# Submission for Architecture and Culture, Vol. 4, Issue no. 3.

Title: Author(s): Email: Affiliation:	The Consequences of Dialogue and the Virgilian Nostalgia of Colin Rowe Mollie Claypool m.claypool@ucl.ac.uk The Bartlett School of Architecture, University College London
Words (bibliography):	294
Words (endnotes):	184

# Author biographical Details [max 100 words]

Mollie Claypool is a designer, writer and educator in architectural design, history and theory based in London. She is a Lecturer at The Bartlett School of Architecture, UCL, and also teaches at the AA School of Architecture. She has worked for architectural design practices in New York and London and is currently working on a PhD supervised by Professor Mario Carpo and Barbara Penner at The Bartlett. She has written for and edited books on architecture and design including a forthcoming book on Antoni Gaudi with Laurence King Publishing, *Adaptive Ecologies: Correlated Systems of Living* (Theodore Spyropoulos, AA Publications, 2013), *In Search of a Forgotten Architect* (Lily Dubowitz, AA Publications, 2012) and *Composing Space: The Photographs of Helene Binet* (Phaidon Press, 2012), amongst others.

(total no. of words in author biographies: xx total here)

#### Images

Fig. 1 Rowe, Colin. "The Mathematics of the Idea Villa," *The Mathematics of the Ideal Villa and Other Essays* (Massachusetts Institute of Technology: 1987).

Fig. 2 "The Italicised Architecture of Inigo Jones and His School." 1941. British Art and the Mediterranean exhibition. London: The Warburg Institute.

Fig. 3 "The English Interpretation of Palladio." 1941. British Art and the Mediterranean exhibition. London: The Warburg Institute.

Fig. 4. Colin Rowe's final draft of his MA dissertation. Author's own photograph.

#### Acknowledgements (if included)

Include here if required

(total no. of words in acknowledgements: xx total here)

#### Abstract: 150 words maximum

At the time Colin Rowe published the now-famous essay "The Mathematics of the Idea Villa" (1947) he was close to completing his MA in the History of Art as Rudolf Wittkower's only student at the Warburg Institute in London. Rowe's unpublished Master's thesis, titled "The Theoretical Drawings of Inigo Jones: Their Sources and Scope," demonstrates how Rowe began to explore the method of comparative *dialogical* technique through the use of literary texts, images and diagrams in the construction of the history of architecture as myth. While it has been widely acknowledged that Rowe is an important source on the work of Jones, Rowe's development of and application of the technique of dialogical construction – often less relying on true factual evidence and rather more with imagination – have rarely been examined. This Roweian myth will be viewed as an act of dialogical construction: a theoretical positioning of the role of history within the discipline of architecture.

(total no. of words in abstract: 154)

### Keywords: 4-8

Rowe; comparative; diagram; visual; history.

# The Consequences of Dialogue and the Virgilian Nostalgia of Colin Rowe

In his essay "The Mathematics of the Idea Villa", originally published in March 1947 in *The Architectural Review*, the architectural historian and critic Colin Rowe lucidly observes that the Renaissance villas of architect Palladio and the Modernist villas of master Le Corbusier are, in a sense, similar in effect. The effect that Rowe particularly speaks of harks back to the dreams of Virgil on the absurdity of humanity's relationship to nature, or, as Rowe writes, to a "Virgilian nostalgia."<sup>1</sup> The reference to Virgil that Rowe makes allows him to write about Le Corbusier's villas in a way that relates them to Palladio's villas. This compellingly transforms the perception of Le Corbusier as a 1920s revolutionary architect into a nostalgic architect of 1940s. The space of the villas of Le Corbusier and Palladio is, in Rowe's terms, a return to the "bucolic" of Palladio's writing and to the "pastoral" in Le Corbusier's writing. Rowe cites Le Corbusier's statement "Leur vie domestique sera insérée dans un rêve virgilien" ["Their domestic life will be inserted into a Virgilian dream"] as evidence of Le Corbusier's interest in Virgil as the invocation of "the ideal life of the villa," which Rowe attributes also to Palladio further on in his essay.<sup>4</sup> Rowe's particular brand of historiography is, as one can observe in the first few paragraphs of this now-famous essay, born from an act of construction of a dialogue between two points in history. The words that Rowe has quoted from Palladio's The Four Books of Architecture (1570) and Le Corbusier's Precisions (1930) - were written centuries apart. Rowe chooses to construct a dialogue, utilizing literary evidence derived from the pastoral, between these two points in architectural history. Later, when he constructs relations between Villa Malcontenta by Palladio and Villa Garches by Le Corbusier, and then Palladio's Villa Rotonda and Le Corbusier's Villa Savoye, Rowe uses visual evidence. Rowe uses both text and image (photographs and drawings) as a means through which to insinuate a certain argument or a revelation of truth. At the same time, as demonstrated in the latter part of his (?) essay, the visual evidence that Rowe employs is mainly as a technique of diagrammatic comparison. This paper argues that the analytical act of seeing through the technique of diagrammatic comparison with visual evidence is developed in a parallel with the technique of dialogical construction. Furthermore, the paper argues that, between these parallel constructions, there is a theoretical positioning of the role of history within the discipline of architecture. This space between is a space of intent, projection and nostalgia: the construction of a myth.

