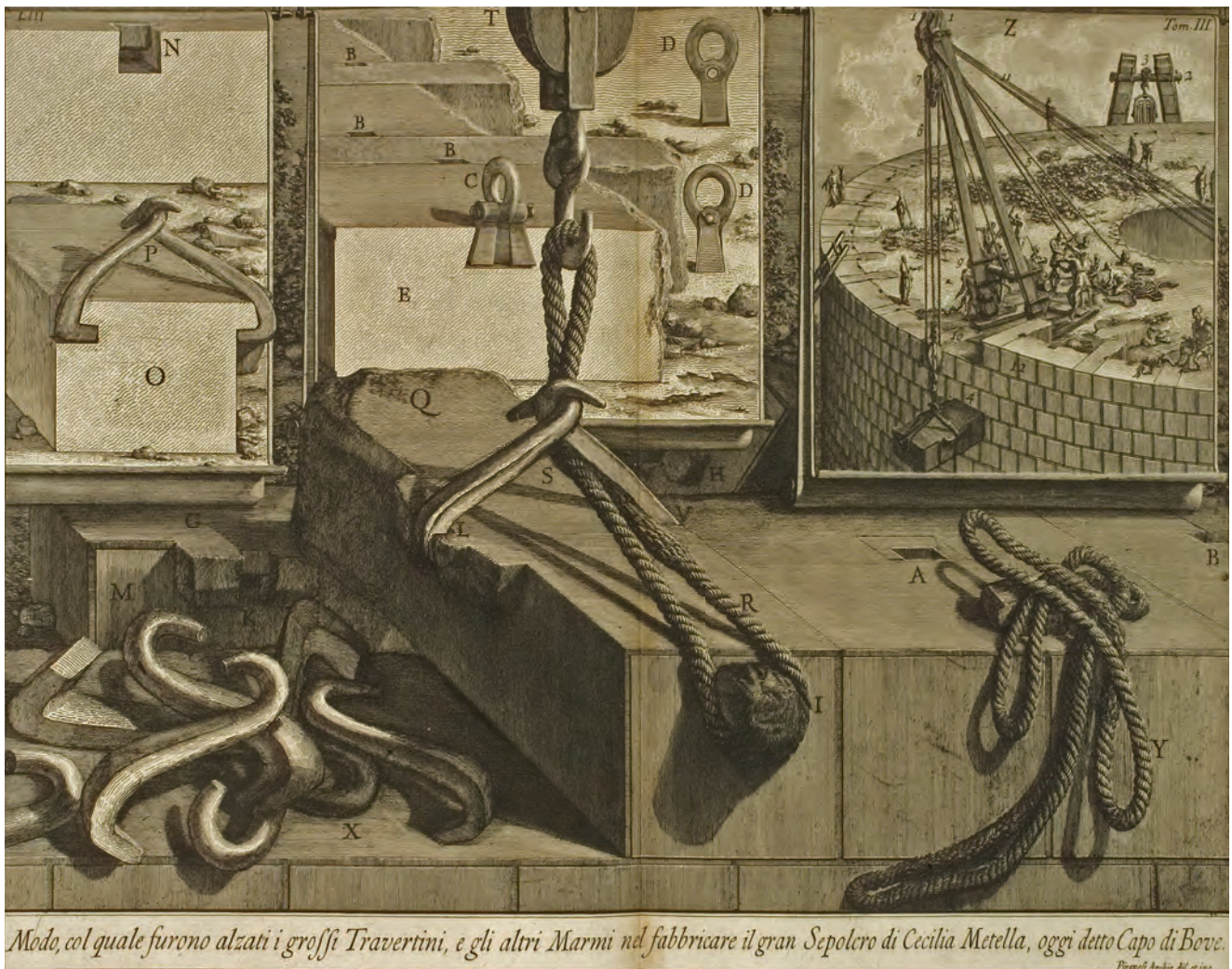


Figure 8 Piranesi's drawing of the construction technique adopted for the funerary monument of Caecilia Metella, in *Le Antichità Romane: Divisa in Quattro Tomi: Contenente gli Avanzi de' Monvmenti Sepolcrali di Roma e dell'Agro Romano*, vol. III, pl. LIII (digitized by Google books)

I decided to preserve them by means of my prints.”⁶⁷ In the same preface, Piranesi complained that he could not rely much on modern works on Roman antiquities since they contained many mistakes, to be attributed either to the fact that their authors did not carefully inspect the ruins, or to their ignorance of architecture, or to the fact that they did not have a complete plan of Rome (such as the famous one that Giovan Battista Nolli had worked on between 1741 and 1743 and was published in 1748, see Leto 2013). For this reason, Piranesi had to turn to ancient authors, analysing them and comparing them with the extant remains that he carefully recorded.

Piranesi has received much attention with publications and exhibitions devoted to him and to his unusual approach to architecture and antiquities. His style of drawing is characteristic and his interest for ancient building techniques is clear in his publications, in which he supplied etchings representing sections and details of buildings that aimed to illustrate ancient construction methods (fig. 8). The composition style that he adopted in many of his drawings was meant to collate all the different sources that he drew on to create the reconstructions, resulting in what Nixon has called “multi-dimensional images” (Nixon 2002, 476). In these drawings, Piranesi took into consideration all the elements that compose a structure, such as its foundation, the elevation and its construction technique, contrary to the traditional view which focussed primarily on decoration (Barbanera 2010, 35).

His reconstructions, however, have puzzled contemporary and modern scholars for their mixture of archaeology and invention, their purpose being difficult to grasp. Piranesi possessed in fact a great knowledge of Roman architecture, that he acquired with personal observations of the buildings and by reading modern and ancient authors that he combined with his skills in architectural design; yet, he introduced many elements from his own imagination that made his reconstruction drawings to be discarded by many as mere imaginative depictions. An example of his approach is his reconstruction of the Campus Martius in Rome, titled *Ichnographia Campi Martii Antiquae Urbis*, which he published in 1762. In the dedication to the Scottish architect Robert Adam, Piranesi explains his concerns about the reception of this work, especially the fact that his work could be seen as imaginative and false, while he had taken some creative license, likewise, he observed, had ancient architects.⁶⁸ This plan seems therefore a conscious attempt to break the rules of architecture and therefore should not be considered as a mere visionary reconstruction; instead, according to Aureli, it needs to be contextualized within the recurrent theme of the “*instauratio Urbis*”, the ruins of ancient Rome being used as symbols to convey a message of renovation (Aureli 2011, 92).⁶⁹

In the late 18th century, a Greek revival movement started to grow out of the interest in ancient Greek architecture. In Britain, The Society of Dilettanti, which was founded in London around 1734, contributed to make known the deplorable state of ancient monuments in Greece and financed studies and publications on the subject. Notable outcomes of the Society were the surveys of Athenian architecture by the artist James Stuart and the architect Nicholas Revett between 1751 and 1754, who produced accurate drawings of monuments that are now lost. The four volumes resulting from their work were published between 1762 and 1816 under the title of *The Antiquities of Athens* and will influence the taste for architectural classicism during the late 18th and 19th centuries (Stiebing 1993, 121).

Greece had become the subject of romantic and idealised writings by many scholars and men of letters, as testified to by works such as the *Voyage Pittoresque de la Grèce* (1782) by the French ambassador to the Ottoman Empire and scholar of Greek antiquities Marie-Gabriel-Florent-Auguste de Choiseul-Gouffier (1752-1817).⁷⁰ In this collection of his impressions gathered during his travels, he included numerous reconstruction drawings of the monuments he had seen, such as a reconstructed view of the ancient town of Assos on the coast of Asia Minor (fig. 9), aiming at conveying “a faint idea” of the original cityscape. Interestingly, he legitimates his attempts at reconstructions of architecture by making a parallel between the visual reconstruction of ancient monuments and the philologist’s restoration of a corrupted ancient text,⁷¹ an analogy that will be used again in recent years to call indeed for a “new philology” of 3D digital reconstructions, a requirement to ensure the correct assessment of computer-based reconstructions by the academic community (Frischer *et al.* 2002, 7-18).



Figure 9 Restored view of Assos, in de Choiseul 1809, pl. 10

In this period, the separation between the rigorous and archaeologically accurate documentation and a more visionary and artistic way of depicting antiquities starts to become increasingly evident and will become more pronounced from the second half of the 19th century. Piranesi's style of creating composite images remained quite unique and was followed up only for the illustrations of the "voyages pittoresques", a genre that became popular at the end of the 18th century to describe journeys in thus far unknown destinations.⁷² The archaeological documentation, on the other hand, became more and more specialized, in a drawing style that aimed to accurately record the evidence and to establish some standard methods to distinguish between documentation and interpretation, and this will become more evident in the course of the 19th century.

