



# The epistemological and artistic relevance of Robert Fludd's memory theatres

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## Abstract

This article explores the memory theatres in Robert Fludd's major work *Utriusque cosmi historia* (History of both worlds), focusing in particular on their epistemological and artistic relevance. My recent research into Fludd's manuscripts has revealed that the British philosopher invested his personal skills in the art of drawing, in order to materialise his ideas for images. He created appealing designs for his books, which worked as visualisations of his philosophical texts, both allusively and didactically. In this article, I develop my earlier findings by arriving at the conclusion that Fludd also used skills in the art of memory to create and organise his ideas for images. Most notably, Fludd preferred round and square shapes, corresponding to the shapes that he applied in his "Ars memoriae". I conclude the article by exploring the further historical reception and development of Fludd's hermetic art of memory, showing the shift from mnemonics as a competency in Renaissance arts and sciences to mnemonics as an artistic subject and method in modern and contemporary fine arts.

## Keywords

hermeticism, history of technology, astrology, alchemy, mnemosyne atlas, fine arts

## How to cite this article

Frietsch, Ute. "The epistemological and artistic relevance of Robert Fludd's memory theatres". *Galilaeana* XXI, 2 (2024): 111-148; doi: 10.57617/gal-46

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## Article data

Date submitted: February 2024

Date accepted: June 2024

### 1. Introduction: Robert Fludd as hermetic theorist and practitioner

The British philosopher, physician, and alchemist Robert Fludd (1574-1637) based his major encyclopaedic work *Utriusque cosmi maioris scilicet et minoris metaphysica, physica atque technica historia* (hereafter *UCH*) on a traditional magical concept, distinguishing between macrocosm (the greater world) and microcosm (the lesser world: man), as Marsilio Ficino had previously done in the learned magic of Florentine Neoplatonism.<sup>1</sup> Even though Fludd claimed to represent the whole knowledge of his time, he nonetheless devoted himself to this hermetic knowledge of learned magic in particular. His claim that his “*demonstrationes*” (proofs or experiments) contributed to the new experimental sciences resulted in him becoming embroiled in a controversy with the German astronomer Johann Kepler, among others. Indeed, it was easy for Kepler to show that Fludd’s “*demonstrationes*” did not accord with the new astronomical sciences, that he did not use astronomical measurement methods, and that his cosmology was rooted in outdated (geocentric) approaches.<sup>2</sup> According to Kepler, Fludd’s use of images, in particular, made it clear that he was not arguing from an empirical basis.<sup>3</sup>

However, Kepler overlooked the fact that Fludd argued with empirically gained *alchemical* knowledge, which he also illustrated in “*demonstrationes*”. In this respect, he experimented with a range of devices (including a *vitrum calendarium*, alchemical ovens, and mirrors as burning glasses) and had his theories visualised in copperplate engravings, as was common practice in the context of the ambitious art chambers of the royal courts and among Paracelsian scholars of the late sixteenth and early seventeenth centuries. Fludd used these “*demonstrationes*” to convince his readers of the validity of his theories, and indeed his overall success and popularity owed much to them. Although he did not succeed in persuading new astronomers, such as Kepler, he was, for instance, read by people with interest in medical alchemy (*chemiatria*).

As I shall demonstrate in this article, the pictorial programme of Fludd’s “*demonstrationes*” resulted from his transcendental and didactic concept of *ars memoriae*, as well as from his practical skills in the art of drawing.<sup>4</sup> Indeed, his abilities relating to *ars memoriae*

<sup>1</sup> This study has been undertaken as part of the research project “The Materialisation of Robert Fludd’s Alchemical and Theosophical Concepts: A Case Study in the History of Science on the Interaction between Author, Artisans, Artists, and Publishers” financed by the German Research Foundation (DFG), project number 508112724.

<sup>2</sup> On differences as well as similarities in the natural philosophical views of the two authors, see Boner, *Kepler’s Cosmological Synthesis*, 135-166.

<sup>3</sup> On Kepler’s criticism of Fludd’s images, see Lüthy, “What Does a Diagram Prove That Other Images Do Not? Images and Imagination in the Kepler-Fludd Controversy”.

<sup>4</sup> For a discussion of Fludd’s craftsmanship and geometric drawings, see Frietsch, “Robert Fludd’s Visual and Artisanal Episteme: A Case Study of Fludd’s Interaction with His Engraver, His Printer-Publisher, and His *Amanuenses*”.

allowed him to focus his imagination on the metaphysical, physical, and technical dimensions of “both worlds”, i.e. the world (macrocosm) and the human being (microcosm), and to create and explicate the impressive images of his philosophical system.

## 2. *The systematic place of Fludd’s Ars memoriae*

Fludd’s *UCH* is both extensive and complex. However, it makes a clear distinction by dealing with the world (macrocosm) on the one hand and the human being (microcosm) on the other. In this system, the traditional magic of macro- and microcosm, which had been criminalised in the 1600s, undergoes a remarkable transformation, becoming part of the history of technology. Accordingly, Fludd writes two histories of technology for his *UCH*: a technological history of the macrocosm and a technological history of the microcosm. The first consists of eleven separate parts: Universal Arithmetic, Music, Geometry, Optics, the Art of Drawing, the Art of War, Mechanics, Time Measurement, Cosmography, Astrology, and Geomancy.<sup>5</sup> The second consists of seven parts: Prophecy, Geomancy, *Ars memoriae*, Genethliology, Physiognomy, Chiromancy, and *Pyramidium scientia*.<sup>6</sup> Although Fludd’s technological history of the macrocosm corresponds in part to our current understanding of technology (in particular, his depictions of machines in the part on Mechanics), his technological history of the microcosm follows the tradition of conveying secret mental practices.

As regards the systematic place of “*Ars memoriae*” as section and capacity, Fludd presents it as a link between the macrocosm and the microcosm.<sup>7</sup> In this respect, it corresponds to Geomancy, which constitutes own parts of both *UCH* histories of technology. Fludd’s *ars memoriae*, at any rate, is on the one hand represented in the first chapter of the technical history of the macrocosm, in the part on Universal Arithmetic, where he explains how the places of memory should be organised.<sup>8</sup> On the other hand, his technical history of the microcosm dedicates a whole part on it. In this part on “*Ars memoriae*” in the technical history of the microcosm – the focus of my article – Fludd again takes up this arithmetical dimension, by comparing “natural” or sensory memory (*memoria naturalis*, *memoria sensitiva*) to counting on the fingers. By contrast, he considers “artificial memory” (*memoria artificialis*) as a process of mathematical calculation, which affords an arithmetical training.<sup>9</sup> According to Fludd, natural memory, which is something that

<sup>5</sup> Fludd, *Utriusque cosmi historia* (*UCH* I, b).

<sup>6</sup> *Ibid.*, (*UCH* II, a, 2).

<sup>7</sup> Fludd, “De animae memorativae scientia, quae vulgo ars memoriae vocatur”, in *UCH* II, a, 2, 47-70 (hereafter, “*Ars memoriae*”). My thanks to my student assistant Mareike Phoebe Wackerhagen for supporting me with a rough German translation of Fludd’s “*Ars memoriae*”.

<sup>8</sup> Fludd, “De arithmetica memoriali”, in *UCH* I, b, 153-157.

<sup>9</sup> At the end of his “*Ars memoriae*”, Fludd explicitly returns to the arithmetic of the macrocosm and points out that he has already dealt with the memorisation of arithmetic figures (addition,

humans share with animals, is constituted by the contraction of a worm-shaped piece of flesh in the middle of the brain. This natural memory, however, is artificially corrected and expanded through the imagination (*imaginatio*) of human fantasy (*phantasia*), which is like a pulsation for this cell of memory. Indeed, the constant exercise of the imagination causes the new artificial memory not only to form, but also to remain coherent and fresh. Yet, if the original natural memory has been completely damaged or lost, it can additionally be artificially corrected and restored, by means of medication.<sup>10</sup>

Fludd takes Plato's concept of ideas and expands the term to include all imagined things that have been memorised.<sup>11</sup> As Robert Westman – a historian of science and researcher of the works of Fludd – has already noted, Fludd considered knowledge to involve an act of remembering, in the sense of having already seen. Through imagination and fantasy, then, human beings are able to participate in the divine (i.e., in the ideas and in the origin of things in creation). As such, the capacity of *ars memoriae* constitutes a connection to God and the events of creation.<sup>12</sup> At the same time, artificial memory has to do with ideas or imaginations that can be specifically modulated and practically utilised by means of arithmetical methods. Accordingly, Fludd's own use of *ars memoriae* involves two complementary approaches, which are not merely didactic, but actually transcendental. Indeed, he presents himself to his readers with the self-confidence of a master who is not only able to teach the practice of *ars memoriae* but also to provide theoretical information about how it works. Fludd mentions a supernatural gift of memory, as mediated by divine favour,<sup>13</sup> which suggests that this gift enabled him to become a master. However, he also emphasises that (supernatural) magic – for example, the powers of magic rings, used by scholars of his time – is not useful to improve one's memory skills, because *ars memoriae* has to be exercised by virtue of the imagination. Instead of using magical means, it was in fact necessary to correct the imagination.<sup>14</sup> According to this, Fludd's supernatural divine gift of memory seems to have been no magical gift.

multiplication, etc.) there, prompting readers to leaf back through Fludd's technical history of the macrocosm. Cf. Fludd, "Ars memoriae", 70. Here, they see that he also uses *specula* for arithmetic. Cf. e.g.: Fludd, "De arithmetica vulgari sive algorithmo", in *UCH I*, b, 49 (*speculum multiplicationis*).

<sup>10</sup> Fludd, "Ars memoriae", 49-50. The distinction between a natural and an artificial memory goes back to the pseudo-Ciceronian books *Rhetorica ad Herennium*; see Schmidt-Biggemann, "Robert Fludd's Theatrum memoriae", 156.

<sup>11</sup> On Fludd's transformation of Plato's concept of ideas, see Fludd, "Ars memoriae", 50-51.

<sup>12</sup> On Fludd's concept of cognition, see Westman, "Nature, Art, and Psyche: Jung, Pauli, and the Kepler-Fludd Polemic", esp. 180-199.

<sup>13</sup> Fludd, "Ars memoriae", 50.

<sup>14</sup> *Ibid.*, 50-51.