The visual comparison that Rowe makes utilizes both Palladio's and Le Corbusier's words, as well as the plans and elevations of their buildings. The comparison for him reveals an under-arching, implicit structure; it is the evidence of a constituent system that becomes legible through the way these buildings are composed, ordered and idealized. This enables architecture and its history to be understood as demonstrations of this system. The technique, as developed further by Rowe in its application, enables early twentieth century Modernism with a capital "M" to be read not as being divorced from history, but instead, as very much "in bed" (a term that Rowe himself would have enjoyed very much) with the rules and systems of classicism. It is therefore possible to read modernism (with a lowercase "m") as part of a longer and deeper history of architecture. This technique is derived from the work of art historian Rudolf Wittkower, whose work on the interpretations of Palladian elements by the English Renaissance and eighteenth century architects refers to the same constituent system as "the eternal rules of architecture."<sup>5</sup>

Rowe's recalling of Virgilian nostalgia is, as Monica Centanni notes, an "epistemological filter through which the scholar views the ancient."<sup>6</sup> Rowe's position as a historian dissolves the early twentieth century boundaries of architectural history defined by epochs, and establishes an emblematic link between twentieth-century architectural history and the classical tradition. This also signals the emergence of a framework which becomes what we know as the practice of architectural theory today. Rowe's filter enables him, through a process of precise exclusions (of hundreds of other texts, buildings and architects) and inclusions (of only the works of Palladio and Le Corbusier), to selectively construct a shared history between architects who lived hundreds of years apart. In his version of history, the reader of "The Mathematics of the Ideal Villa" must be able to believe in the dialogue that he has constructed; the constituent system that underlies the work of Palladio and Le Corbusier must have carried across the centuries through their words and buildings. This is, in a sense, both absurd and yet highly rational, as it requires that the discipline of architecture is reduced (in a positive sense) to the construction of a dialogue between past and present. It is here, in the act of diagrammatic comparison and the reduction to subjective dialogue, that the myth (myth here being inherently subjective) becomes history. Decades after Rowe published "The Mathematics of the Ideal Villa," he writes in *The Architecture of Good* Intentions (1994) that "all architecture is determined by a shared myth."<sup>7</sup> This notion of the myth, one could argue, refers back to this act of construction being at once an invention and an idealization - as the etymology of "myth" suggests.

This positioning of architectural history by Rowe in "The Mathematics of the Ideal Villa" has been widely assumed in the scholarly work of more recent historians and critics such as Monica Centanni, Alina Payne, James Ackerman and Francesco Benelli, to trace back to the methodology of comparative technique – the construction of dialogue between two subjects – that Rudolf Wittkower used in his own work on the Renaissance. Derived from the teachings and work of the art historian Aby Warburg while Wittkower was employed at the Warburg Institute from 1934 to 1956, this methodology can be seen in the work that Wittkower produced during his stay at the Institute, such as "Pseudo-Palladian Elements in English Neo-Classical Architecture", published in the *Journal of the Warburg and Courtauld Institutes* in 1943. This methodology also supports the argument that Wittkower set forth in his 1949 book *Architectural Principles in the Age of Humanism*, published originally as Volume 19 of the *Studies of the Warburg Institute*, which is most evident in the second chapter titled "Palladios's Geometry: The Villas."