6 THE 19TH AND 20TH CENTURIES

In the 19th century, archaeology started to gain the status of an academic discipline and was introduced into universities. The world's first professor of archaeology was Caspar Reuvsen appointed at the University of Leiden (The Netherlands) in 1818. By the mid-19th century, ten chairs of archaeology existed in Germany and one in France, while in 1851 the first chair was established in Great Britain by John Disney at the University of Cambridge (Leach 2007, 35-9). France and Germany were also the first countries to establish their schools in Athens: the *École française* in 1846 and the *Deutsches Archäologisches Institut* in 1874. Italy was struggling to become a truly united country after 1861 and, despite individual bright examples such as Giuseppe Fiorelli, Italian archaeology was lacking experienced personnel able to be in charge of the developing institutions for the new born state.⁷³ The first professor of "archaeology and art history" in this country was the Austrian archaeologist Emanuel Löwy, who was appointed in Rome in 1891.⁷⁴

In the first decades of this century, the stratigraphic principle established in geology was introduced into archaeology. Although stratigraphic excavation would still be far from being the standard field methodology, a considerable change is noticeable in the excavation practise in the closing decades of the 19th century. In the 1870s, the German scholar Alexander Conze started the large scale and meticulous excavations at Samothrace, which were published in a report that for the first time included photographs; the German Archaeological Institute commenced the excavations at Olympia, under the directorship of Ernst Curtius, paying great attention to small finds and stratigraphic information (Stiebing 1993, 138; Fagan 2016, 92). In Britain, Pitt Rivers' careful excavations at his Cranborne Chase estate in Dorset between 1880 and 1900 set the methodological standard for the following generations.⁷⁵ Outside the academic environment, local antiquities societies, museums and

journals grew exponentially, mirroring the increased participation of the middle class in the study of antiquities (Marchand 2007, 255).

The fascination for classical literature and Greek and Roman antiquities inspired and promoted narratives of national identity (Murray 2002, 238).⁷⁶ In Greece, the revolts that had begun in 1821 against the Ottomans fuelled sentiments of Romantic Nationalism in the other European countries. These feelings and calls for action are well embodied by the poem "Hellas" composed by Percy Bysshe Shelley in 1821, in which he urges the British people to support the Greek War of Independence writing that "We are all Greeks".⁷⁷ The independence obtained led to the formation of the new state, which was rooted in the ancient Greek past, and measures were taken (such as the creation of the Greek Archaeological Society in 1837) to protect the Greek heritage that had already been looted and appropriated by other European countries.⁷⁸ As Hamilakis and Yialouri have shown, Greek classical antiquity played a crucial role in the formation of the new state and has been used throughout Greek history as symbolic capital that could be exchanged in the negotiation for power and as an authoritative source that has been used to legitimate or resist a regime (Hamilakis and Yialouri 1996, 117-29).

In Victorian Britain (1837-1901), Latin and Greek held a predominant role in the curriculum at elite schools and universities (see Goldhill 2011), with Homer being considered an inspirational and relaxing reading (Wood 1999, 178), and the study of Roman Empire being seen in the light of the politics of colonial consolidation of the British Empire. Mythological and historical scenes and atmospheric views of ancient Rome and Greek landscapes appear in the works of several painters, such as William Turner's "Ancient Rome" exhibited in 1839 (Thomas 2008, 89-90), and in the many paintings by the Dutch Sir Lawrence Alma Tadema (1836-1912).⁷⁹ In this context, illustrations of ancient monumental architecture took a different route than the drawings of finds, as the latter was increasingly employed by archaeologists to create artefacts' typologies (Lewuillon 2002, 226).

Roman and Greek architecture continued to be used as training material for young European architects. During the 19th century, numerous French architects came to Rome and visited Greece leaving many drawings of ruins and reconstructions of the monuments. The "Prix de Rome", a scholarship established in the 17th century and opened to architects in the early 18th, gave in fact the possibility for many French students to spend some years in Rome, applying their skills to study ancient sculptures and monuments (see Cassanelli *et al.* 2002). One of these architects was Augustin-Nicolas Caristie (1783-1862), who won the prize in 1813. After he came back to France he was

in charge of the restoration of the Roman arch at Orange which he published in his *Notice sur l'État Actuel de l'Arc d'Orange et des Théâtres Antiques d'Orange et d'Arles* (1839) and his *Monuments Antiques à Orange: Arc de Triomphe et Théâtre* (1856) (Sturgis 1905, 455). Later on, others won the prize such as Constant Moyaux (1835-1911) in 1861, Julien Guadet in 1864 and Louise Noguét in 1865, all of them engaging in creating reconstruction watercolors of monuments in Rome, especially in the Forum. To Greece, instead, went Albert Tournaire (1862-1958), who participated in the excavations at Delphi and in 1894 created a restored drawing of the complex of the sanctuary of Apollo, by merging the extant remains that he had surveyed with the information from ancient texts (Ragon 1995, 57).

Among the British scholars who travelled in Greece and Italy in this period, one of the most famous is the London architect Charles Robert Cockerell (1788-1863), who spent over seven years in his *Grand Tour* around Greece and then

Italy studying ancient architecture and participating in excavations. He then applied his taste for classical architecture to design buildings such as the offices of the Bank of England in different cities. Moreover, he expressed his interest for Greek and Roman buildings in several reconstruction drawings, such as of the city of Athens, the Parthenon, the Roman fora and the houses at Pompeii (Richardson 2001, 79). His restored views were used in other publications, such as his view of Athens (fig. 10) which is included in the second volume of H. W. Williams, *Selected Views in Greece* (1829).

In this period, archaeologically informed reconstructions and art productions depicting imaginative scenes of the past developed in increasingly different directions. Scholars in fact started to pay more attention to the choices they made in the reconstruction drawings to be inserted in their publications, thus offering more elements to the reader to assess the reliability of their illustrations, a topic which has



Figure 10 Restored view of Athens by C. R. Cockerell in Williams 1829

generated discussion among scholars dealing with reconstructions in the digital age (see e.g. Miller and Richards 1995; Ryan 1996; Forte 2000; Denard 2012). An early example of an attempt to make the reconstruction drawings “intellectually transparent” comes from the British scholar Sir William Gell (1777-1836). In his *De Pompeiana* (1819) that he wrote in collaboration with the British architect John Peter Gandy (1787-1850), several reconstruction drawings are presented, that were accompanied by explanations to facilitate the reader in understanding the choices made in the restorations. In the preface, the method that was used to create the drawings is elucidated, which consisted of using the “camera lucida”, a device which helped in rendering the correct perspective in the drawings. Each plate is preceded by an introduction that discusses the drawings and the accuracy of the elements that were inserted. For example, for plate XIX (fig. 11), the authors state that “The gateway is restored in the simplest manner possible, but the biga over it is imaginary. Of the walls there can be no question. The pedestal supporting a statue on the left undoubtedly was built for that purpose; but it possibly might have been an equestrian or other group since the plan of the pedestal is not square. The statue is from one found in the city. (...) As a general observation, it may be marked that in this view everything beneath the horizontal line is certain; above it, only partly so” (Gell and Gandy 1852, 98).

In some cases, the drawing of the reconstruction was juxtaposed to the one of the extant remains, as in the case of plate XXIX representing the restored atrium of the house of Sallust, since by comparing the two “it will be seen how far the restoration is authorised” (Gell and Gandy 1852, 125). Moreover, the text updates the reconstructions when some new discovery would shed new light on the section of the



Figure 11 Reconstruction of one of the city gates of Pompeii (Gell and Gandy 1852, pl. XIX)

city that was drawn. This is for example the case of the restored view of the temple of Jupiter, where the textual explanation specifies that “The part to the right had perhaps a second order, as two sizes of columns are found upon the spot; but this restoration was imagined before the excavation had fully laid open the part beyond the building marked 3” (Gell and Gandy 1852, 168).

During the 19th and 20th century, illustrations depicting reconstructions of ancient buildings and sites started to be increasingly made either by archaeologists themselves, or by draughtsmen and architect participating in excavations and being actively engaged in discussions with the archaeologists, in order to visualize the most plausible reconstruction hypotheses in their drawings. One of them was the Dutch Piet de Jong (1887-1967), who is considered “one of the best-known, most distinctive, and most influential archaeological illustrators of the 20th century” (Papadopoulos 2007, 2). By the first decades of the 20th century, he was involved in several projects: he worked with Arthur Evans and the British School to make reconstructions of the Palace at Knossos and with Carl Blegen and the American School at Athens for the reconstruction of the Palace at Pylos, and participated for several years in the American excavations in the Athenian Agora. His numerous watercolors, depicting reconstruction of objects, wall paintings and buildings, have had a great influence on shaping the image of Aegean prehistory and Classical archaeology. The level of detail and quality in the drawings made these works of art in themselves, as stated by Rachel Hood: “The archaeologists asked for a restoration of the pictures and patterns on the pottery or a reconstruction of an architectural moulding. What they got were works of art” (cited in Papadopoulos 2007, 17). All the scholars that he worked with held a high opinion about him, Blegen for example remembered him as “(...) our artist, whose constructive imagination recreated and brought to vivid perception the lingering aura of the Royal Mycenaean rulers who dwelt in this palace” (cited in Papadopoulos 2007, 13).