### 3. Yates's interpretation of Fludd's *Ars memoriae*

Frances Yates, whose works *The Art of Memory* (1966) and *Theatre of the World* (1969) are considered to be her best, has made a particularly valuable contribution to the analysis of Fludd's *ars memoriae*.<sup>15</sup> Westman has pointed out that Yates's interpretation of this section of the *UCH* has resulted in a better understanding of Fludd's practical approach as an author.<sup>16</sup>

Yates examines the history of the art of memory from antiquity to the seventeenth century, beginning her account by focusing on the Greek poet Simonides, who, according to Cicero, invented the art of memory as a technique for linking places and concepts. Following a banquet that ended disastrously, with the building collapsing, Simonides remembered the seats of the guests who died in the accident, which enabled him to name the corpses that were otherwise unrecognisable. According to Cicero, this resulted in the development of the so-called loci method.<sup>17</sup> Yates shows that the Majorcan philosopher Raymond Lull transformed this method of assigning places and names in the thirteenth century, by coming up with turntables featuring different terms in order to practise *ars memoriae*.<sup>18</sup> Later, in the sixteenth century, Giordano Bruno replaced the traditional concepts of *ars memoriae* with images, retaining the use of turntables, in accordance with Lull.<sup>19</sup> In the same century, by contrast, the Calvinist logician and didact Petrus Ramus – whom Yates describes as an iconoclast – replaced the images, which he perceived as being medieval and Catholic, with binary conceptual diagrams, although his approach was thought to be superficial and merely to serve the purpose of learning by rote.<sup>20</sup> The Anglican Fludd, in turn, used images for his *ars memoriae* – and like the Italian scholar Giulio Camillo (1480-1544) in his work *L'Idea del Teatro* (published posthumously in 1550), he replaced the concept of the memory palace, which is still used in mnemonics today, with the concept of memory theatre.<sup>21</sup>

Yates analyses Fludd's *oeuvre* in terms of the history of the book and asks precisely the questions that still interest historians of science and knowledge today.<sup>22</sup> She rightly

<sup>15</sup> For Yates's analysis of Fludd's art of memory, see Yates, *The Art of Memory*, 320-367, and *Theatre of the World*, 42-189.

<sup>16</sup> On Westman's recourse to Yates, see Westman, "Nature, Art, and Psyche", 181, 222. Yates's statements about the Rosicrucians, which overestimated their political significance, can be regarded as refuted. However, this does not discredit her entire research. For criticism, see, e.g., Vickers, "Frances Yates and the Writing of History".

<sup>17</sup> Cicero, "De oratore II (351-358)", in *Cicero: De oratore libri tres*, 400-403; Yates, *Art of Memory*, 1-2.

<sup>18</sup> Cf. Yates, *Art of Memory*, 173-198.

<sup>19</sup> *Ibid.*, 199-265, 287-319.

<sup>20</sup> *Ibid.*, 266-286.

<sup>21</sup> On Camillo, cf. Yates, *Art of Memory*, 129-172.

<sup>22</sup> On contemporary approaches to the history of science, such as historical epistemology, material and performative history of science, and history of knowledge, see Verburt, *Debating Contemporary Approaches*.

assumes that not only the ideas for Fludd's images were his own, but that he also created some of the drawings.<sup>23</sup> In her pioneering work, however, Yates also ventured some risky arguments. For instance, Fludd explicitly points out that the theatre, as a place of the art of memory, should not be an invented place, but rather an existing one. In response, Yates felt compelled to identify Fludd's memory theatre – as well as his illustrations – with the Globe Theatre in London, an approach that has rightly been criticised and rejected for being concretistic.<sup>24</sup> What is more, Fludd does not present a single memory theatre in his text and images, but rather two round memory theatres (*theatrum rotundum*), in which spiritual themes are to be memorised and one square memory theatre (*theatrum quadratum*), for the memorisation of sensual objects. Fludd attributes the round theatres to the zodiac, apparently having been inspired to do so by the Roman architectural theorist Vitruvius (who lived during the first century BC), whose concept of the amphitheatre as an open-air complex was similarly based on the course of the sun and the zodiac.<sup>25</sup> Fludd envisaged his round theatres – which are ideal, intellectual-historical concepts – as being anchored in the ether; he also proposed that they should be viewed in the imagination as if through smoke.<sup>26</sup> In my opinion, Fludd's square theatre is similarly an intellectual-historical concept, again visualised only roughly by means of illustration. In this respect, Fludd's advice relating to existing concrete places appears to constitute an invitation to readers to assemble their own ideal theatres of memory from real places that they know.

#### 4. Fludd's autobiographical framing of his "Ars memoriae"

However, one of the attractions of Fludd's *UCH* is that he repeatedly refers to "real", i.e. autobiographical, events that accompanied his writing. The books of the *UCH* are very extensive and Fludd worked on them for years before publishing them between 1617 and 1624. In the winter of 1601, for instance, he visited the small town of Nîmes (*Nemosiensis, Nemausensis civitas, or Nemausus*) in Provence to see its monuments that had been well preserved from the Roman Empire. The reference to Fludd's journey to Nîmes constitutes

<sup>23</sup> Yates poses the question: "Is it possible that Fludd himself was the artist behind some of [his illustrations]?" Her answer is: "He teaches perspective and figure drawing in the optics and painting sections [of the *UCH*], from which it would seem natural to follow that he could himself draw. Not very well perhaps, but well enough to be himself the artist of the illustrations in his books". She also emphasises that Fludd's diagrams were "remarkable [...] as Renaissance development of medieval schemata"; cf. Yates, *Theatre of the World*, 75. Cf. also Fludd, "De optica scientia", in *UCH* I, b, 293-316, and Fludd, "De arte pictoria", *ibid.*, 317-341.

<sup>24</sup> Cf. Schmidt-Biggemann, "Robert Fludd's *Theatrum memoriae*", 159.

<sup>25</sup> For the zodiac, cf. Vitruvius, "Book Five: Public Buildings, Chapter Six: Theater design", in *Vitruvius: Ten Books on Architecture*, 68-70, 247 (figure).

<sup>26</sup> Fludd, "Ars memoriae", 55.

a prelude to his account of the “Ars memoriae”;<sup>27</sup> but this framing has not yet been sufficiently analysed. Which monuments did Fludd see in Nîmes? And how did he orientate himself during his stay?

In 1559 and 1560, Jean Poldo d’Albenas (1512-1563) published a book in Lyon titled *Discours historial de l’Antique et illustre cité de Nismes*. The book presents architectural plans of the Capitole temple, popularly known as the “Maison Quarrée” (or Carrée) since the sixteenth century, and the “Amphitheatre”, popularly known as “Les Arènes” (Figs. 1 and 2). In addition, the woodcut of the Arènes reproduces some of the images (a bull, a fight and a she-wolf, suckling the twins Romulus and Remus) that have been cut in stone in the amphitheatre.<sup>28</sup> When Poldo comments on the amphitheatre of Nîmes, he, like Vitruvius, refers to the zodiac, and in his descriptions of the traditional cock and bull fights, he even depicts a zodiac of the morning (*Mane*) as well as a zodiac of the evening (*Vespere*), with indications of the respective planetary positions for “our” hemisphere (Fig. 3). Poldo’s explanations of the Greek and Roman history of this theatre, then, reveal that it was perceived as a place of drama as well as battle (in other words, as an arena). Wilhelm Schmidt-Biggemann, a philosopher and researcher of the works of Fludd, has also recognised this aspect of Fludd’s “Ars memoriae”, relating Fludd’s *theatrum rotundum* to the scholar’s Manichean world view and interpreting it as a theatre of battles between good and evil – and, therefore, as a reflection of the metaphysical structure of the world.<sup>29</sup>

Poldo’s work was well received in Europe. The Italian architect Andrea Palladio, for instance, was inspired by the woodcuts, dedicating six illustrated plates to the “Maison Carrée” in his *Quattro libri dell’architettura* in 1570. Later, in the 1590s, Thomas Platter the Younger, a Swiss physician, also drew on the Poldo illustrations when describing his Grand Tour.<sup>30</sup> Later still, the scholars of the early seventeenth century, like Fludd, were inspired to visit Nîmes by these and other books and illustrations.

When Fludd arrived in Nîmes, he must have noticed a strong difference between the city’s glorious past and its present. Indeed, at that time, Nîmes was one of the most important cities for French Calvinism, with a reformed academy. However, its population had been reduced by the religious struggles, famines, and plague of the sixteenth century.

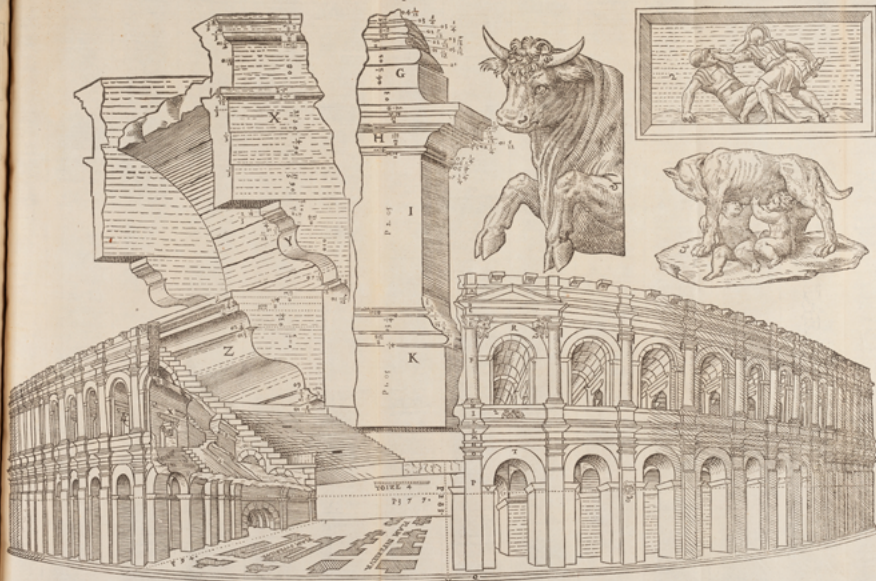
<sup>27</sup> *Ibid.*, 48.

<sup>28</sup> On the “Maison Quarrée”, see Poldo d’Albenas, *Discours historial de l’Antique et illustre cité de Nismes*, 73-80. On the amphitheatre, see 62-67 and 119-148. In the 1560 edition, the woodcuts are no longer an appendix, but are bound into the text. For the historical reception of this book, see Lemerle, “Jean Poldo d’Albenas (1512-1563), un antiquaire ‘studieux d’architecture’”.