At the time Rowe was writing "The Mathematics of the Idea Villa", he was in the process of completing his Master's degree in the History of Art as Wittkower's only student at The Warburg Institute in London. Rowe's unpublished thesis, titled "The Theoretical Drawings of Inigo Jones: Their Sources and Scope" was submitted in 1948, a year after "The Mathematics of the Ideal Villa" was published. The thesis on the work of Jones (often revered as the first modern English architect) demonstrates the depth to which Rowe was exploring dialogue through the method of comparative technique. Rowe's Master's dissertation can currently be found in the Senate House Library at the University of London. A second copy of the thesis that was originally held in the Library of the Warburg Institute is lost; however, the copy held in the Senate House Library at the University of London has been one of the most accessed pieces of unpublished work on Inigo Jones by scholars working on English Renaissance architecture. For example, John Bold, the author of John Webb: Architectural Theory and Practice in the Seventeenth Century (1989), accessed Rowe's thesis three times between 1976 and 1979, presumably while researching his book on Webb, a sixteenth- and seventeenth-century architect who worked with Inigo Jones and inherited the collection of drawings

and books that Rowe had accessed for his own research on Jones. Rowe's dissertation has also been used by several scholars working on Wittkower and on the Warburg Institute, such as Francesco Benelli (mentioned above), a scholar from the Columbia University's Italian Academy for Advanced Studies in America, and Katia Mazzucco, an academic at the Università Iuav di Venezia, both of whom published essays in *L'architettura come testo e la figura di Colin Rowe* (2010), a compilation of essays originally presented at a conference in 2008 at Università Iuav di Venezia. It is pertinent to discuss the contexts that these latter two texts have provided before looking at Rowe's dissertation in more detail.

The essays by Benelli and Mazzucco provide some insights into the context of the Warburg Institute for both Wittkower and Rowe. Mazzucco's interest lies in the role exhibitions played in the ethos of the Warburg and the establishment of the Warburg Method in the mid- to late-1940s, while Benelli's work looks at establishing a timeline and the circumstances of Wittkower and Rowe's first meeting, with a focus on how Rowe employs his "Wittkowerian" education in "The Mathematics of the Ideal Villa." Mazzucco's essay uses the exhibition "British Art and the Mediterranean" (1941) as the fulcrum point around which her investigation, titled "The Context of Colin Rowe's Meeting with Rudolf Wittkower and an Image of the 'Warburg Method'," rotates. The exhibition opened at the Warburg Institute, with the support of the Council for the Encouragement of Music and the Arts (CEMA), then travelled around the UK between 1942-1944. The exhibition catalogue records that it was shown at the University of Liverpool for two weeks in late July 1942, when Rowe was a student there.<sup>8</sup>

In the exhibition, the history of British art in the Mediterranean was grouped into two sections: reproductions of works of British art dating from pre-history to the sixteenth century, and from the sixteenth century to the nineteenth century. This choice of using reproductions allowed the curators, Fritz Saxl (pre-history to the sixteenth century) and Wittkower (sixteenth century to the nineteenth century), to suggest that, as Gertrude Bing wrote in the CEMA Bulletin in March 1942, "the contact between Britain and Mediterranean

peoples has in the past produced permanent value [...] thus simple but unforgettable truth can be shown in artistic terms, and approached through visual education."9 Rowe would have presumably seen the exhibition when it was shown in Liverpool, and therefore would have been familiar with the Warburgian methods employed by Wittkower and Saxl. In addition, the exhibition that Wittkower and Saxl curated (see Figures 2 and 3) and its subsequent catalogue contained images of the Queen's House by Inigo Jones, described in the catalogue as "the first building in full Italian style built in England." Wittkower went on to analyze Jones' building in comparison to Palladio's Villa Pisani and construct a conversation between Jones and Palladio, as Rowe would later do in his Master's dissertation.<sup>10</sup> Here, though, Wittkower's dialogical comparison was purely through the use of images; he did not use diagrams, as Rowe did in "The Mathematics of the Ideal Villa," or even as Wittkower himself later did in The Architectural Principles of Humanism. The viewer was forced to construct an idea about the intent of the conversation that Wittkower was suggesting. The exhibition and its catalogue required the viewer to look at the two images, and from them intuit Wittkower's argument. It enabled the subject to play a role in the construction of the myth.