In the same period, in Italy, the archaeologist Giuseppe Gatteschi (1862-1935) was working on a series of reconstruction drawings of ancient Rome. The research related to this study took up thirty-four years of his life (1890-1924) and its publication in 1924 was endorsed by great archaeologists of the time, such as Rodolfo Lanciani (1847-1929).⁸⁰ Unlike de Jong, Gatteschi is not well known and sparse information on his life can be derived from his publications. Gatteschi based his reconstructions on a variety of sources (ancient authors, coins, the Severan marble plan *Forma Urbis Romae*, works of Renaissance architects), on his own personal observations of the buildings, and on the new archaeological discoveries that were made at that time.⁸¹ He tried to recreate lively scenes of the ancient urban way of

living by inserting drawings of people occupied in everyday activities in his reconstructions. Gatteschi embarked in this work aiming to preserve the memory of the ruins that he was seeing quickly disappearing after the major urban renovation that Rome was undergoing in that period. As Raphael before him, he complained that Rome had been destroyed not so much by the weather, earthquakes and Barbarian invasions, but rather by men, and especially by the 16th century Popes.⁸²

Gatteschi wanted to provide the reader with enough information about the reliability of his reconstructions. For this reason, his method was to supply each reconstructed view of ancient Rome with a photograph of the current state of the corresponding place taken from the same perspective of the reconstruction. In this way, one could immediately catch the correspondence between the two and be convinced of his accurate study.⁸³ Moreover, likewise Lauro's *Antiquae Urbis Splendor*, each drawing is accompanied by a short textual explanation in Latin, Italian, French and German discussing the sources that were used for the reconstruction (fig. 12).

In the course of the 20th century, reconstruction drawings have been used copiously as illustrations in books and exhibitions to convey a more immediate impression of the everyday life in the ancient world. Examples of influential publications that employed such drawings in the 20th century are Wycherley's *How the Greeks Built Cities* (1949), Paul McEndrick's *The Greek Stone Speak* (1962) and Peter

Connolly's and Hazel Dodge's *The Ancient City, Life in Classical Athens and Rome* (1998). A good example of an artist who was able to inject his artistic flair to archaeologically informed reconstructions, was the Englishman Alan Sorrell (1904-1974).⁸⁴ He studied art in England and won in 1928 a Prix de Rome scholarship that allowed him to get acquaintance with antiquities and archaeologists in Rome. Sorrell's unique style has fascinated and inspired generations of archaeologists. Although Sorrell was always keen on describing himself as an artist and not as an archaeologist, his drawings helped to trigger new research questions that the archaeologists that he collaborated with had not thought about before. In a preparatory sketch of the temple area at Caerwent, Wales, one could see his drawing method based on a gridded canvas that allowed him to maintain the correct proportions and perspectives and the presence of many annotations and questions about the rendering of the scene that he wanted to discuss with the excavators.⁸⁵ For example, Sorrell wonders about the most likely vegetation cover on the background of the scene and of the temple's courtyard, and makes inquiries on the correct locations of architectural elements (Catling 2013, 32-39). Other drawings bear traces of the extensive correspondence he engaged with archaeologists to clarify his uncertainties and suggest the inclusion of details in a rigorous and collaborative reconstruction process (Perry and Johnson 2014).

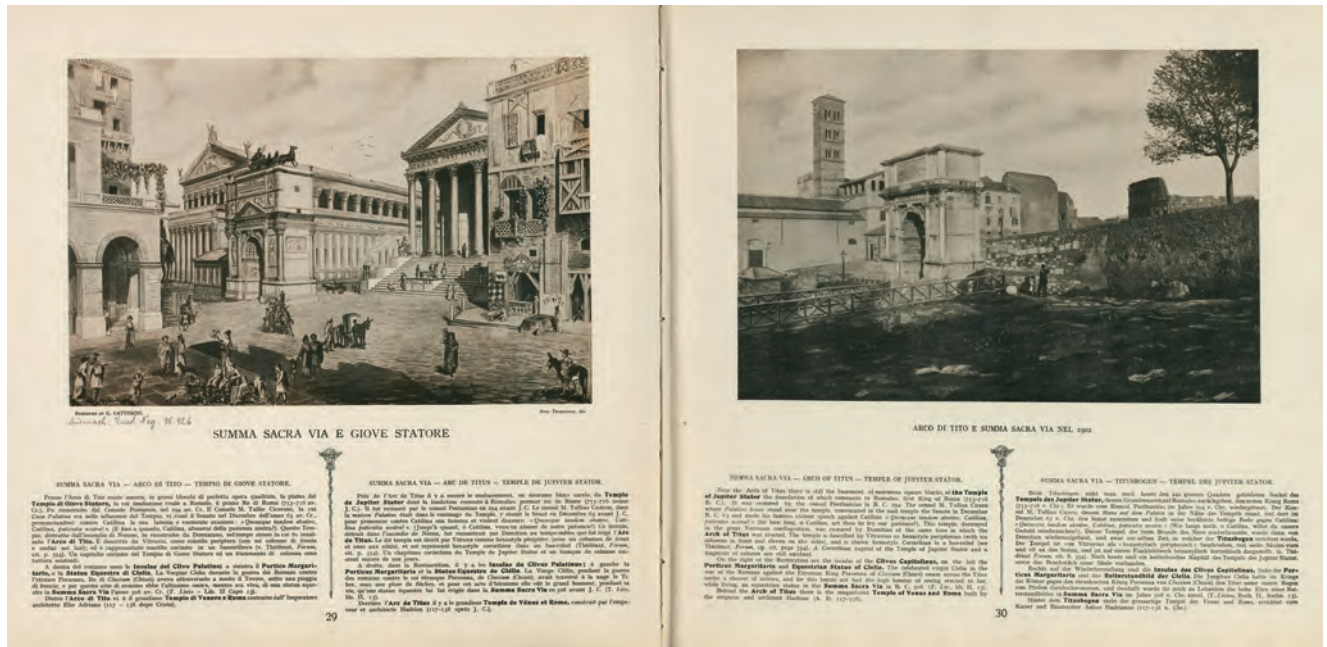


Figure 12 Gatteschi's reconstruction and photograph of the area of the Via Sacra and the Temple of Jupiter Stator (Gatteschi 1924, 29-30)

In the 19th century, physical models also started to be employed as a means to display the extant remains or the reconstruction hypotheses for an archaeological site. One of the earliest three-dimensional models of Italian antiquities is the one of Pompeii that was made in the late 19th - early 20th century. This model had a troubled history and was on display again in the early 1990s at the Archaeological Museum of Naples after restoration work that tried to save this delicate and dusty piece (Sampaolo 1993, 89-91). The streets were made of plywood, while the walls were of cork that was incised to create the different brickworks such as *opus reticolatum* and *incertum*. The frescoes are reproduced on the walls by using at first a base of plaster, and later on decorated paper that was used also for the floors. The vaults and ceilings were made in separate pieces so that it was possible to lift them to inspect the interior of the buildings (Sampaolo 1993). The model was of great importance for scholars, since, as the German archaeologist Johannes Overbeck pointed out, it recorded the ancient city, and allowed an overview of the excavations that could not be achieved with the panorama photographs that were available at that time (cited in Sampaolo 1993, 85). It is, however, even more important nowadays because, notwithstanding the ravages of time, the model keeps the record of *insulae* and decorations that are now lost, either destroyed during the wars or decayed from negligence.

Several 3D physical models have been created to represent the city of Rome in Imperial times. The first attempt to create a three-dimensional reconstruction of this city was made by the sculptor Giuseppe Marcelliani between 1904 and 1911.⁸⁶ This monochromatic model, known as the *Restitutio Urbis* (or “La Roma di Coccio”, since clay is the material that is made of), aimed to show Rome in the 4th century AD. The result, however, should be considered more as an artistic product than a reliable attempt to create a volumetric reproduction of the ancient urban layout. Marcelliani’s artistic background played in fact a relevant role in the realization of the project, which shows little archaeological knowledge of ancient Roman topography and landscape and is mainly based on fantasy (Giuliani 2007, 261; Ciancio-Rossetto 1990, 11-15).

In the same period, the French architect Paul Bigot created his “Le plan de Rome”, a 75 m² model presenting again the city at the time of the emperor Constantine. The model was first displayed during the 1911 exhibition celebrating the fiftieth anniversary of the unification of Italy (Pasqualini 2006, 631).⁸⁷ In order to facilitate the assembling of his model, Bigot divided it into 102 modules that could be easily combined together as pieces of a puzzle. The French architect started to work on this project in 1904 and continued to modify it until his death in 1942, conducting in the meantime research on Roman architecture and city

planning (Royo 1992; Royo 2006). During this period, the urban layout of Rome went through major changes and many archaeological discoveries were made that shed new light on the urban development of the ancient city. For this reason, Bigot devised a workflow that allowed him to quickly update the model when new information needed to be included. He therefore based his work pipeline on the creation of sketched mock-ups made of clay that could be revised several times before being finally plaster casted (Giuliani 2007, 261). Bigot paid also much attention to colours, that nowadays have mostly faded away, and to the contrast that the architecture in travertine and marble would create against the surrounding green vegetation (Bigot 1942, 6 cited in Royo 1992, 596). Moreover, it seems that Bigot had installed several projectors around the model emitting various colours to recreate the effect of light in Rome during different day and night times (Royo 1992, 596).