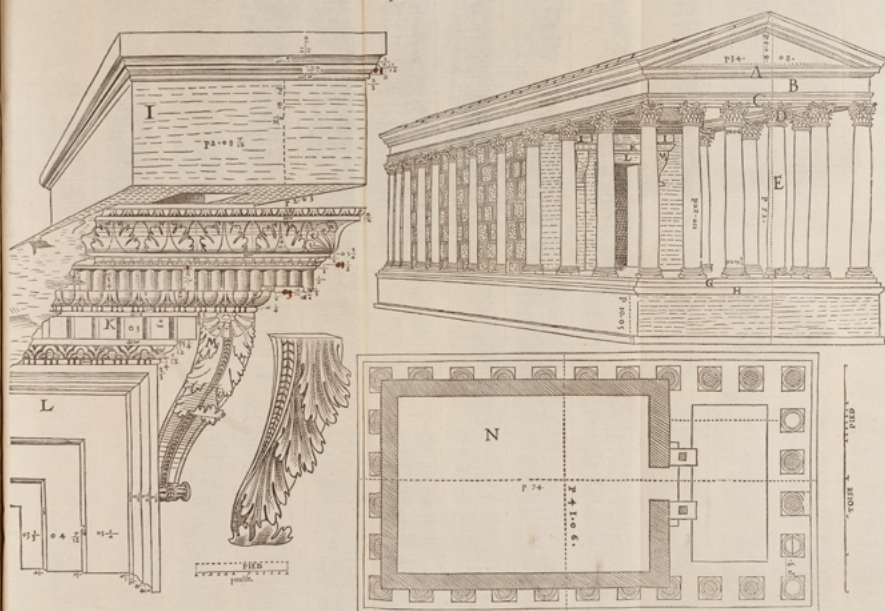
<sup>29</sup> Cf. Schmidt-Biggemann: “Robert Fludd’s Theatrum memoriae”, 159 (without reference to Poldo).

<sup>30</sup> Cf. Palladio, *I Quattro libri dell’architettura*, IV, 112-117; Platter the Younger, *Beschreibung der Reisen durch Frankreich, Spanien, England und die Niederlande, 1595-1600*, Part 1, 102-113 and 277-280; Lemerle, “Jean Poldo d’Albenas”, 169-170.

L'Amphitheatre, dicté les Arenes.



Le Capitole, dicté la maison Carrée.





rieur: & ainsi des autres corps, & celestes, & leurs intellectu-  
 etuels, selon les vertus, & facultés, que le Dieu excelle Arche-  
 tipe leur a attribuees. Et ainsi l'entendoit le grand personaige,  
 qui disoit au Romain, que ne s'esbahit pas, si ce ieune autre  
 Romain luy estoit tousiours, & du tout superieur: car ton  
 Genius, disoit il, craint & reuer, & donne lieu au sien: voulant  
 entendre, que lvn Genius estoit plus hautain, & au celeste, &  
 à l'intellectuel, que l'autre. Et de là aduient, continuant enco-  
 res nostre propos des coqs, que estant le Soleil au Sagitaire,  
 qui est des le xj. Nouembre, ou entuiron, selon les annuelles  
 conuerfions, & introitz du Soleil és signes, par les supputa-  
 tions Astronomiques, iusques à la fin du signe, & entree du  
 Soleil au Capricorne, le coq, oyseau folaire, messager, & pro-  
 gnosticateur du iour artificiel, & lumiere, chante à ces iours  
 là, sur la vespree, & enuiron l'heure ix. Car de tant que le lion  
 celeste, c'est à dire, ce vifaige, & potence celeste, qui a souz soy  
 le nostre elementaire, & que le lion celeste est domicile du So-  
 leil celeste, par la mesme Astronomie, en ce temps est ausi  
 sur nostre Horison, dont le coq alors haulse sa voix, & chan-  
 te. Et affin qu'on le puisse mieux comprendre, la figure Astro-  
 nomique a esté par moy icy mise, & excogitee, pour donner à  
 entendre la tradition des maistres, bié qu'ilz ne la mettét pas.



Je n'adhère pas donc en cecy à l'opinion d'aucuns, qui font  
 profession des Augures, interpretans, à ce temps là le chant  
 des coqs vespertin à bonne fortune, de tant que cest oiseau,  
 vaincu, ne chante pas, mais lors qu'il est vainqueur, il s'enor-  
 guillit, & esleue sa voix, ainsi que Themistocles l'interpreta le

Fig. 1 (top, previous page) – Les Arènes, woodcut, artist unknown, in: Poldo d'Albenas, *Discours historial de l'Antique et illustre cité de Nismes*. Lyon 1559. HAB Wolfenbüttel: A: 58.3 Hist. 2° (1), folding leaf, without pagination.

Fig. 2 (bottom, previous page) – La Maison Carrée, woodcut, artist unknown, in: Poldo d'Albenas, *Discours historial de l'Antique et illustre cité de Nismes*. Lyon 1559. HAB Wolfenbüttel: A: 58.3 Hist. 2° (1), folding leaf, without pagination.

Fig. 3 (above, this page) – Zodiac of the morning (*Mane*) and the evening (*Vespere*), with indications of the respective planetary positions, woodcut, in: Poldo d'Albenas, *Discours historial de l'Antique et illustre cité de Nismes*. Lyon 1559. HAB Wolfenbüttel: A: 58.3 Hist. 2° (1), 65.

Fearing the Catholics, the local population even destroyed the temple of Diana itself. Only in the 1620s did the early modern mechanical arts (crafts and technology) slowly become established in the city.<sup>31</sup> Fludd may therefore have been all the more impressed by the surviving monuments from Roman times, and it is plausible to draw a connection between the “Maison Carrée”, the amphitheatre of Nîmes – the largest one surviving outside Italy – and Fludd’s ideal locations of his round and square theatres. Like the famous Globe Theatre, these two buildings are likely to have influenced Fludd in the formulation of his concepts. Moreover, Fludd also linked his “Ars memoriae” with the technological history of the macrocosm (in this instance, the architecture of the Roman Empire) through his brief and general yet explicit reference to the Roman architectural monuments of Nîmes.<sup>32</sup> In this way, he (like Simonides or Cicero) was also referencing a moment of catastrophic history: the fall of the Roman Empire, whose technical expertise had, at the time, yet to be regained.

Although Fludd – a pretty self-confident author who was too old for a typical educational trip in the style of a Grand Tour at the time of his journey to France – does not detail the monuments he visited in Nîmes, he states that he met a scholar there, who introduced him to mnemonics, but refrains from naming him. Rather, he emphasises that he essentially taught himself the art of memory on his onward journey to Avignon, following this brief initiation, mastering it so well that he was soon able to teach it to his host and patron, the Duc de Guise, Charles de Lorraine, and his brother, François de Lorraine, as well as to the youth, both there, in Aix-en-Provence, and finally in Marseilles. Indeed, Fludd was so successful as a teacher of the mathematical arts, and especially the art of memory, that he ended up being called to Marseilles to teach in leading circles there.<sup>33</sup> Fludd concludes this passage of his narrative by informing his readers that he is teaching them, free of charge, in his published work, the very same knowledge that he had previously acquired at great expense and then demonstrated with great success on his travels.<sup>34</sup> In his preface to the technical history of the macrocosm, Fludd also mentions that he had written the part on the “Ars memoriae”, as well as the part on Music (in the technical history of the macrocosm), for a certain Marquis de Orizon, Viscount de Cadenet (i.e., André II d’Oraison?, Marquis d’Oraison, Vicomte de

<sup>31</sup> Cf. Huard, *Histoire de Nîmes*, 145-197.

<sup>32</sup> Fludd, “Ars memoriae”, 48: “Cum ego in peregrinationibus meis regnum Galliae inter alia praecipue ultro citroque perlustrarem. *Nemosiensem* tandem civitatem, invitatus fama, extantium in ea antiquitatum petebam, ubi apud quendam ex arte sua memoriae satis famigerabilem coepi primum illius artis suavitatem degustare [...]”.

<sup>33</sup> Fludd returns to this in the introduction to his *Geomantia*, where he also mentions his initially conflictual but ultimately amicable contacts with Jesuits in Avignon; cf. *UCH* I, b, 718-720. Josten has translated these biographical passages into English as an appendix to his explanation of Fludd’s *Geomantia*: Josten, “Robert Fludd’s Theory of Geomancy and His Experiences at Avignon in the Winter of 1601 to 1602”, 335.

<sup>34</sup> Fludd, “Ars memoriae”, 48.

Cadenet), as the marquis was enamoured with such *scientiae*.<sup>35</sup> Fludd may also have produced some of his teaching materials – for instance, pictures for his alphabets and numbers – during his time socialising in the aforementioned Catholic circles.

## 5. Fludd's memory theatres and his artistic skills

### 5a. The theatre as a distinguished place

Fludd conceived his *theatrum rotundum* and *theatrum quadratum* as places that required readers to develop their own individual narratives, playing them through repeatedly in order to memorise individual themes, concepts, and names. The doubling of the theatres mirrored the doubling of the macrocosm and the microcosm, but what aspect of the theatre distinguished it as a place for his technique of *ars memoriae*?

Around the year 1600, the theatre was regarded as a place that was strongly shaped by and bound up with the early modern concept of perspective. The area for the audience was initially constructed as a semicircle, which was modelled on ancient amphitheatres. At the beginning of the seventeenth century, however, a square stage was placed facing this area, running towards one or more vanishing points in central perspective. This frontal juxtaposition (or opposition) of stage and audience was developed following the invention of opera. But although opera continued to follow the ancient model of the amphitheatre, the visual stage took on a life of its own as a square space.<sup>36</sup> This architectural development explains why Fludd used the zodiac as a model for the movement of his *ars rotunda* (Figs. 4 a and b) but illustrated the *theatrum rotundum* with two square stage spaces (Figs. 5 a and b, Figs. 6 a and b) that hardly differed in visual terms from the stage space of the square theatre that he also presented (Figs. 7 a and b).

The theatre of the seventeenth century was a public place where actions (*actiones*) were performed. A sovereign subject, characterised by the ability to act, was projected onto the vanishing points of the new perspective stage, shaping the space of action rather than being lost in the three-dimensional space of antiquity or the paratactic space of the Middle Ages. It is precisely the public nature of the theatre that qualifies it as a stage for Fludd's "Ars memoriae". Indeed, according to Fludd, the actions of the memorising subject are to be "demonstrated", just like the actions that occur in the comedies and tragedies.<sup>37</sup> Fludd thus conceptualises the images of "Ars memoriae" as "imagines agentes", acting images or

<sup>35</sup> Cf. Fludd, "Lectori Benevolo", in *UCHI*, b, 3. For the biographical details, see also Yates, *Theatre of the World*, 63-64.

<sup>36</sup> On this radical change, which is realised in the architectural theory of Andrea Palladio (1508-1580) – in contrast to the Roman architect Vitruvius – see Haß, *Das Drama des Sehens*, 125-159.