Wittkower's essay "Pseudo-Palladian Elements in English Neo-Classical Architecture" (1943), published in the *Journal of the Warburg and Courtauld Institutes*, further highlights the dialogical method that Wittkower employed in his comparative study of Palladio (as representative of the Renaissance) and the English Neo-classical. Wittkower again used the work of Inigo Jones as an example, and suggested that English neo-classical architecture "should be seen from a distance like a picture," with the aim of demonstrating that English neo-classical architecture was an interpretation of Italian architecture.<sup>11</sup> His evidence for this was based on findings in collections of Italian Renaissance drawings that architects in seventeenth-century England had access to.<sup>12</sup> Wittkower's own development of a "visual education" was thus evident in his work throughout the 1940s, as it was in work by other historians at the Warburg Institute, Fritz Saxl amongst them. In early 1939, Saxl had presented an exhibition at the Warburg titled *The Visual Approach to* 

*the Classics*. Like the later exhibition, this too used large, high-resolution photographs of reproductions of classical masterpieces. There was little text of explanation; instead, Saxl's interpretations of classical masterpieces were expressed through these enlarged details of the reproductions. Saxl, as recalled by Gertrude Bing, "did not think of his exhibitions in terms of 'education to art'." Instead, "he wanted to convey a historical message," one which "relied on an appeal through the eye." Bing went on to state that "it was left to the spectator's perceptiveness to read the message, without necessarily noticing how his understanding was guided by the control of relevant material and the choice and combination of pictures."<sup>13</sup>

The methods used by Wittkower and Saxl in their exhibitions were therefore constructive, utilizing a dialogical, comparison-orientated view of history to establish a theoretical position towards the role of the visual. Simultaneously, this method allows the subject (the constructee) to interpret the position of the constructor (in this case the art historian). It enables, in a way, a multiplicity of interpretations to occur within a set framework that relies on an "appeal through the eye," as Bing argued, which is a reliance on the aesthetic experience of the subject. This is perhaps where Rowe begins to differ, as we will see later. It is important to note at this point that theory, or the term "theoretical," is used by Rowe in the sense of a means of justifying an explanation, or more precisely, and to borrow a definition from the Oxford English Dictionary, as the establishment of "a set of principles... upon which the practice of an activity is based," such as a comparison as a tool or technique for/of visual education.<sup>14</sup> In Wittkower and Saxl's exhibition, that practice is purely aesthetic, but in Rowe's dissertation, it is epistemological; it is a projection of how architectural knowledge and history can be constructed.

Coming back to Rowe's Master's thesis, it is here that we see Rowe's experiment with the same technique. The Virgilian nostalgia present in "The Mathematics of the Ideal Villa" is not present *per se* in any visual evidence in Rowe's dissertation. However, it is present in Rowe's verbal description, when he compares Inigo Jones's work with Italian classicism. The construction of Rowe's argument is very similar to that of the exhibition put on by Wittkower

and Saxl with their use of reproductions and enlarged details, particularly in terms of its use of the myth as a theoretical device (as explained further below) and its emphasis on comparison. It is not, however, reliant on aesthetic experience. In the case of Rowe's MA thesis, the evidence shown is the untitled drawings by Inigo Jones. It is not the subjective experience of these that is particularly important for Rowe; instead, he attempts to highlight (?) their specific (?) content in order to project Jones' own intent. Rowe accessed these drawings in multiple locations, from Worcester College, Oxford to the Royal Institute of British Architects in London; yet despite his diligence he noted certain difficulties of access in the Prefatory Note to the thesis that prevented him from "proceed[ing] systematically." He was unable to be as rigorous with his quantification as he had wished. The thesis was, he wrote, "necessarily uneven and sketchy" as a result.<sup>15</sup>

The confidence with which Rowe writes "The Mathematics of the Ideal Villa" is not to be found in his dissertation; its sketchiness conveys uncertainty, but is also an opportunity for epistemological projection, one that Rowe clearly harnesses. Rowe deduces (?) from these untitled drawings that Jones intended to write a treatise on architecture akin to those written by Alberti, Palladio or Scamozzi. In a sense, Rowe adopts a similar strategy to Saxl's, in that the viewer is the interpreter of that which he confronts; he is a reader, participating in a conversation with the past. However, in the case of his Master's thesis, Rowe is largely still the viewer, looking from a distance. Rowe constructs his argument both structurally (as in how he orders and arranges the chapters of the thesis) and in terms of the actual evidence that he is examining (Inigo's unpublished drawings). The thesis is divided into four main sections (see Figure 3), beginning with a biography of Inigo Jones and a conceptualization of his architectural development, both in conceptual and stylistic terms. He then proceeds to outline a history of the English architectural treatise, using Jones' relationship with Italian architecture and the main Italian architectural treatises of the Renaissance. These first two chapters provide the context for the final two chapters. These include Rowe's "projected treatise" in terms of the origin, history, content, technique and arrangement of the drawings, and a catalogue of Jones' unpublished