A different celebration, the bi-millenary of Augustus’ birthday in 1937, was the occasion to create another plaster-model of Rome, made by the Italian architect Italo Gismondi. The model was displayed during the “Mostra Augustea della Romanità”, an exhibition that Mussolini wanted in order to stress the connection both between the magnificent ancient Rome and the new one that he intended to create, and between Augustus and himself.⁸⁸ Gismondi, as previously Bigot, based his model on the fragments of the “Forma Urbis” that Rodolfo Lanciani had published in 1901 and that reported all the major buildings of ancient Rome that were known at the time of its creation at the beginning of the 3rd century AD. The model was made on a 1:250 scale and it extends over a surface of about 200 m², filling up an entire room of the *Museo della Civiltà Romana* in Rome. While the plaster-model of Rome is Gismondi’s best known achievement, he actually created many reconstruction drawings of ancient buildings and other plaster-models, representing for example Hadrian’s Villa at Tivoli (Ten 2007, 277-80), the complex of Claudius’ and Trajan’s harbours, and the ancient city of Ostia, the last two being currently on display at the Museo della Via Ostiense – Porta S. Paolo in Rome (Pellegrino 2007, 275-6).

Gismondi looked at the ancient structures with the technical eye of an architect, looking especially to materials and construction techniques, but as the archaeologist Giuseppe Lugli has pointed out “he combined a knowledge of the archaeological material which is remarkable for a technician” (Filippi 2007, 15). It is interesting to analyse the methodology that Gismondi applied to the creation of his model of Rome, to see how the Roman architect dealt with challenges that also the modern 3D model-maker is confronted with.⁸⁹ The first challenge that Gismondi had to overcome was the necessity of reconstructing the entire city, although many of its parts were not archaeologically

documented. This situation called for solving two problems, the first one was to find a way to relatively quickly fill in the empty areas with buildings, and the second one was to distinguish the buildings archaeologically attested from those that were inserted only to create a plausible view of the ancient city. To tackle the first problem, Gismondi created two categories of Roman building types, the *insula* and the *domus*, dividing each of them in three subtypes, thus obtaining six basic types that he could then arrange randomly to generate variety in the urban layout (Tschudi 2012, 391). To solve the second problem, he chose to create buildings with different levels of detail, by moulding only a volumetric outline for the building for which little or nothing was known and adding more details to those that were archaeologically documented. As Tschudi noted, “these two different approaches to architectural ‘unknowns’ may be seen to mark a transition from a historicist model of ancient Rome to a modernist one” (Tschudi. 2012, 391).

In 1951, Gismondi’s plaster model of Rome was used in Mervyn LeRoy’s cinematographic adaptation of *Quo Vadis: A Narrative of the Time of Nero*, the epic historical novel by the Polish writer Henryk Sienkiewicz (1895). Ironically, the model that was originally commissioned for the 1937 exhibition aiming to connect Mussolini’s and Augustus’ Rome was now used in the scene where Nero illustrates to his court his megalomaniac project for the new Rome he had envisioned (Wyke 1997, 140-1). The novel was rendered as a movie adaptation on five different occasions (the Italian silent movies in 1912 and 1925, the Hollywood blockbuster in 1951, the miniseries for Italian television in 1985 and the Polish version in 2001), each of them giving prominence to and interpreting in different ways the various themes of the story such as politics, ethnicity and religion.⁹⁰ For example, in the adaptation released in 1951, the aftermath of WWII, the American audience could easily grasp the reference to Hitler and the Nazi’s persecution of the Jews in Nero’s madness, his destructive effects on Rome and the persecutions against the Christians (Scodel and Bettenworth 2009, 93-7; see also Skwara 2013, 166).⁹¹ The Polish version of the novel focused instead on different aspects (such as the more explicit allusions to Poland and to the pontificate of Pope John Paul II), associating Nero’s rule to the communist regime and Saint Peter to the Polish Pope (Scodel and Bettenworth 2009, 97).

Quo Vadis’ movies are just an example of how the image of the reconstructed ancient world that has been elaborated and transmitted in movies has always been permeated by contemporary ideas and messages. In recent years, film historians have started to look at historical movies as powerful agents that shaped and popularized a historical narrative of the past, which represented and addressed the needs of the contemporary society (Wyke 1997, 8-13). At the

beginning of the 20th century, some indeed considered cinema as the new frontier to teach history and reconstruct the past in a way that could surpass in accuracy and capability of engagement any previous attempt (Wyke 1997, 9). As Wyke has shown, Roman virtues, such as military courage, the Emperors’ vices and the rise of Christianity opposed by the cruel Roman Empire have been deployed as recurrent themes in an extensive filmography to support different narratives, including nationalism, imperialism or opposition to tyrannical regimes (Wyke 1997, 14-33, esp. 20). In the early years of the introduction of cinema, for example, movies provided the collective experience needed to foster feelings of national identity in the United States and in Italy, two countries struggling to create an internal cohesion. For example, the Italian cinematographic production of *Scipione l’Africano* in 1937, sustained by copious financing by the Fascist regime, was infused with colonial ideology. This movie aimed to contribute to the creation of the ideal Fascist Italy that had to be “wise, strong, disciplined and imperial”, and resurrect the “immortal spirit of Rome”, as envisioned by Mussolini in his speech for the celebration of the foundation of Rome on the 21 April 1922.⁹²

The dominant Hollywood style of historical movies that was popular until the 1950’s and is well expressed by the colossal productions such as *Ben-Hur* (1959) and *Spartacus* (1960) knew a rapid debacle in the course of the 1960’s, culminated in the bankruptcy of the 20th Century Fox caused by the costs that the movie studio had to sustain for *Cleopatra* (1963), the most expensive production of the time, which did not return the expected revenues (Wyke 1997, 184). During the 1960’s, the audience could not identify any more with the clichéd characters and themes that had been proposed until that time in these rather standardized productions (Wyke 1997, 184-5). In striking contrast with the visual language that characterized Hollywood historical movies, European filmography adopted other schemes and narratives. The change in taste and the different image of the past that is projected in movies in the late 1960’s and early 1970’s is well represented by Fellini’s *Satyricon* (1969), where alien and desecrating Roman characters played in the fragmented narrative that wanted to render in this way “the potsherds, crumbs and dust of a vanished world” (Fellini 1978, 17 cited in Wyke 1997, 189).

7 CONCLUSION

The purpose of this paper was to contextualize the reconstructions of Greco-Roman cities within their historical framework by discussing a selection of case studies from the 15th to the 20th century. Specifically, with this study I aimed to contribute to the still rare studies on the creation and reception of visual reconstructions of antiquities, which add

interpretative keys to explore the complex relationship between ancient and modern cultures. The case studies here discussed have demonstrated the richness of clues in visual reconstructions, which, taken their often questioned archaeological reliability aside, contribute to the interpretation of the historical context in which they were created. In fact, the act of visually representing a reconstruction hypothesis always entails a (more or less conscious) process of selection, interpretation and cultural appropriation. Any type of reconstruction of antiquities, be it a drawing, a plaster model or a cinematographic adaptation, lends itself to express and legitimate present ideas and needs, and contributes to shaping the contemporary traditional view of the past.

The ways in which humanists, antiquarians, architects, artists and film makers have looked at the past and the message they wanted to express with their renditions have varied considerably. For the humanist historian Biondo, the ancient restored monuments were instrumental to support the papal plans of the architectural renovation of Rome; Annius of Viterbo's forgeries contributed to emphasise the importance of his hometown; antiquarians such as Lauro wanted to convey a suggestive impression of ancient Rome that could still transmit the ancient glory of the city and be popular among visitors who came from across the Alps; Gismondi's plaster model visually and physically brought back the magnificence of Imperial Rome that Mussolini wanted to connect to; and finally, the cinematographic images of Rome mirrored contemporary political, ideological and social issues. The attention to this topic is still relevant today, as the selection of specific elements of the past for substantiating a cultural narrative or an ideological discourse can still be seen in how archaeological objects are represented and how the notion of heritage is constructed, as shown by recent research in the field of heritage studies (Watson and Waterton 2010, 84-97; Hamilakis 2016).

The attempt to preserve the vanishing traces of an ancient past that could still hold meaning for the present has always been one of the triggers for surveying and drawing material remains. Many scholars over the centuries have complained about the critical condition of ancient ruins, that have been constantly spoiled not only by time and weather, but also by pillages, commerce, negligence, and indifference. This is well exemplified by the city of Rome, first the capital of the Roman empire and then of the Catholic church, that, soon after the decline of the Roman empire, became a quarry of marble for the construction and embellishment of new buildings and a "warehouse of ancient sculpture" (Weiss 1969, 8). Reconstructions, therefore, have become also a valuable source of information on the state of knowledge of the time of their creation and also a visual memory of

structures that nowadays are lost, such as the drawings of Cyriac of Ancona or the plaster model of Pompeii remind us.