<sup>37</sup> Fludd, "Ars memoriae", 55.

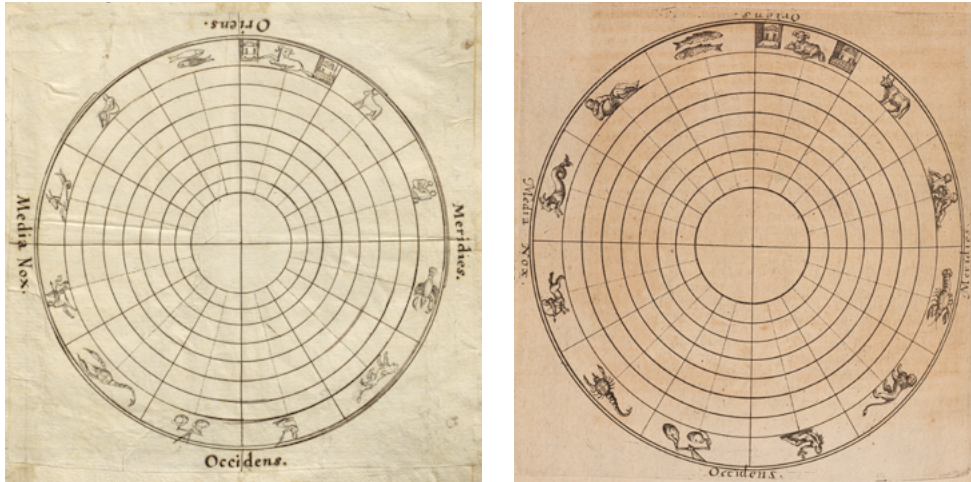


Fig. 4 a and b – Zodiac as a scheme of the *ars rotunda*, a) Johann Theodor de Bry and Workshop (?), pen and ink drawing, in: Fludd, *De technica microcosmi historia*. UB Frankfurt am Main, MS lat. qu. 15, fol. 66 recto, without annual details, b) Matthäus Merian the Elder (?), etching, in: Fludd, “*Ars memoriae*”, UCH II,a,2. HAB Wolfenbüttel: A: 111 Quod. 2° (2), 54.

image acts, and also as “*demonstrationes*”. What is more, the fact that the acts of *ars memoriae* are to be imagined as public acts means that they are also to be accompanied by strong – impressive and therefore memorable – emotions.<sup>38</sup>

### 5b. The print template of Fludd’s “*Ars memoriae*”

A single print template of Fludd’s technical history of the microcosm has been preserved in the Universitätsbibliothek Johann Christian Senckenberg Frankfurt am Main, as MS lat. qu. 15. This manuscript, written down by Fludd’s scribe in italic hand with characteristic clubbed descenders contains Fludd’s part on “*Ars memoriae*”.<sup>39</sup> It is likely that some of the pen and ink drawings in this manuscript were prepared or even made by Fludd himself in cooperation with Johann Theodor de Bry, his publisher in Frankfurt, as well as by some likely amanuenses acting as Fludd’s draughtspeople.<sup>40</sup> The ambitious au-

<sup>38</sup> The concept of “*imagines agentes*” was coined by (pseudo-) Cicero in *Rhetorica ad Herennium*. On this concept and its strong emotions, see Berns, “Schmerzende Bilder”, and Schmidt-Biggemann, “Robert Fludds *Theatrum memoriae*”, 156. On the concept of the “image act”, see Bredekamp, *Der Bildakt* (without reference to Fludd).

<sup>39</sup> Fludd, *Utriusque cosmi historia*, *De technica microcosmi historia*. Universitätsbibliothek Johann Christian Senckenberg Frankfurt am Main, MS lat. qu. 15 (hereafter: MS lat. qu. 15). The whole manuscript corresponds to: UCH II, a, 2, 1-191.

<sup>40</sup> For a detailed description of the template and its partly drawn-in, mostly glued-in pen and ink



thor provided his publisher de Bry with this illustrated master copy to achieve a close integration between text and image, as well as to “demonstrate” his erudite statements. In any case, Fludd was well aware of the artistic weakness of some of the pen and ink drawings in his meticulous template. Accordingly, he granted de Bry – and Matthäus Merian the Elder, the young engraver and etcher who worked for the publisher – a certain degree of artistic licence in producing the attractive copper plates and etchings of the printed books.<sup>41</sup> In this article, I show figures that appeared in Fludd’s “Ars memoriae” in both manifestations – that is, as the pen and ink drawings of the print template as well as the final etchings of the printed book – to demonstrate his concrete work with images.

### 5c. Fludd’s *Theatrum rotundum* and his *Ars rotunda*

Fludd’s *theatrum rotundum* corresponds to the macrocosm, here meaning the spiritual world. Indeed, with its order of the zodiac, the twelve classical signs of planetary astrology, and its two stages of sunrise and sunset, the place of this round theatre is the ether.<sup>42</sup>

In Fludd’s *theatrum rotundum*, the art of memory is to be practised as a round or circular art (*ars rotunda*).<sup>43</sup> Fludd orientates himself in relation to the movement of the sun: accordingly, the *ars memoriae* should take place as a movement from east to west, following its rising and setting. In Fludd’s conception, memorising is to begin in the bright white theatre of the day and end in the deep black theatre of the night. In these two memory theatres of sunrise and sunset, readers – who are students of the art of memory – are intended to stage ideas (vocabulary, sayings, and parts of speeches, etc.) as actions. In the imagination, these two round theatres of day and night should each be equipped with five doors.<sup>44</sup> By imagining these doors, however, Fludd appears to be reverting to the older concept of the memory palace, because these doors are more characteristic of palaces than of theatres. Nonetheless, Fludd’s theatres are generally conceived in the sense of stages.<sup>45</sup>

drawings (in their different, partly lost versions), of which some geometric ones in particular appear to have been made by Fludd himself, see Frietsch, “Robert Fludd’s Visual and Artisanal Episteme”, 349-362.

<sup>41</sup> On the attribution of specific engravings and etchings from Fludd’s printed work to Merian the Elder, see Wüthrich, *Das Druckgraphische Werk von Matthäus Merian d.Ae.*, 80-84. On Merian’s contribution to the iconography of the hermetic arts and sciences, see Wüthrich, *Matthäus Merian d.Ä.*, 210-242, Wagner and Gannon, *Opus Magnum*. On Merian’s improvements to the print template’s drawings in his own etchings, see Frietsch, “Das Manuskript”. On Wüthrich’s oral assessment of the print template, see Wagner “Trias der Bildideen”, 64.

<sup>42</sup> Fludd, “Ars memoriae”, 54-55.

<sup>43</sup> *Ibid.*, 51.

<sup>44</sup> *Ibid.*, 55.

<sup>45</sup> Yates has already pointed this out, although she links Fludd’s stages to the ground plan of the Globe Theatre in a simplifying way; cf. Yates, *Theatre of the World*, 136-161.

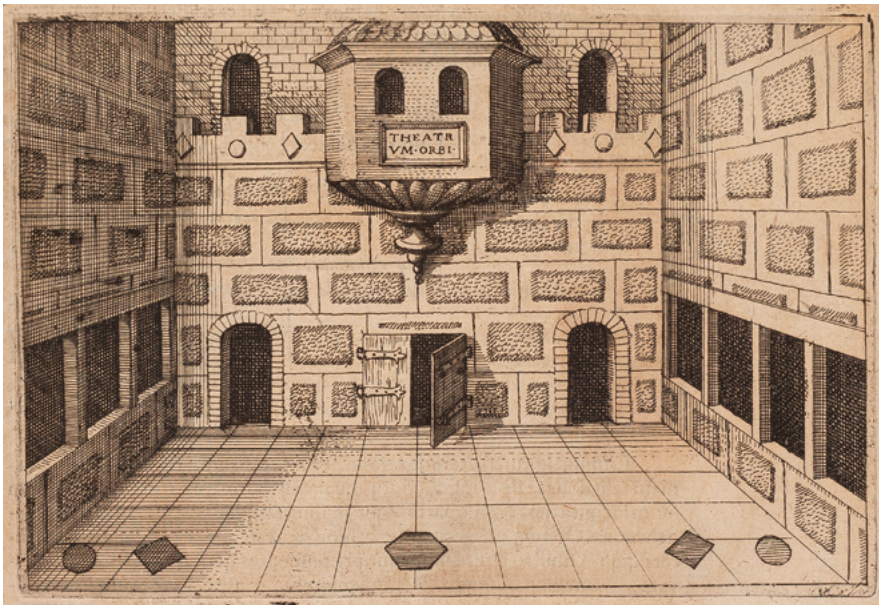
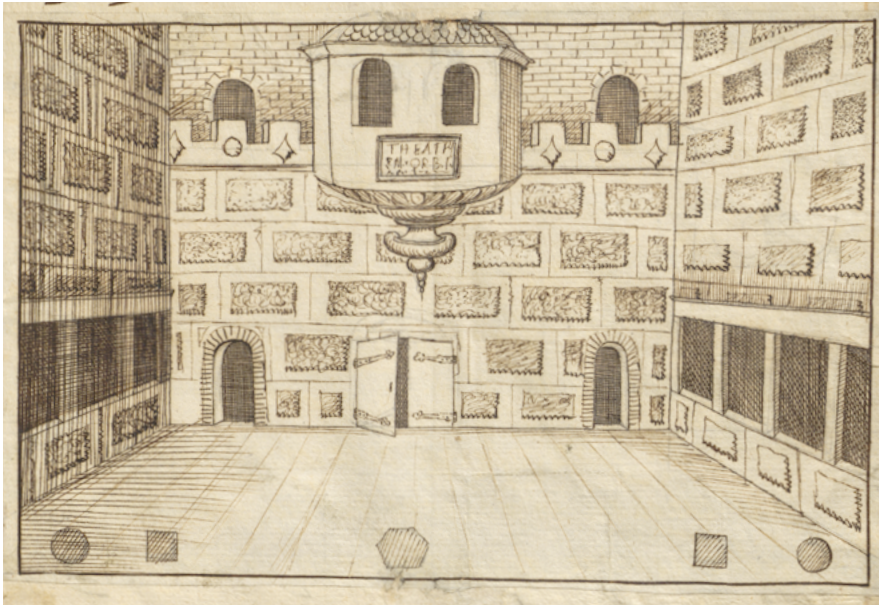


Fig. 5 a and b – Theatrum Orbi[s], a) Robert Fludd in collaboration with Johann Theodor de Bry and Workshop (?), pen and ink drawing, in: Fludd, *De technica microcosmi historia*. UB Frankfurt am Main, MS lat. qu. 15, fol. 67 recto, without annual details; b) Matthäus Merian the Elder (?), etching, in: Fludd, “Ars memoriae”, UCH II, a,2. HAB Wolfenbüttel: A: 111 Quod. 2° (2), 55.