("theoretical") drawings, which Rowe argued is the evidence of Jones' intention to produce a treatise.

The final chapter, at over one hundred and fifty pages, or over one third of the entire thesis, tediously and obsessively outlines every drawing of Jones' used by Rowe, cataloguing them with a numbering and identification system (see Figure 4). There is an introductory text to the catalogue, a key to the catalogue, and then four subchapters, or "books" (a reference to Palladio's *The Four Books of Architecture)* titled: "Book I: The orders. Minor elements associated with the orders;" "Book II: Domestic buildings. The ancient house. Elements of domestic design and their application. The palace, the villa, and the house;" "Book III: Urban building;" and "Book IV: Ecclesiastical building. The manners of the temple according to Vitruvius. The church and the cathedral." Further to this, there is a subchapter titled "The Extraordinary Book: Composite capitals. Grottoes and fountains. Gates and doors."<sup>16</sup> The rigour with which Rowe presents this chapter of the dissertation gives the effect of research which is complete. Rowe relies on the appearance of a fully formed argument, while what he offers is only a sketch.

Elsewhere in the thesis Rowe refers again to a form of sketchiness, particularly in terms of how he began to compare Jones to the masters of the Italian Renaissance. Using the Italian Renaissance treatises and works of Palladio, Scamozzi, Alberti, Michelangelo and Serlio, Rowe positions Jones's as a next of kin to the Italians. Through Jones' interpretation of the treatises of the Italian Renaissance, and in reference to Jones' background and his travels, Rowe is able to argue for Jones as someone who is within the same architectural history. While Rowe observes that Jones freely borrowed from the Italians, he argues that "the principal difference lies in the general feeling of Inigo's designs, which to use his own phrase, are '*moi suelta*' than their originals," and are novel in their "looseness of organization and a general easiness of effect."<sup>17</sup> Elsewhere Rowe again refers to this "looseness," albeit in slightly different terms, for example when he writes of the elevation of the Banqueting House that it is "uninhibited."<sup>18</sup> The looseness, or uninhibitedness, of Jones' interpretation of the Renaissance was an opportunity for Rowe. The

viewer who Wittkower and Saxl relied on to bring their subjective interpretation to bear when looking at juxtaposed images is here required to read into the gaps in Rowe's dissertation, just as Rowe reads into the gaps in the evidence he has amassed, and is unable to fully formulate a demonstration of Jones' intent to write an architectural treatise. Rowe's methodolgy requires that he, and we, believe in the myth that he presents; it is by constructing a dialogue between one point in history and another that Rowe can argue that Inigo Jones intended to construct a theoretical treatise on architecture.

After the methodological experimentation in his Master's thesis, Rowe was able to more adept at controlling his argument, more confident in the role of the subjective viewer or reader (of himself as constructor and of the reader as complicit in that construction). The sketchiness and looseness opens up a path for dialogical comparison between these two points in history. Rowe's argument is supported not purely by the evidence left behind by Jones, but also through Rowe's manipulation of that evidence in his particular form of writing. In the dissertation, seeing, or "visual evidence," means reading, and reading into, through dialogical comparison. What Rowe refers to early in his thesis as a "piece-meal approach to the whole catalogue" is in fact an acknowledgement and emphasis on the thesis being at its core a construction of a myth, of an intended and projected dialogue - a myth in the sense of a projection of what, or nostalgia for what, may have been.<sup>19</sup> It is in the shift from the sketchiness of his dissertation to the certainty in his use of the diagram in "The Mathematics of the Ideal Villa" that Rowe shifts from student to master, from an account of what may have been to a writing of what is.