When the interest for antiquities started to extend beyond the limited audience of antiquarian circles, a second reason to prepare reconstruction drawings was to present what the ancient buildings looked like to visitors and to engage them in a more popular and approachable vision of antiquities. This was the purpose of the 17th century Swiss Guard Giovanni Alto, but also, more close to us, of the many drawings that were commissioned to Piet de Jong and Alan Sorrel to be displayed in museums. Finally, architects have been accustomed to prepare reconstructions of ancient buildings as part of their training, to understand how buildings were constructed and to gain the skills that would allow them to apply ancient construction techniques in their contemporary architectural projects. This is a recurrent theme in the work of Leon Battista Alberti, in Piranesi's engravings and in the European architects that came to Rome and then created many buildings in their own countries following classical taste.

Besides exploring the different functions of reconstructions over the centuries, the examples discussed have allowed us to follow the development of a scientific methodology to deal with historical sources and archaeological remains. By starting to question the reverence for the authority of the written word, antiquarians began to adopt an empirical approach based on first hand observations and personal surveys as the principal way to gather information. The direct study of the extant remains, starting with Biondo, Cyriac of Ancona and Ligorio, also had a clear impact on the way in which antiquities were represented, as the textual descriptions that had been well suited to replicate the information found in ancient authors fell short in conveying the physicality of the ruins, thus paving the way for an increasing use of visual representations. A further methodological turning point is represented by the growing awareness of the uncertainty related to any reconstruction of antiquities, as expressed by Buonarroti, and the associated inclusion of explicit information about the reliability of the reconstructed parts, as well exemplified by Gell's and Gatteschi's works.

Finally, this overview of reconstruction drawings and plaster models contributes to putting modern computer-based visualizations into an historical perspective. Similarly to their analogue counterparts, also digital reconstructions are knowledge representations. This parallel emphasizes the importance of being explicit about the original data, the comparative material, and the line of interpretation underlying the creation process. In fact, this information enables other researchers to evaluate the scholarly value of the digital reconstruction, and can serve as a starting point

for future research – even in case digital formats have become obsolete, or current modelling methods have been replaced with more advanced techniques. Recent initiatives have contributed to the development of standards for computer-based visualizations in archaeology.⁹³ However, a survey analysing papers presented at major conferences in 2012 has shown that only a very small percentage of published articles on this subject (1% of 686 papers) included methods to integrate metadata and to validate their results (Cerato and Pescarin 2013, 290). Moreover, while the transition to a different *medium* has changed the visual appearance of digital reconstructions into more sophisticated and realistic renderings, the new possibilities of analysis and simulation offered by 3D modelling have so far been recognized and explored only by a few researchers (e.g. Earl and Wheatley 2002; Frischer and Dakouri-Hild 2008; Hermon 2008; Hermon and Nikodem 2008; Paliou 2014; Landeschi *et al.* 2015; Piccoli 2016; Piccoli, in preparation). Only when the intellectual transparency and the analytical potential of 3D reconstructions will be more broadly addressed, they will become an integral part of archaeological research.

Notes

1 For an overview of the fascination for ruins and their use in literature see e.g. Woodward 2001. For the tension between old and new and the consideration of the past as an artefact of the present, see Lowenthal 1985.

2 Cf. Favro 1999, 366; Smiles and Moser 2005, 6.

3 See in this respect Favro 1999, 366.

4 The decoding of such symbolic values as elements specific of a certain period and cultural milieu belongs to the field of perception studies and has been treated extensively in art history, starting with the pioneering works by Erwin Panofsky (Panofsky 1939). In this regard, see also the works by Pierre Bourdieu, who identifies art perception as a mediate deciphering operation (e.g. Bourdieu 1984, especially Chapter 8 – Outline of a Sociological Theory of Art Perception).

5 Piggott was the first scholar who started to critically analyse the history of archaeological illustrations (1965; 1978). In more recent years, Moser has delved deeply into the subject of archaeological representations and their reflections of cultural conceptions and political or nationalistic agendas (Moser 1992; 1998; 2001; 2012; 2014; 2015); Perry has critically analysed the relationship between archaeologists and images (Perry 2009a; 2009b; 2013), stressing the deductive power of reconstructions for example for gaining information about the behaviour and habitat of prehistoric animals (Perry 2013, esp. 293).

6 Cited in Piggott 1978, 7.

7 The scope of this paper has been limited to Greek and Roman cities in Europe. There are obviously several other instances that show how the past has been “re-constructed” over the centuries in different ways in compliance with the current cultural and political contexts. Examples include other cities (e.g. Babylon, to which the Louvre has dedicated an exhibition in 2008, see <http://www.louvre.fr/en/expositions/babylon>, last accessed March 2017), archaeological structures (e.g. Stonehenge, to which the travelling exhibition “Stonehenge belongs to you and me” has been dedicated, see Bender 1998; Hodgson 2004, 140-74) and countries (e.g. Egypt, see Moser 2015).

8 A digital image of this page is available at <https://www.ibiblio.org/expo/vatican.exhibit/exhibit/b-archeology/images/arch01.jpg> (last accessed March 2017).

9 See for example Elia Caprioli’s *Chronica de rebus Brixianorum ad Senatum Populumque Brixianum* (1505) where he refuses to explain the origins of his hometown Brescia with the tradition that connected them with the myths of Hercules.

10 A similar representation of the Colosseum is to be found in a depiction of the city of Rome that appears in an illuminated 15th century copy of the poem *Dittamondo* by the 14th century Florentine poet Fazio degli Uberti (1305?-1367) describing in its verses an imagined journey around the world (Fazio degli Uberti, II *Dittamondo*, avec le commentaire d’ Andrea Morena da Lodi, 1447, [Paris, BnF, MSS italien 81], fol. 18r.). See <http://gallica.bnf.fr/ark:/12148/btv1b8426808j/f41.image> (last accessed March 2017) for a copy digitized by the Bibliothèque National de France.

11 “Le case moderne, cioè in muratura, sono molte ma guaste; il bello di Roma sono le rovine..”, cited in Günther 1997, 380.

12 From the preface of *Roma Instaurata* dedicated to Pope Eugenius IV, predecessor of Nicholas V: “*Urbis Romae rerum dominae ruinarum potius quam aedificiorum quae nunc cernuntur noticiam pro viribus innovare Eugeni pontifex sanctissimi multa suadent mihi. Sed illud maxime impellit quod tanta fuit praeteritorum diu saeculorum hominibus studiorum humanitatis ignoratio: ut quum pauca singulis in urbis ipsius aedificiorum partibus, quae olim fuerint, non ab imperita solum moltitudine, sed ab his etiam qui doctrina cultiores sunt sciantur: tum multa ac pene omnia falsis et barbaris appellationibus inquinata vel potius infamata cernamus. Unde brevi futurum apparet ut Roma ingeniorum parens, virtutum alumna, celebritatis specimen, laudis et gloriae columen, ac omnium quae universus orbis ubique habet bonarum rerum seminarium in suis obscurata structuris maiorem celebritatis et famae iacturam faciat; quam in rebus pridem factam ac potentia videamus*”.

Excerpt from the preface of *Roma Instaurata* dedicated to Pope Eugenius IV, predecessor of Nicholas V (based on the translation in Warwick 2016, 94, modified by the author): “Most holy Pope Eugenius, many things persuade me to renew as much as I could the fame of the ruins - more than of the buildings that still can be recognized - of the city of Rome, the mistress of things, but this one thing compelled me the most: there has been so much ignorance of the study of the humanities in previous generations that, since few of the structures of this very city which once existed are understood in their single parts not only by the inexperienced multitude but also by those who are more learned with respect to doctrine, we then see

many, nearly all things fouled, or rather defamed, by false and barbarous names. (...) The return of your pontificate onto its seat confirmed our resolution to write, a return so useful and necessary for its conservation that it is evident that, being already destroyed by calamity and decline, it would be completely lost if you had been absent another ten years. Not only do you nurture Romans with the presence of your accompanying curia, a thing which has always benefited the opulence of the city, but also in many locations you restore and remake fallen, misshapen buildings at the greatest cost. (...) As I owe everything I have to your holiness, why shouldn't I strive to renew Rome with the literary monuments of my small talent likewise you do with the labor of stone workers or carpenters. The renewed account of the works of the Roman Popes who came before you is added to this restoration of our city, which would suit the sanctity of your merit and especially increase your glory (...)."

13 Estense Ms. Lat. 992. Other copies are known, such as the earlier Bern codex (MS. B42) held at the Stadt- und Universitätsbibliothek and the Garrett MS. 158 held at Princeton University Library. While the former has no illustrations, the latter begins with 15 full page drawings with the same representations as the Estense manuscript. A digitized copy of the Garrett manuscript is available at libweb5.princeton.edu/visual_materials/garrett/garrett_ms_158.final.pdf (last accessed March 2017).