In the *ars rotunda*, the twelve signs of the zodiac (e.g., Capricorn), with their gods and planets (e.g., Saturn), and astrological attributes (e.g., wealth), constitute the main characteristics. Fludd offers an illustration of the beginning of the movement of memorising, which starts in the sign of Aries: in the characteristic round shape of the zodiac, Aries, which begins the astrological circle, is highlighted, sitting between the two stages of the oriental and occidental theatre (Figs. 4 a and b). Fludd continues to explain that Aries corresponds to the story of the Greek hero Jason, who won the Golden Fleece with the support of the king's daughter, the enchantress Medea, and he also states that the individual stages of this couple's tragic story are to be placed in the imagination behind the five doors.<sup>46</sup> This story is likely to have been particularly well known to readers from the high nobility, who may have aspired to join the contemporary Order of the Golden Fleece themselves. Based on this and other myths, Fludd's readers were then asked to memorise suitable images for the words and characters, as well as the individual names and their own newly invented storylines.

A second illustration shows the sunrise theatre of the "*Theatrum Orbi[s]*" (or Theatre of the Circle, i.e. of the World), with five columns – two of which are round, two of which are square, with the other one being hexagonal – and five doors, three of which are on the stage floor, with the other two being on a gallery (Figs. 5 a and b). The young artist Merian transferred the orthographic error in the "*Theatrum Orbi[s]* [*Terrarum?*, illegible letters]" from the print template to the etching. On the one hand, this error may have been made by Fludd himself, when he was labelling the pen and ink drawing, possibly because he was taking his cue from Pico della Mirandola's topos of the "*Theatrum mundi*".<sup>47</sup> On the other hand, though, the orthographic error – "*Theatrum Orbi*" instead of "*Theatrum Orbis*" – may also be interpreted as indicating that this pen and ink drawing of the master copy was made by one of Fludd's amanuenses or by a member of the de Bry Workshop.<sup>48</sup> Fludd had accompanied this depiction of the sunset theatre by a further illustration, showing five columns – three of which are round and two of which are square – and five doors (Fig. 6 a and b).

#### 5d. Fludd's *Theatrum quadratum* and his *Ars quadrata*

Fludd combines the two round theatres with a *theatrum quadratum*, which serves to memorise physical objects, showing this square theatre in a further figure (Figs. 7 a and b). Moreover, he also calls the art of memory that is to be practised in this square theatre a square art (*ars quadrata*).<sup>49</sup> Fludd was aware that most of his contemporaries regarded this theatre as the most relevant one, because for them the sensual appeared – deceptively – as

<sup>46</sup> Fludd, "Ars memoriae", 60, 62, 65, 67, 68.

<sup>47</sup> On Pico della Mirandola's concept of the "*Theatrum mundi*", the world as theatre, see Haß, *Das Drama des Sehens*, 201-217.

<sup>48</sup> See also the correction of the fourth "i" in "Oculus imaginationis" in fig. 10 a, below.

<sup>49</sup> Fludd, "Ars memoriae", 51.

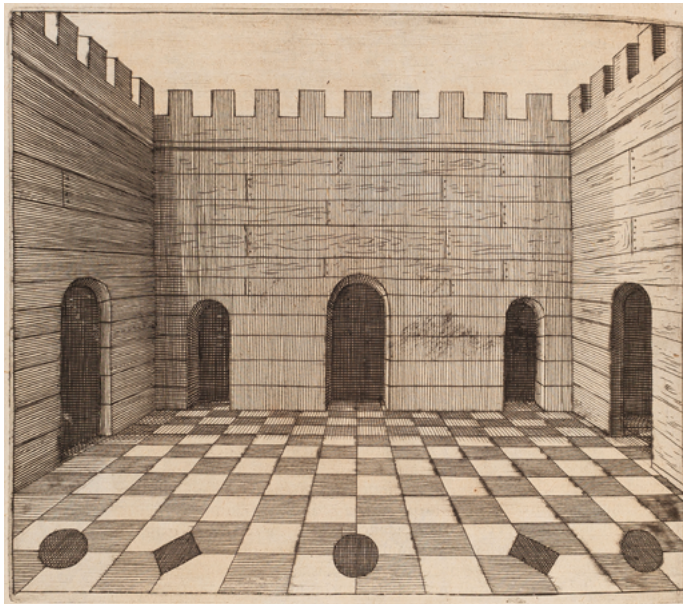
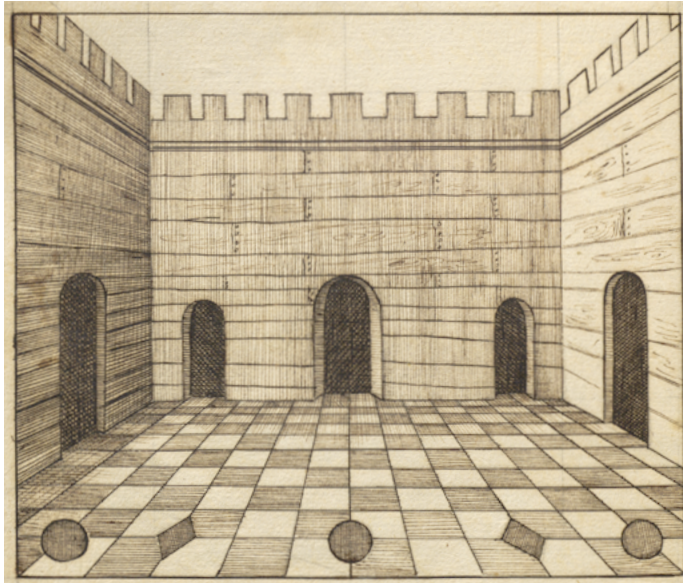


Fig. 6 a and b – Form of the true theatre of *ars rotunda*, a) Robert Fludd in collaboration with Johann Theodor de Bry and Workshop (?), pen and ink drawing, in: Fludd, *De technica microcosmi historia*. UB Frankfurt am Main, MS lat. qu. 15, fol. 75 verso, without annual details, b) Matthäus Merian the Elder (?), etching, in: Fludd, “Ars memoriae”, UCH II,a,2. HAB Wolfenbüttel: A: 111 Quod. 2° (2), 64.



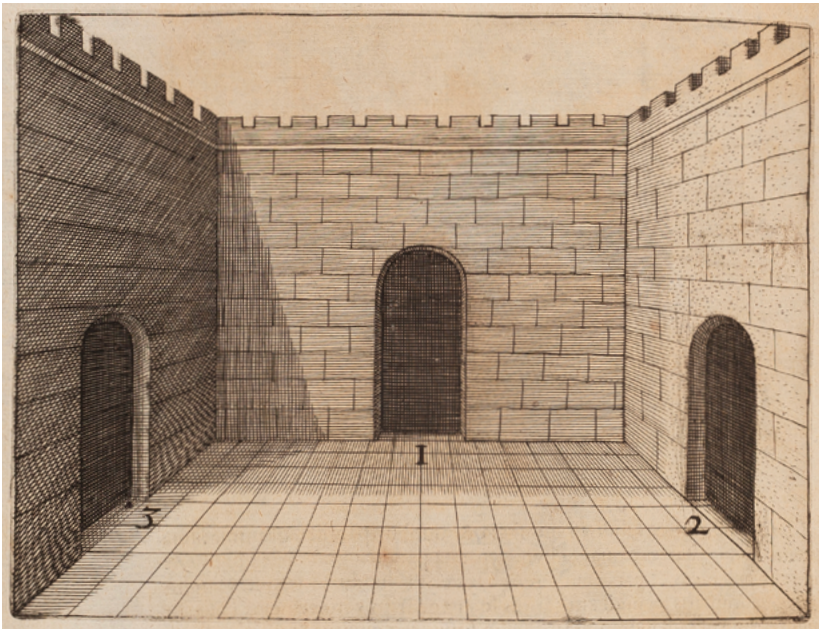
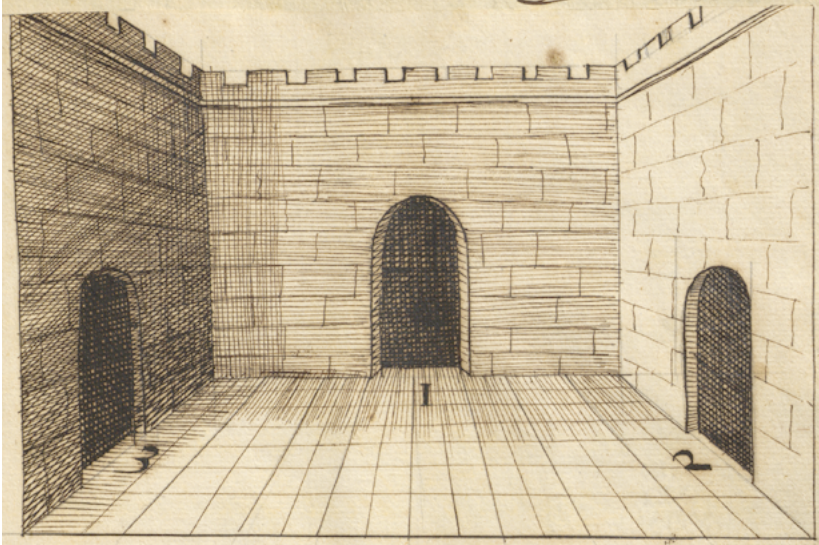


Fig. 7 a and b – Form of the theatre of *ars quadrata*, a) Robert Fludd in collaboration with Johann Theodor de Bry and Workshop (?), pen and ink drawing, in: Fludd, *De technica microcosmi historia*. UB Frankfurt am Main, MS lat. qu. 15, fol. 69 recto, without annual details, b) Matthäus Merian the Elder (?), etching, in: Fludd, “Ars memoriae”, UCH II,a,2. HAB Wolfenbüttel: A: 111 Quod. 2° (2), 58.

the real and only world.<sup>50</sup> He therefore explicitly advises against practising this square art by means of the fantasy of palaces, comparing the concept of a memory palace to a series of mirrors, whose images are not mutually amplified, but instead diminished and obscured. Fludd, being a doctor as well as a philosopher, also compares the memory palace to orally administered medicine for bladder stones, which continues to weaken on its long journey from the mouth to the bladder. Ultimately, though, he emphasises that the work of the imagination must begin with the real, and not with intentional things.<sup>51</sup>