<sup>&</sup>lt;sup>1</sup> Colin Rowe, "The Mathematics of the Idea Villa," in *The Mathematics of the Ideal Villa and Other Essays* (Cambridge, MA: MIT Press, 1987), 3.

<sup>&</sup>lt;sup>4</sup> Ibid., 2, 3.

<sup>&</sup>lt;sup>5</sup> Rudolf Wittkower, "Pseudo-Palladian Elements in English Neo-Classical Architecture," in *Journal of the Warburg and Courtauld Institutes*, Vol. 6 (London: The Warburg Institute, 1943), 154.

<sup>&</sup>lt;sup>6</sup> Monica Centanni, "For an Iconology of the Interval. Tradition of the Ancient and Retrospective View in Aby Warburg and Colin Rowe," translated by David Gordon in *L'Architettura come testo e la figura di Colin Rowe*, edited by Mauro Marzo (Venice, Marsilio, 2010), 226.

<sup>&</sup>lt;sup>7</sup> Colin Rowe, *The Architecture of Good Intentions* (London: John Wiley & Sons, 1994), 48.

<sup>8</sup> Fritz Saxl and Rudolf Wittkower, *British Art and the Mediterranean* (London, New York: Oxford University Press, 1948).

<sup>9</sup> Gertrude Bing, "Article outline by Gertrude Bing for CEMA Bulletin," attached to a letter from Fritz Saxl to Philippe James, 2 March 1942 (Warburg Institute Archive, General Correspondence, Exhibitions).

<sup>10</sup> Saxl and Wittkower, British Art. Page numbers?

<sup>11</sup> Rudolf Wittkower, "Pseudo-Palladian Elements in English Neo-Classical Architecture," in *Journal of the Warburg and Courtauld Institutes*, Vol. 6 (London: The Warburg Institute, 1943), 164.

<sup>12</sup> Ibid., 158.

<sup>13</sup> Gertrude Bing, "Fritz SaxI: A Biographical Memoir," in *Fritz SaxI (1890-1948): A Volume of Memorial Essays from His Friends in England* (London: Thomas Nelson and Sons, 1957), 31.
<sup>14</sup> Definition of 'theory' in *Oxford English Dictionary*,

http://www.oxforddictionaries.com/definition/english/theory, accessed 1 October 2015. <sup>15</sup> Colin Rowe, "Prefatory Note," in *The Theoretical Drawings of Inigo Jones: Their Sources and Scope*, unpublished thesis (Warburg Institute, University of London, 1948). Page number?

<sup>16</sup> Ibid. Page number?

<sup>17</sup> Rowe, referring to Palladio's Palazzo Thiene, parts of which derive from Giulio Romano, quotes Jones: "and most of Palladio his works are moi suelta than they ar in designe'." See Rowe, "Prefatory Note," **??**, 35.

<sup>18</sup> Ibid., 34.

<sup>19</sup> Ibid.

#### References

Bing, Gertrude. "Article outline by Gertrude Bing for CEMA Bulletin," attached to a letter from Fritz SaxI to Philippe James, 2 March 1942 (Warburg Institute Archive, General Correspondence, Exhibitions).

Bing, Gertrude. 1957. "Fritz Saxl, A Biographical Memoir," in *Fritz Saxl (1890-1948): A Volume of Memorial Essays from His Friends in England*, edited by D.J. Gordon, London: Thomas Nelson and Sons.

Marzo, Mauro, editor. 2010. *L'Architettura come testo e la figura di Colin Rowe*, Venice: Marsilio.

Rowe, Colin. 1994. The Architecture of Good Intentions. London: John Wiley & Sons.

Rowe, Colin. 1987. "The Mathematics of the Idea Villa," *The Mathematics of the Ideal Villa and Other Essays*, Cambridge, MA: MIT Press.

Rowe, Colin. 1948. *The Theoretical Drawings of Inigo Jones: Their Sources and Scope,* unpublished thesis, Warburg Institute, University of London.

Saxl, Fritz and R. Wittkower. 1948. *British Art and the Mediterranean,* London, New York: Oxford University Press.

Wittkower, Rudolf. 1943. "Pseudo-Palladian Elements in English Neo-Classical Architecture," *Journal of the Warburg and Courtauld Institutes,* Vol. 6, London: The Warburg Institute.

Wittkower, Rudolf. 1949. Architectural Principles in the Age of Humanism, London: The Warburg Institute.