14 A digitized copy of the manuscript held at Princeton University Library and containing these drawings is available at http://libweb5.princeton.edu/visual_materials/garrett/garrett_ms_158.final.pdf (last accessed March 2017).

15 Codex Ashmolensis, MS. Lat. misc. d. 85, kept at the Bodleian Library.

16 On this text, see Saxl 1940/41, 19-46, who contextualized it within the role that Roman inscriptions played in the 15th century political panorama. For the contacts between Fontius and Cyriac of Ancona, see Saxl 1940/41, 29-37.

17 One of the 16th century detractors of Anniius, the Archbishop of Tarragona Antonio Augustín, reports a story according to which Anniius, after the discovery of some inscriptions that he had forged and buried in a vineyard in the vicinity of Viterbo, claimed that they matched with a passage in one of his books, confirming that there lay the oldest temple in the world and proving that Viterbo had been founded by Isis and Osiris (Stephens 2004, S207).

18 For the reception of Anniius' *Antiquities* and its outreach among European scholars, see Stephens 2013, 277-89; Stephens 2004, S201-S223. The influence of Anniius' work on Spanish historiography has been investigated in Caballero López 2002, 101-120.

19 The coinage of this sentence has been attributed to Francesco Albertini, who wrote it in his *Opusculum de Mirabilibus Novae et Veteris Urbis Romae* (Rome, 1510); after its use for the Septizodium's drawing, the sentence appears again on the frontispiece of Sebastiano Serlio's *Third Book on Architecture* (1544). See Curran 2012, 37. For a contextualization of the first generation of Dutch artists who travelled to Rome in the 1530's such as Herman Posthumus, Lambert Sustis and Maarten van Heemskerck, see Dacos 2004.

20 See chapter III 'William Camden and the *Britannia*' in Piggott 1978, 33-55.

21 For the fashion of depicting Rome with a circular or ellipsoidal plan, see Cesarano 2011, 69.

22 Cf. below Fabio Calvo's plans of Rome. For an analysis of the *De Nola* and its legacy, see Cesarano 2011.

23 A transcription of the letter is published in Golzio 1936, 78-92. For the surviving manuscripts and a translation of the letter in English, see Hart and Hicks 2006, 177-92.

24 "Ma perchè ci doleremo noi de' Gotti, de' Vandalli et d'altri perfidi inimici del nome latino, se quelli che, come padri et tutori dovevano difendere queste povere reliquie di Roma, essi medesimi hanno atteso con ogni studio lungamente a distruggerle et a spegnerle?" (Golzio 1936, 82-3).

25 "Onde essendo io stato assai studioso di queste tali antichità, et havendo posto non piccola cura in cercarle minutamente et in misurarle con diligentia, e leggendo di continuo di buoni auctori et conferendo l'opere con le loro scripture, penso aver conseguito qualche notizia di quell'antiqua architettura." (Golzio 1936, 82).

26 "(...) Havendomi Vostra Santità comandato che io ponessi in disegno Roma anticha, quanto cognoscier si può per quello, che oggi di si vede, con gli edifici, che di sè dimostrano tali reliquie, che per vero argomento si possono infallibilmente ridurre nel termine proprio come stavano, facendo quelli membri, che sono in tutto ruinati nè si veggono punto, corrispondenti a quelli che restano in piedi e che si veggono." (Golzio 1936, 84).

27 For a detailed discussion on each of Calvo's drawings see Jacks 1990, 453-81.

28 For a biography of Pirro Ligorio see Coffin 2004.

29 Full title: *Libro di M. Pyrrho Ligori Napolitano, delle Antichità di Roma, nel quale si tratta de' Circi, Theatri, & Anfiteatri, con le Paradosse del medesimo auctore, quai confutano la commune opinione sopra varii luoghi della città di Roma, Venice: Michele Tramezzino, 1553.*

30 This work, as we learn from the preface that was written by the editor Michele Tramezzino, was dedicated to Ippolito d'Este and was meant to be just an extract of a much greater undertaking that Ligorio was carrying out, namely a treatise in 40 volumes on the antiquities of Rome. Tramezzino and Ligorio hoped that the Cardinal was willing to sponsor and finance the work, but this ambitious project was never accomplished, see Daly Davis 2008, 5-6.

31 *Paradosse*, 25v: "(...) ne con la diligenza, che si ricerca leggendo & essaminado le parole, e i sentimenti de gli antichi scrittori, ne' quali si conserva anchor viva in buona parte la memoria di Roma; ma andando à guisa di ciechi, & quando in una, & quando in un'altra falsa apparenza inciampando, sono caduti infiniti, & grandissimi errori.

32 *Libro di M. Pyrrho Ligori Napolitano, delle Antichità di Roma*, 18r: "Desiderando io à tutto mio potere di rinfrescare, & di conservare la memoria delle cose antiche, & insieme di sodisfare à quelli, che d'esse si diletano, mi sono con ogni possibile cura, & diligentia sforzato, & ingegnato, tra gli altri nobili edificij di dimostare anco la pianta intiera di questo Circo; & per ciò fare sono

andato non senza grandissima fatica ricercando minutamente ogni luogo, & parte di esso; non lasciando pezzo alcuno di muro, per minimo che fusse, senza vederlo, & considerarlo sottilissimamente, accompagnandovi sempre la lettione di quelli auttori, che hanno scritto de i Circi alcuna cosa piu particolare; & valendomi bene spesso della coniettura, dove le ruine, che poche sono, mancavano; & pigliando l'esempio de gli altri Circi, che sono più intieri in quelle parti, che in questo erano affatto ruinate; & in somma il tutto di parte in parte conferendo, & comunicando con huomini non meno per dottrina, che per giudicio rari, & eccellenti. Tanto che tra per li vestigij, & per l'autorità, & per le conietture, & per gli esempj, & per le consulte, ne habbiamo alla fine ritratta la presente forma."

33 *Libro di M. Pyrrho Ligori Napolitano, delle Antichità di Roma*, 18v: "Se però alla bontà loro parerà, che io lo meriti, essendo stato il primo che mi sono messo à tanto pericolo, accertandoli che ne havrò loro obbligo grande, & che non mi sarà mai discaro l'imparare da chi ne sa più di me."

34 A reprint of the 1561 original can be viewed online in the digital collections of the British School at Rome <http://www.bsr.digitalcollections.it/details.aspx?ID=3&ST=BS> (last accessed March 2017).

35 Titled "Antiquae Urbis Romae Imago accuratissime ex vetustis monumentis formata".

36 Panvinio and Ligorio shared in fact a publisher (which made the engravings that Ligorio had used for his work accessible also to Panvinio) and also the collaboration with Dupérac (Stenhouse 2012, 246-7).

37 "Haec ut facilius intelligantur, & morem meum sequar in satisfaciendo avidis antiquitatum studiosis Romanarum rerum, duabus tabellis huius Circi topographiam, delineationem, & post ruinam quomodo nunc cernitur adiunxi." *De Ludis Circensibus Libri II*, 55-6.

38 For a contextualization of the Du Cerceau family see Blomfield 1911, 140-156.

39 "(...) qui pourra servir à ceux qui sont curieux de l'antiquité, & encore plus (à mon jugement) à ceux qui sont maîtres en l'Architecture, lesquels y pourront trouver plusieurs beaux traits & enrichissements pour aider leurs inventions." *Livre des Edifices Antiques Romains* (1584), letter of dedication.

40 Lipsius, *Polioreticon*, I, cap. 6 (p. 37) translated by J. Papy (Papy 2004, 116).

41 "Inserere figuram in qua tu, Lector, scito quaedam à pictore esse ad rem subiiciendam oculis, non à veritate. ut ostiolum ante Editorem, gradus in arenam: quia revera per alios interiores aditus delati gladij & arma in Orchestram.", J. Lipsius 1585. *Saturnalia Sermonum Libri Duo* II, cap. XIX (p. 150).

42 The first work that positioned antiquarians in their historical and cultural context is the essay 'Ancient History and the Antiquarian' by A. Momigliano, which was presented as a paper at the Warburg Institute in 1949 and reprinted twice (in 1955 and 1966) after its first publication in the *Journal of the Warburg and Courtauld Institutes* in 1950. This essay has been influential in setting the framework for the understanding of the relationship between

antiquarians and ancient history, and of the development of a historical method. A recent re-contextualization of Momigliano's work is given in Miller 2007. Another important contribution to the field has been given by Piggott 1976, which focusses on the history of antiquarian studies in England and Scotland from the 16th to the 17th centuries. Recent re-assessments of the antiquarian contributions are given by Sweet 2004, Murray 2007, 14-21, and Murray 2014, 189-201.

43 Murray focuses in particular on the construction of British prehistory during the 16th and 17th centuries, discussing what he defines the 'interactionist methodology' that antiquarians adopted to reconcile new sources of information, such as ruins, coins and inscriptions with 'authorities' such as the Bible and the *historiae* of Classical authors such as Tacitus (Murray 2014, 189-201; Murray 2007, 14-9).