In the same way that musicians prefer to practise their art using polychords rather than monochords, it is unsuitable for students of mnemonics to imagine empty places as settings.<sup>52</sup> By contrast, Fludd recommends imagining six rectangular rooms, with a floor and ceiling, as settings, each with five locations or fields. Each of these locations should have three doors, and above the centres of the doors a characteristic image should be placed. Behind the doors, one should then imagine the corresponding storylines, with main and secondary aspects. This square art should also be orientated towards the movement of the sun, because it is in this way that it imitates nature (rather than the movement of the Latin writing system). Accordingly, each room should be entered on the right-hand side, with the movement of the imagination then finally ending on the left-hand side. In this respect, Fludd's concepts of rooms and squares are reminiscent of horoscopes (magic squares) as well as astrological "houses", thus establishing a further connection to the zodiac, as well as his round art.<sup>53</sup>

### 5e. Fludd's alphabets and numbers

To memorise letters, Fludd suggests that his readers should use five alphabetical orders, in his round as well as his square art. They are further asked to combine the Latin alphabet with images of men, women, wild animals, birds, and fish, with Fludd providing suitable images in each case. For example, the men and women in the round art represented gods and goddesses, such as Apollo and Andromache, with the suitable wild animals including the ox, ibex, and goat. Fludd combines the animals with allegories of virtues and vices, such as ambition looking up at the sun or bestiality looking down with wild hair, to generate letters from A to X. In the square art, people such as Abraham and Penelope, wild animals such as donkeys, oxen, and camels, and birds such as eagles, owls, and crows are suitable for memorising letters. On the other hand, numbers should be memorised by images of inanimate objects, and animals and objects should always be combined with people to represent aspects of action. According to Fludd, a man sitting on the back of a

<sup>50</sup> On square art, also see Fludd, "Ars memoriae", 56-58.

<sup>51</sup> Fludd, "Ars memoriae", 51-52.

<sup>52</sup> *Ibid.*, 53. This comparison is surprising, because Fludd uses the monochord extensively in the *UCH* to illustrate his cosmology.

<sup>53</sup> Cf. *ibid.*, 57. The illustration of the five places also takes up the depiction from the technical history of the macrocosm; cf. Fludd, "De arithmetica memorali", in *UCH* I, b, 153.



Fig. 8 a and b – Fludd’s alphabets and numbers, a) Johann Theodor de Bry and Workshop (?), pen and ink drawing, in: Fludd, *De technica microcosmi historia*. UB Frankfurt am Main, MS lat. qu. 15, fol. 72 verso (detail), without annual details, b) Matthäus Merian the Elder (?), etching, in: Fludd, “Ars memoriae”, UCH II,a,2. HAB Wolfenbüttel: A: 111 Quod. 2° (2), 61.

donkey with a lance, for example, represents the number ten (“10”), with the lance symbolising a “1” and the donkey symbolising a “0” (Figs. 8 a and b).<sup>54</sup>

### 5f. Colours and metals in Fludd’s memory theatres

In the round theatre, Fludd specifies that one should imagine the images as being transparent, like shadows. In the sunset theatre, they should be imagined as black or brown in colour.<sup>55</sup> And in the square art, the images and their five locations should be differentiated by clear colours: the first place should be white like a snow-covered field, with the other places being red like a blood-soaked battlefield outside the theatre, green like a square with grass and trees in front of the entrance to the theatre, blue like the water from fountains pouring

<sup>54</sup> Fludd, “Ars memoriae”, 59-62.

<sup>55</sup> *Ibid.*, 60, 62-63, 65, 67.



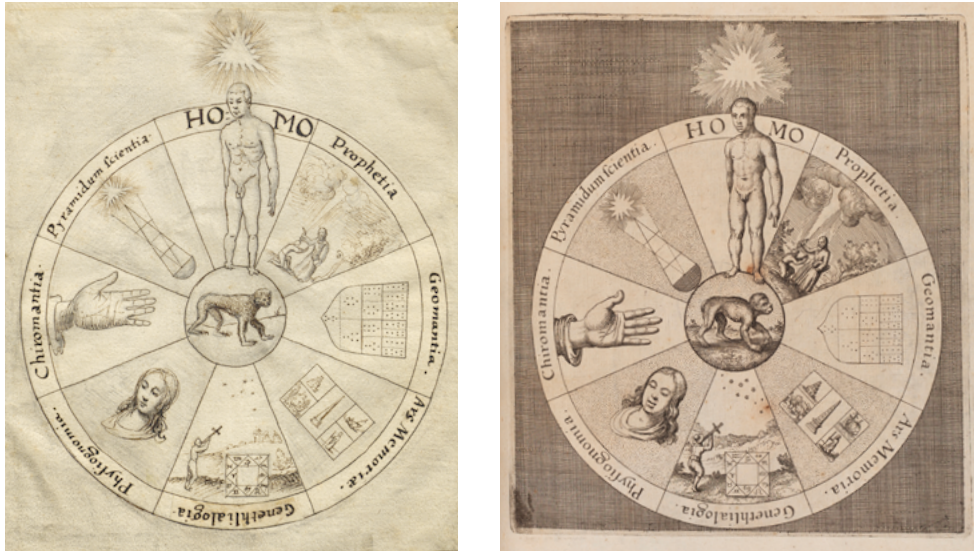


Fig. 9 a and b – Mnemonic wheel of the technical history of the microcosm, a) Robert Fludd in collaboration with Johann Theodor de Bry and Workshop (?), pen and ink drawing, in: Fludd, *De technica microcosmi historia*. UB Frankfurt am Main, MS lat. qu. 15, fol. 1 recto, without annual details; b) Matthäus Merian the Elder, etching, title page, in: Fludd, UCH II,a,2. HAB Wolfenbüttel: A: 111 Quod. 2° (2), 1.

out from everywhere in front of the entrance and black like a cave or underground grotto. These locations are also characterised by the shapes and colours of the five columns: the outer two columns are to be circular and have the opposite colour to the opposite door or the opposite place, while the centre column is to be hexagonal, with the two columns between them being square. Fludd also decorates this square theatre with various instances of metal. Attached to the columns are rings and chains for the animals, with these animals representing certain adverbs, conjunctions, prepositions, and interjections, according to the imagination of the reader. In addition, the white pillar was to be fitted with a silver ring and a silver chain, the red pillar was to be fitted with a copper ring and a chain made from a twig (i.e., a green chain), the blue pillar was to be fitted with a lead ring and corresponding chain, and the black pillar was to be fitted with a ring and a chain made from iron.<sup>56</sup> The five doors of the round art should also be imagined as white, red, green, blue, and black.<sup>57</sup>

The colours and metals mentioned by Fludd hint at his awareness of the importance of alchemy. Moreover, Fludd also names Raymond Lull, a figure from the history of alchemy,

<sup>56</sup> *Ibid.*, 63.

<sup>57</sup> *Ibid.*, 65.



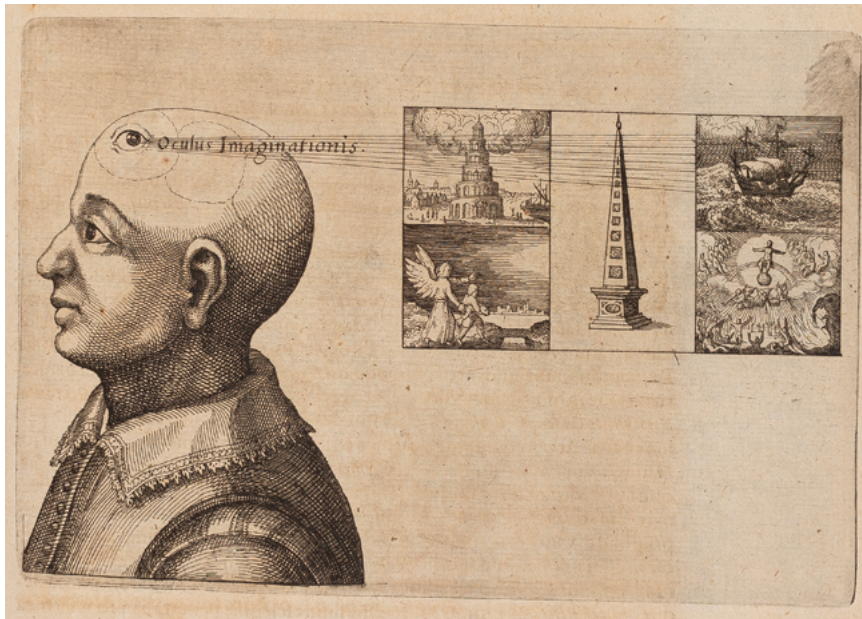
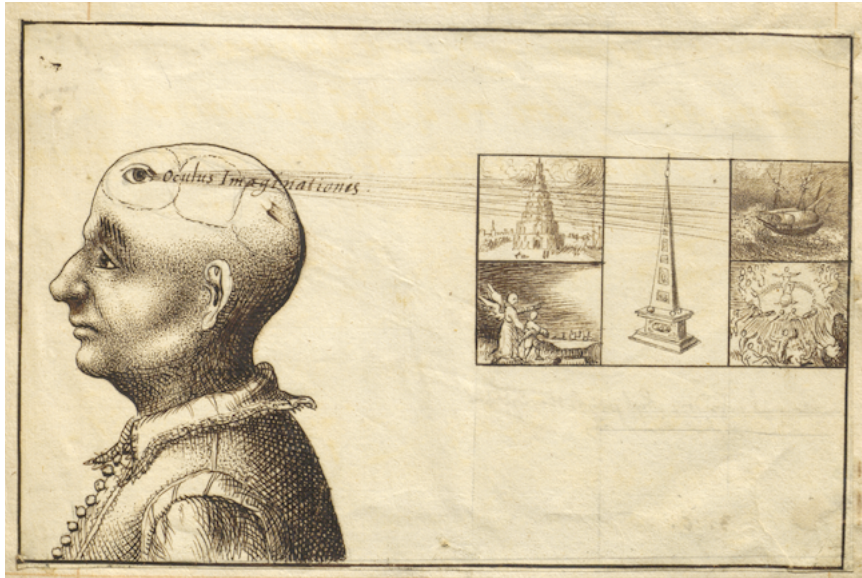


Fig. 10 a and b – Imagination as a faculty of memory, image from the title page of the “Ars memoriae”, a) Johann Theodor de Bry and Workshop (?), pen and ink drawing, in: Fludd, *De technica microcosmi historia*. UB Frankfurt am Main, MS lat. qu. 15, fol. 57 recto, without annual details; b) Matthäus Merian the Elder, etching, in Fludd: “Ars memoriae”, UCH II,a,2. HAB Wolfenbüttel: A: 111 Quod. 2° (2), 47.

who is one of the protagonists of the theatre, complete with vials and an alembic.<sup>58</sup> Fludd then imagines a female bear (probably in allusion to *Ursa major*, the Great Bear constellation) breaking Lull's vials, which prompts Lull to throw a mortar at her. The individual components (the bear and Lull) represent individual letters, with the scene as a whole working to memorise a name (in this case, the angel Uriel?). In any case, through this example, Fludd reveals the role that Lull plays in his own memory theatre.<sup>59</sup>

## 6. Fludd's interest in images

In addition to the images of the zodiac, the two theatre stages of the *theatrum rotundum*, the stage of the *theatrum quadratum*, and the various images of alphabets and numbers, Fludd also uses a range of other impressive images to situate the art of memory in the real as well as biblical worlds. For example, the title page of the "Ars memoriae" shows a bald protagonist, whose "Oculus imaginationis" (eye of imagination, or third eye) offers a view of five scenes from the Bible and history: the Tower of Babel, a forest or Tobiah with the fish, the archangel Raphael behind, an obelisk (as the main image), a ship on sea, and a prophet or the Last Judgement (Figs. 10 a and b). These five scenes are not discussed in the main text: Fludd's "Ars memoriae" provides readers with a repertoire of exemplary figures. They are, however, required to produce their own narratives, in order to develop and then train their own memory system.