44 Excerpt from section n. 7 ("The Antiquary") of John Earle's *Microscopie* (1628).

45 This tension between those who sustained the supremacy of the ancients and those who instead considered the inventions of modern times as the proof of the cultural superiority of their age is a recurrent theme in the Renaissance thought, starting with Petrarca (Boruchoff 2012, 133-164; Fumaroli 2001, 7-220). In 17th century France, this debate peaked with the so called "Querelle des Anciens et des Modernes", a dispute initiated within the Académie française among scholars sustaining opposing views of artistic inspiration and models. The "casus belli" was the reading of the poem *Le Siècle de Louis le Grand* that Charles Perrault had composed in 1698 for the King, in which the French author compared the "siècle de Louis" with that of the Emperor Augustus, stating that the ancients are "men like us" ("La belle Antiquité fut toujours vénérable./ Mais je ne crus jamais qu'elle fut adorable./ Je vois les Anciens, sans plier les genoux./ Ils sont grands, il est vrai, mais hommes comme nous;/ Et l'on peut comparer, sans craindre d'être injuste./ Le siècle de Louis au beau siècle d'Auguste (...)") cited in Mortier 1982, 51). This view represents the feelings of the "Modernes", who praised the accomplishments of their contemporary artists under Louis XIV, as opposed to the "Classiques", who instead considered Greek and Roman achievements as unparalleled and therefore promoted imitation as the only way to replicate the artistic perfection of the Classical works. This opposition was however not only limited to literature, but was the expression of different political orientations as discussed in Fumaroli 2001, 167-8.

46 For an analysis of this work, its context and its dedications, see Del Pesco 1984.

47 "Vides hic praeterea Ioannem Grossum Heluetium pro more suo nobilibus Germanis antiquitates ostendentem Romanas, cuius ipsi ut etiam nobiles Galli, sunt inspectores curiosissimi et merito quidem, nam praeter quam quod decet honestos viros huiusmodi honesta occupatio ad ponendum tempus utiliter et cum voluptate interim dum alij illud impendunt pecuniasque profundunt in res cum honestate pugnantes et in plurima mala quae secum solet afferre otium malorum omnium origo, proficiunt etiam hac cognitione ad cognoscendam rerum omnium vicissitudinem quomodo plurima nunc iaceant quae olim flourerunt, adde quod multum facit haec cognitio antiquitatis ad intelligendos et interpretandos profanos auctores."

48 In the explanation related to the reconstruction drawing of Portus, the ancient harbour of Ostia, Lauro in fact stated that the

depiction was taken from the description of Ligorio, from antiquities, medals and from ancient and modern authors: “(...) come in questa descrizione si vede, cavata da quella di Pirro Ligorio, delle antichità, e medaglie, e da gl’Autori antichi, e moderni.”

49 Transcription of the dedication to the reader opening the 1641 edition: “Gio. Ridolfo Alto / Svizzero a chi leggerà / La città di Roma, si come, per la vastità dell’Imperio non ebbe mai altro popolo, o Nazione, che l’agguagliasse, così ha lanciato nelle sue Rovine sì alti vestigi dell’antica maestà, e grandezza, che è forza, da’ soli avanzi, che se ne veggono, (tutto che le reliquie miserabili del tempo, e dell’hostilità de’ Barbari) ammirarla per Capo del Mondo, e trionfatrice dell’Universo, E perchè essendo questi monumenti, non solamente venerati; ma con straordinaria curiosità, e diligenza da tutte le genti continuamente ricercati; poichè (spinte dal rimbombo della Fama) sin da gli ultimi confini della Terra, qua si trasferiscono a posta per vederli, e contemplarli dappresso: nè essendo poi lor possibile descriverne, ritornati alle lor case, così esattamente le maraviglie, che, & essi, e gli ascoltanti ne restino pienamente sodisfatti.; ho voluto servire in quella parte al godimento universale, rappresentandole nuovamente in queste carte delineate al naturale dalla dotta mano di Giacomo Lauro; e da penne sublimi vivamente descritte in varie lingue; Opera veramente di grandissima spesa, e fatica; già che per darle la perfezione, che si poteva maggiore, oltre all’essersi esattamente ricercate le piante delle Antichità nelle macerie stesse; & investigate le forme vere delle fabbriche, nelle Medaglie, Bassi rilievi, Marmi, Metalli, & altre cose tali de’ secoli passati, si sono anche rivoltati con sommo studio gli Autori più celebri, e rinomati, come Pollione Vitruvio, M. Varrone, Tito Livio, Svetonio, Tacito, l’uno, e l’altro Plinio, Plutarco, Dione, Appiano Alessandrino, Diodoro Siciliano, Herodiano, Dionisio Alicarnaseo, Ammiano Marcellino, Sesto Rufo, Giulio Capitolino, Elio, Lampridio, Flavio Vopisco, Elio Spartiano, Flavio Eutropio, Flavio Gioseffo: & oltre a questi Giovanni Zonara, Gio. Boemo, Fenestella, Pomponio Leto, Andrea Alciato, il Biondo, l’Albertino, il Boccaccio, Guido Pancirolo, Alessandro de Alessandri, Guglielmo di Choul, il Marliano, & il Fauno, e L. Mauro, Andrea Fulvio, Carlo Sigonio, Honofrio Panvinio, il Lipsio, e tutti gli altri finalmente, da’ quali si poteva aver notizia, sì degli edificij notabili pubblici, e privati, come delle Attioni Sacre, Civili, e Militari de’ Romani, più degne di memoria; che sono state per colmo aggiunte, parimenti delineate al vivo in questo Libro. Ricevi (amico Lettore) queste fatiche, qualunque sieno: e pascendo in esse la tua virtuosa curiosità, gradisci l’animo di coloro, e mio, che per servire in uno stesso tempo all’utilità, e dilettaione commune, ci siamo volentieri adoperati in metterle insieme e pubblicarle; riputandoci non indegni della tua affettione, se non per altro, per avere impiegato le nostre industrie nel rappresentarti, quasi in maestosissimo Teatro, quelle cose, che sono state sempre l’oggetto della maraviglia, lo stupor de’ secoli, e ‘l miracolo del mondo: E vivi contento.”

50 For Meursius’ scholarship and his contacts with several scholars who sent him materials, see Sánchez Hernández 2010, 9-11.

51 Gallo defines this treatise as the “manifesto of a new antiquarianism” that was influenced by the establishment in 1657 of the Accademia del Cimento, a Florentine scientific society that followed Galileo and his experimental method, and by the Newtonian approach (Gallo 1999, 828). In Buonarroti’s reasoning one can also recognize the influence of “Cartesian doubt”, Descartes’ method of investigating the truth by starting with the assumption that the only certainty is uncertainty.

52 “(...) Indigesta collezione di dubbi, che d’osservazioni certe, ben digerite, & esaminate.”

53 “(...) Benchè io sappia, che per contentare il gusto presente, ci volevano altre cose che queste, messe giù senz’ordine e alla rinfusa, e con tal’ incertezza e dubbio della mia opinione e sentimento, che meriteranno forse d’esser’avute piuttosto per un’indigesta raccolta di dubbi, che d’osservazioni certe, ben digerite, & esaminate. Egli è ben vero però, che in quanto a questa seconda parte, io ci sono caduto volontariamente, sperandone anche l’approvazione di tutti coloro, i quali faranno riflessione, che lo studio dell’antichità e dell’erudizioni è differente da molti altri, ne’ quali non pare che in rigor di metodo si ricerchi, che l’adattare le conclusioni a quel solo principio, da cui dependono; dovechè in questo non si può sperare di seguitare un metodo così semplice; posciachè vi sono, per così dire, infiniti principii, e le conietture dipendono da favole, istorie, riti, & altre cose divise e disparate fra di loro: e conseguentemente dovrà giudicarli per effetto d’una certa cognizione delle forze dell’arte, il confessar sinceramente di non sapere (per pigliare un esempio da una sola parte, che potrebbe sembrare la più facile) tuttocì che ha potuto venir’in capo a tanti pittori e scultori antichi, i quali ci hanno lasciato i monumenti dell’opere loro, circa l’aggiungere, & ancora mutar’affatto i simboli, & i soggetti delle favole e delle Deità”, Buonarroti 1698, ii-iii.

54 “E se veruna scienza ha bisogno d’un sì fatto preparazione d’intelletto e cautela, lo studio dell’erudizione e dell’antichità è quello che ne ha una necessità particolare, non solo per le cagioni addotte, ma ancora per il gran numero degli scrittori, e per la varietà delle opinioni che ci sono; onde è molto difficile in una strada tanto frequentata da ogni sorta di ingegni seguitare le vestigie, che conducono alla verità, e non piuttosto, a guisa delle pecorelle che escon dal chiuso, E ciò che fa la prima e l’altre fanno, quelle che vanno a finire in falsità e menzogne (...)”, Buonarroti 1698, v.

55 Bianchini is remembered as an important name in the dawn of archaeology as a scientific discipline for his scrupulous method that he applied during the excavation and in the process of publication of the results (Gallo 1999, 833).