Although Fludd was an Anglican, his relationship with images was unwaveringly positive, as can be seen in his explanations of the emblems with which he opens the *UCH*. Fludd explains that the materialisation of the world in Genesis goes hand in hand with a visualisation that can be represented and interpreted philosophically.<sup>60</sup> However, he also works with images in a very pragmatic and technical way, by conceptualising the *UCH* through the repetition of pictorial motifs in a uniform design. Describing the covers of the two histories of technology, Yates used the term "mnemonic wheel[s]";<sup>61</sup> making it clear that Fludd conceived both histories in a visually consistent manner, with their overall conception being related to his "Ars memoriae". In this respect, the spokes of the various "mnemonic wheel[s]" represent the topics (disciplines) of the respective parts (Figs. 9 a and b, fig. 11). What is more, in the illustration for the technological history of the microcosm, the individual disciplines are named (Fig. 9 a and b), with Fludd also including their images on the title pages of the parts. For example, the part on "Ars memoriae" has its own title page and image (Figs. 10 a and b), which quotes, with slight alterations, the images

<sup>58</sup> *Ibid.*, 68.

<sup>59</sup> *Ibid.*, 69. This scene also reminds Giordano Bruno's rejection of astrological-magical imagery in his *Spaccio de la bestia trionfante*.

<sup>60</sup> Fludd, *UCH* I, a, 7-8.

<sup>61</sup> Yates, *Theatre of the World*, 44-45.



Fig. 11 – Mnemonic wheel of the technical history of the macrocosm, signed title page by Matthäus Merian the Elder, etching, in: Fludd, UCH I,b. HAB Wolfenbüttel: Xb 4° 8, without pagination.

that have already been used for “Ars memoriae” on the title page of the technical history of the microcosm (Fig. 9 a and b). The bald protagonist (Figs. 10 a and b; Fig. 12) is also a recognisable figure who guides the reader through the text.

As Westman notes, Fludd’s images were not intended to act as illustrations, but rather as “ways of knowing, demonstrating, and remembering”, which helped readers and viewers to direct their selves back towards inner unity with God, the Creator.<sup>62</sup> When he was constructing these images, however, Fludd did not rely exclusively on his intuition, since he

<sup>62</sup> Westman, “Nature, Art, and Psyche”, 181.





Fig. 12 – Man with scheme of competences, etching by Matthäus Merian the Elder, in: Fludd, *UCH* II,a,1. HAB Wolfenbüttel: A: 111 Quod. 2° (1), 217.

Fludd's mnemonic wheels are reminiscent of Lull's artefacts: it would have been easy to cut them out, reinforce them with cardboard, then attach a metal needle to them, in order to use them as turning discs or machines. The etching skills of Merian probably prevented readers for reaching for the scissors, while the book's publisher, de Bry, also produced some oversized images of the *UCH* as folded sheets, thereby fulfilling a need for haptics and three-dimensionality.

<sup>63</sup> *Ibid.*, 186-193.

also made use of arithmetical concepts. Indeed, his chapters on optics and the art of drawing make it clear that his geometric depictions – especially his triangular shapes – were heavily based on Albrecht Dürer's theory of proportions.<sup>63</sup>

The many discs and squares that appear throughout the *UCH* again suggest that Fludd designed many of these images with his *ars rotunda* and *ars quadrata* in mind. Beginning with the general title page of the *UCH* (Fig. 13), many of the images appear as if they had been memorised by Fludd, in accordance with his round and square arts (Figs. 14 and 15). Some images also demonstrate the different settings of day and night (Fig. 16), with others often forming pairs (pairs of images and letters or images and numbers, as well as pairs of recurring motifs). In this respect, Fludd's "Ars memoriae" is to be considered as a methodological key to the entire *UCH*, because it makes his approach to images more explicit. In terms of the history of ideas and the material history of science, it can also be added that



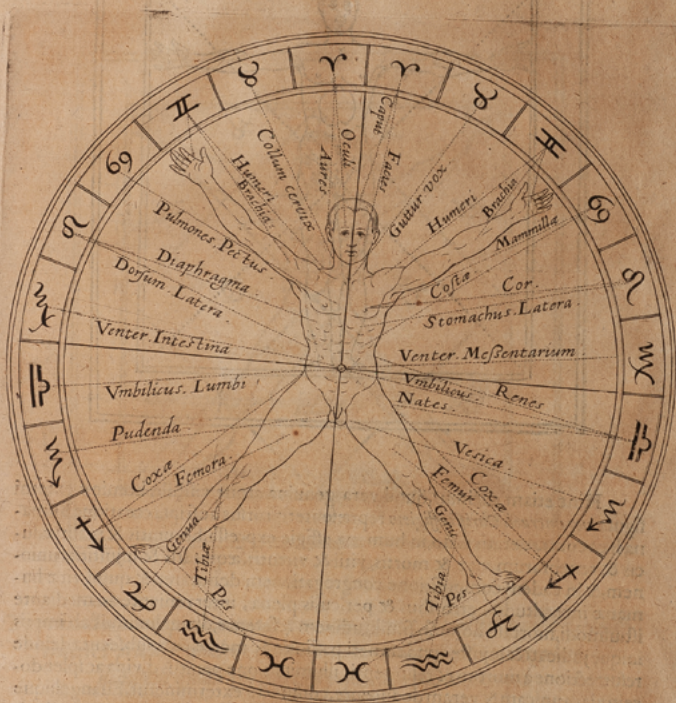
Fig. 13 – Title page of *Utriusque cosmi historia*, etching by Matthäus Merian the Elder, in: Fludd, UCH I.a. HAB Wolfenbüttel: Na 4° 41, without pagination.



DE MICROCOSMI EXTERNI HARM. 113

nempe. Capricornus, genua. Aquarius, tibiae utramque, & Pisces, pedes ambos. Qui quidem signorum ad membra respectus tam sanitatem influentur, si concordis naturalibus à Planetis respiciantur, quam morbos: nam si discordis & antipathia cum pravis Planetarum dispositionibus concurrant, & per consequens naturæ humanæ dissonent, operationes contra naturæ institutum producant, morbosque seu effectus corpori humano infelissimos pariunt.

*Demonstratio sequitur.*



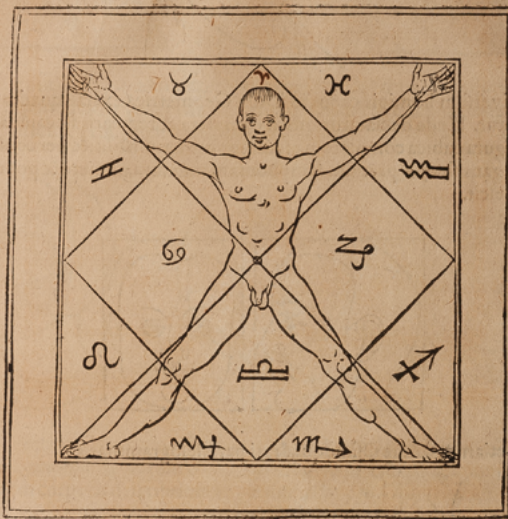
Est etiam compositio Microcosmi externi cuiuslibet alii figuræ regulari apta atque conformis, quatenus, pro diversa membrorum protuberantium positione, diverso modo constituitur. Nam in una ejus statione directa, tibiis nullo modo extensis, sed ferratis, manibusque cum brachiis ad angulos rectos à corpore expansis, atque in longum ab utroque latere complete porrectis, denotabit verissimam quadrati æquilateralis proportionem. Hujus rei demonstratio inferius sequitur, in qua declaratur, quod hujus etiam quadrati centrum sit pudendorum seu genitalium punctus; quippe cum duæ lineæ rectæ seu diametrales, ductæ ab angulo uno quadrati ad ejus oppositum, faciant intersectio-

P nem

Fig. 14 – Man in the zodiacs of the macrocosm and the microcosm (circular form), etching by Matthäus Merian the Elder, in: Fludd, UCH II,a,1. HAB Wolfenbüttel: A: 111 Quod. 2° (1), 113.

DE MICROCOSMI EXTERNI HARM. 115

humanae figurae regione explicatur secundum nonnullorum opinionem, quod Adam primus homo circa horam meridei creatus fuerit; in cuius medio caelo, quoniam Aries inventus fuit, dominium in illud hominis membrum habuit, quod caeli medii angulum respexit, videlicet caput. Quod autem huius figurae quadratae centrum sit in umbilico, declaratur exinde, quod lineae duae rectae progredientes ab angulis quadrati ad angulos sibi oppositos, se invicem in puncto seu centro umbilici interfecant, ut in demonstratione sequenti declaratur.



*De nonnullarum corporis humani partium convenientia cum figuris Geometricis; & primum quidem, quomodo in harmonia figurae triangulari, deinde in quadrangulari, & postea in ovali ac denique in circulari conveniant.*

Latus unicum faciei humanae sub figura triangulari æqualium laterum comprehenditur. Ex quo luculenter demonstratur, quod regularis & conformis sit faciei harmonia proportionibus linearum Geometricis:

Fig. 15 – Man in the zodiac, with the navel in the centre of the St. Andrew's cross (square form), Workshop of Johann Theodor de Bry, in: Fludd, UCH II,a,1. HAB Wolfenbüttel: A: 111 Quod. 2° (1), 115.