56 See e.g. the published excavations diaries by Francesco and Pietro La Vega in Pagano 1997.

57 The *Grand Tour* started to include also sites in South of Italy, such as Paestum, which was properly “rediscovered” only during this century (Villani 2011, 85-98).

58 From the first minute-book of the Society of Antiquaries of London in 1717, of which William Stukeley was first Secretary, cited in Piggott 1978, 7.

59 For the third, less successful, *Thesaurus* on Italian antiquities published by the Leiden publisher Pieter van der Aa between 1704 and 1725 see Piccoli 2013, 61-82.

60 In this regard, it must be noted that the lack of a firm criterion of selection for the works to be inserted in these *Thesauri* depended in some cases purely on the publishers’ wish to create huge collections to attract more buyers. This situation is documented for the compilation of the *Thesaurus Antiquitatum et Historiarum Italiae* (Leiden, 1704-1723), which caused disagreements between the publisher Pieter van der Aa and the editor Pieter Burmann (see Piccoli 2013, 6).

61 For Roman antiquarians, see Gallo 1999, 840.

62 As he stated: “A statue by an ancient Roman hand will always stand in the same relationship to a Greek original in the way that Virgil’s Dido with her retinue, compared with Diana among the Oreiades, relates to Homer’s Nausicaa, which the former attempted to imitate” (cited in Carter 2013, 32).

63 For a discussion of his contributions see Fumaroli 2007, 154-83; Cronk and Peeters 2004.

64 For an analysis on Caylus’ relationship with Diderot see Massau 2004, 45-57.

65 Miller actually sustains that in fact de Caylus was a “much better historian” than Winckelmann (Miller 2007, 35).

66 “E la semplice esteriore osservazione degli avanzi delle antiche magnificenze di Roma è bastata a riformare negli ultimi tempi l’idea del buon gusto dell’Architettura, depravato per l’innanzi dalle rozze e infelici maniere de’ Barbari (...).” Preface of the *Antichità Romane* (Rome, 1756).

67 “(...) E vedendo io, che gli avanzi delle antiche fabbriche di Roma, sparsi in gran parte per gli orti ed altri luoghi coltivati, vengono a diminuirsi di giorno in giorno o per l’ingiuria de’ tempi, o per l’avarizia de’ possessori, che con barbara licenza gli vanno clandestinamente atterrando, per venderne i frantumi all’uso degli edifizii moderni; mi sono avvisato di conservarli col mezzo delle stampe (...).”

68 G. B. Piranesi, preface of the *Ichnographia*, Rome, 1762: “I am rather afraid that some parts of the Campus which I describe should seem figments of the imagination and not based on any evidence: certainly if anyone compares them with the architectural theory of the ancients, he will see that they differ greatly from it and are actually closer to the usage of our own times. But before anyone accuses me of falsehood, he should, I beg, examine the ancient [Marble] plan of the city (...), he should examine the villas of Latium and that of Hadrian at Tivoli, the baths, the tombs and other ruins outside the Porta Capena and he will find that the ancients transgressed the strict rules of architecture just as much as the moderns. Perhaps it is inevitable and a general rule that the arts on reaching a peak should decline, or perhaps it is part of human nature to demand some license in creative expression as in other things which we sometimes criticise in buildings of our times.”

69 On “Il Campo Marzio”, see also Dixon 2005, 115-132.

70 For de Choiseul’s biography see Barbier 2010.

71 “J’ai osé (...) relever ces belles ruines, recomposer ces édifices, et essayer d’en donner une faible idée. Qu’on daigne juger avec indulgence ce travail, ou, si l’on veut, ce jeu d’une imagination qui, rétrogradant de quelques siècles, se plaît à voir ce qui n’est plus, et admet la fiction à se présenter à la place de la réalité que l’on regrette. C’est la première fois que je me suis permis de montrer ainsi de simples souvenirs, de restaurer des édifices, ainsi qu’on se hasarde à restaurer des statues, ou à rétablir le texte des manuscrits. Ce n’est que tenter pour l’architecture, ce que d’autres ont fait pour Quinte-Curce, et pour Salluste: et pourquoi m’interdirait-on de redresser les colonnes d’un temple abattu, lorsqu’on pardonne aux efforts du savant qui n’a pas tremblé de se mesurer avec Tacite?” (de Choiseul 1809, 87).

72 See for example the illustrations by Jean-Laurent-Pierre Houël in his *Voyage Pittoresque des Isles de Sicile, de Malte et de Lipari, ou l’on Traite des Antiquités qui s’y Trouvent Encore; des Principaux Phenomenes que la Nature y Offre; du Costume des Habitans, & de Quelques Usages* (2 vols., 1782 and 1784) that Nixon considers “the most bold of Piranesi’s imitators” (Nixon 2002, 476). Houël shares the same attitude towards illustrations as Piranesi and he synthesizes it by stating in the preface of his work: “J’affirme mes dessins par mes écrits, et je confirme mes écrits par mes dessins” (cited in Nixon 2002, 478).

73 For the Italian situation after unification and the methodological debate between a philological/academic and a more practical approach to archaeology, see Barbanera 2000.

74 Chairs of archaeology had existed in Italian university before the unification, such as the one in Naples where Giuseppe Fiorelli was professor from 1861 (Barbanera 2000, 47).

75 Regarding Pitt Rivers and his legacy, Mortimer Wheeler stated: “Between 1880 and 1900 General Pitt Rivers in Cranborne Chase had brought archaeological digging and recording to a remarkable degree of perfection, and had presented his methods and results meticulously in several imposing volumes. Then what? Nothing. Nobody paid the slightest attention to the old man. One of his assistants had even proceed to dig up a lake-village much as Schliemann had dug up Troy or St. John Hope Silchester: like potatoes” (Wheeler 1958, 55 cited by Lucas 2001, 36). The reality of the facts seems more nuanced than what appears from Wheeler’s strong statement as recently pointed out by G. Lucas, as Rivers’ methodology was received and applied in other contexts (see Lucas 2001, 36ff).

76 Italy for its historical developments represents a different case as elucidated by Barbanera 2000, 42-4.

77 For a contextualization of this work, see Findlay 1993, 281-6.

78 However, it must be noted that Greek intellectual circles in Greece started to react against the pillages of Greek antiquities already before independence, founding for example the Society of the Friends of the Muses in Athens in 1813, but stronger reactions took place only after 1821, see Díaz-Andreu 2007, 46 and 82-6.

79 For a discussion on the classicizing painters of this period, see Wood 1999, esp. chapter 14 and 15 (176-221).

80 See also Capodiferro (ed.) 2006.

81 This information is found in the preface of Gatteschi’s publication (1924) written by Orazio Marucchi.

82 See the introduction in Gatteschi 1924.

83 “Il Gatteschi, nel presentare agli studiosi i Restauri di questi gloriosi monumenti ha adottato il metodo assai razionale di mettere a confronto con i suoi disegni di restauro le fotografie dello stato attuale, cioè dello stato in cui presentemente si trovano gli avanzi di quei monumenti stessi fra i moderni edifizii; onde se ne veda a colpo d’occhio la corrispondenza. E chiunque potrà persuadersi che i suoi restauri non sono il prodotto di una fervida immaginazione come alcuni ideati da altri, ma che hanno la loro base nello studio accurato di tutto ciò che può sapersi intorno alla vera forma di ogni singolo monumento.” Preface of Gatteschi 1924.

84 An exhibition of Sorrel's works was held at Sir John Soane's Museum in London from 25 Oct. 2013 to 25 Jan. 2014. For a biography and discussion of his works, Llewellyn and Sorrell 2013.

85 The drawing is reproduced in Catling 2013, 37.

86 An earlier three-dimensional representation of some key monuments of Rome (among others, the triumphal arches of Titus, Septimius Severus and Constantine which are now lost) is the fountain called "la Rometta" made by Pirro Ligorio in the gardens of the Villa d'Este. This scenographic monument had a symbolic meaning and embodied in three dimensions Ligorio's interest for Roman antiquities (see Madonna 1991).

87 The model has been restored and kept at the University of Caen; recently it underwent a process of digitization and a virtual visit has been created, see Fleury and Madeleine 2010, 67-75.

88 The "Istituto Luce" recorded a propaganda video that presented the exhibition, which is available online at <http://www.youtube.com/watch?v=cneYAemeNqU> (last accessed March 2017).

89 For a detailed explanation on how Gismondi organized his work through preparatory sketches and drawings, see Giuliani 2007, 261-5.

90 The five adaptations have been analysed in Scodel and Bettenworth 2009.

91 As Skwara notes, the 1951 version of the movie was received very differently by the Polish audience, which could see it only in the 1980's and could relate less to the allusions suggested in the movie (Skwara 2013, 167-8).

92 Transcript of Mussolini's speech published in his newspaper *Il popolo d'Italia*, cited in Wyke 1997, 21.

93 See e.g. the London Charter (<http://www.londoncharter.org/>) and the Seville Principles (<http://smartheritage.com/seville-principles/seville-principles>, last accessed March 2017).

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