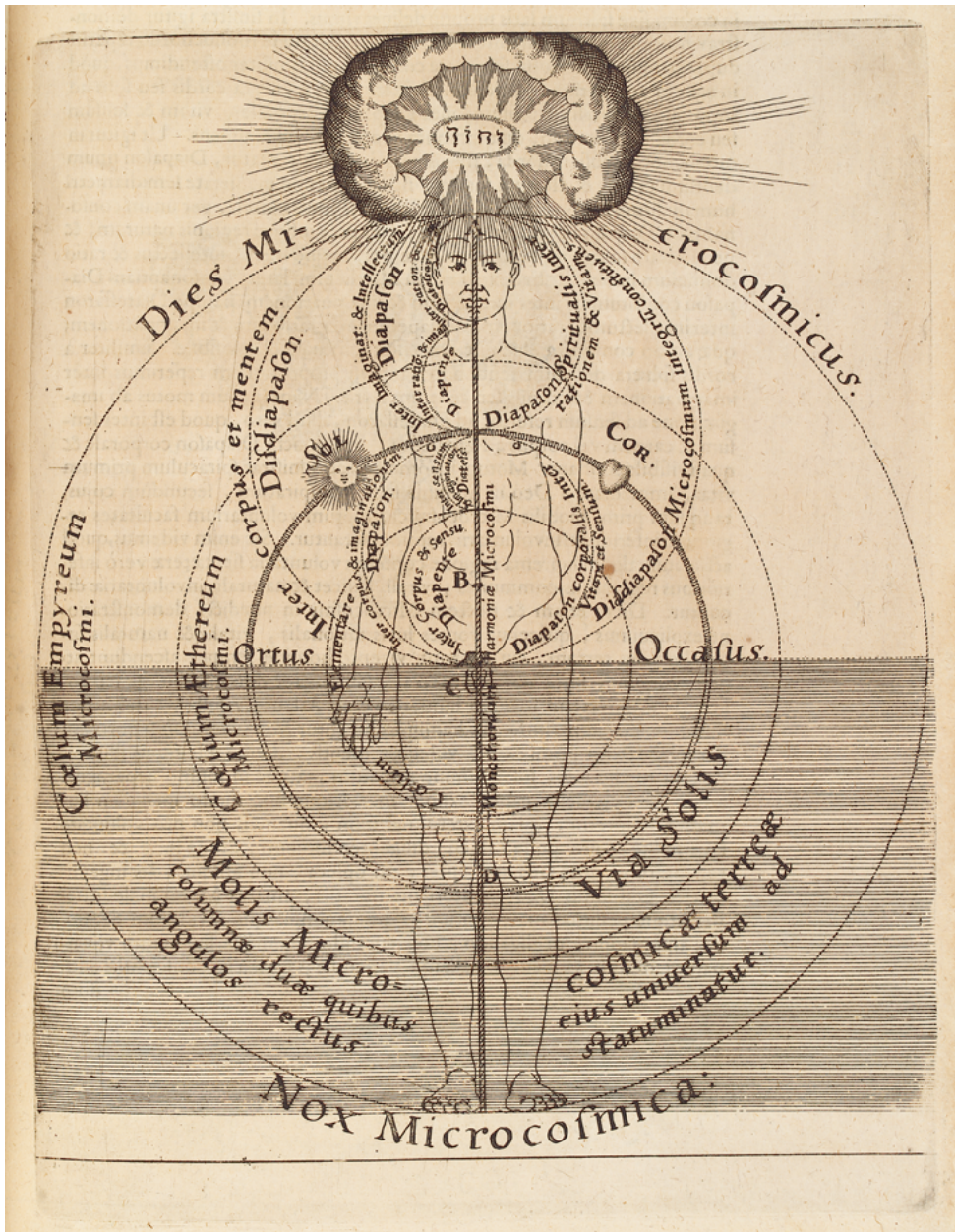


Fig. 16 – Dies Microcosmicus, Nox Microcosmica: Harmonies of man, divine proportions and their corresponding musical intervals, applied to the human body, etching by Matthäus Merian the Elder, in: Fludd, UCH II,a,1. HAB Wolfenbüttel: A: 111 Quod. 2° (1), 275.



## 7. *The arts as a systematic place of Ars memoriae*

### 7a. Fludd's UCH as a pictorial work of art

Fludd's overall artistic vision, as realised in the publication of his folios by de Bry and the manifestation of his images by the engraver and etcher Merian the Elder, resulted in the *UCH* constituting a pictorial work of art, despite the rather mediocre quality of the editing and the paper.<sup>64</sup> The edition of the *UCH* makes it clear that new possibilities in book art – such as the young Merian's expertise in etching – were opening up in the period around 1600, almost completely eclipsing the advantages of manuscripts. However, there was one limit to book art that continued to be encountered: colouring. Even though Fludd's pictures of Genesis could be very well realised in black and white, especially given that Merian enabled the printers' full use of the rich black tone, Fludd's theatres, with their doors, their alignment with the light of the sun, their columns, and their metals, actually called for colours. The publisher would only have been able to comply with this requirement by having the individual copies coloured by hand, but the pen and ink drawings of the manuscript are also uncoloured.<sup>65</sup> As a consequence, the various images of the theatres are somewhat disappointing. However, it is also in favour of Fludd's philosophy that his text stimulates the imagination of further possibilities of technical realisation.

In the remaining sections, I close my article with the reflections of some modern and contemporary approaches to the concept of *ars memoriae* which have been stimulated by hermeticism, and in particular by Fludd's hermetic image concepts.

### 7b. Aby Warburg's Mnemosyne Atlas of Images

Fludd's use of the zodiac – which is reminiscent of the divination boards that had already been used in antiquity as well as the astrological frescoes in early modern palaces – is illuminated by the tradition and material culture of astrology, which is reflected in the history and theory of architecture. In the twentieth century, Aby Warburg, the art historian and cultural scientist, called attention to the significance of these ancient zodiacal mar-

<sup>64</sup> On this lack of quality, cf. Yates, *Theatre of the World*, 72: "The De Bry books do not have the aesthetic appeal of the products of the great humanist presses. They are printed on bad paper which has badly discoloured with time; they are rather hastily printed with a good many typographical errors; the engraving is good but cannot compare with really first-class engraving. The De Bry books were poured forth in haste, as though to produce as much as possible before darkness [the Thirty Years war, U.F.] fell". With regard to the quality of Merian's etchings and engravings, I do not agree with Yates.

<sup>65</sup> The manuscript contains only one coloured (washed) pen drawing. It is an illustration of chiro-mancy; cf. MS lat. qu. 15, fol. 170r.

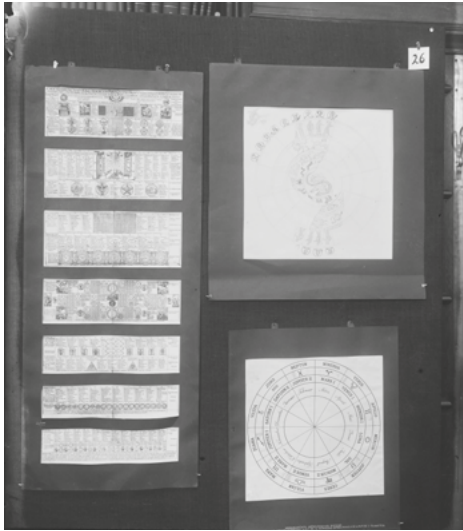


Fig. 17a – The Warburg Institute, Aby Warburg, *Bilderatlas*, 1929, Catalogue No. WIA, III.107.7, Panel 26.

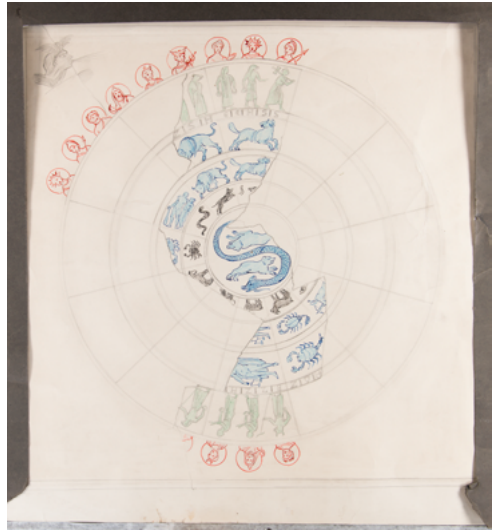


Fig. 17b – Mary Warburg: Schematic Drawing of the *Tabula Bianchini*, coloured, 1911, London. The Warburg Institute, Aby Warburg, *Bilderatlas*, 1929, Catalogue No. WIA, III.107.7, Panel 26, detail: No 2.

bles and early modern frescoes in relation to the history of ideas.<sup>66</sup> For his part, Warburg worked with the concept of the mythical goddess “Mnemosyne”, beginning work on an atlas of images under the name of “Mnemosyne” in 1924 (which remained unfinished in 1929, the year of his death). In 1925-1926, this name was engraved above the lintel of the door to Warburg’s new semi-public Hamburg library.<sup>67</sup> Plate 26 from the fragmentary version of his atlas of images reveals that Warburg perceived a historical relationship between the broader topic of memory and Renaissance astrology (Fig. 17a). The image shows seventeenth-century calendars on the left, with Mary Warburg’s coloured schematic drawing of the “*Tabula Bianchini*” – an astrological divination board with zodiac and decans from the second century AD, in which the decans of Aries are emphasised

<sup>66</sup> On the frescoes of the Palazzo Schifanoia, cf. Warburg, “*Italienische Kunst und internationale Astrologie im Palazzo Schifanoja zu Ferrara (1912)*”: Bredekamp and Wedepohl, *Warburg, Cassirer und Einstein im Gespräch*, 13-44.

<sup>67</sup> After the Warburg Institute emigrated to London during the National Socialist era, this name was established on the lintel of the new library. It can still be found today at both institutes, in Hamburg and London.

– on the right (Fig. 17b), and a twentieth-century scheme of the four elements below.<sup>68</sup>

In his “Mnemosyne” atlas, Warburg analysed the afterlife of antiquity, in the form of historically recurring motifs of emotions and passions (pathos formulas), with a focus on the European Renaissance: Medici Florence was the starting point. Warburg’s aim was to show that ancient depictions of passions had been transformed by artists working in different historical and cultural moments. According to Warburg, the West’s cultural memory was structured by pathos formulas: not only did he work with images from the Renaissance, but also with images from his own time, featuring new technical developments, such as the Zeppelin, as well as advertising spreads and newspaper cuttings – for example, documents and photographs representing the modern relationship between church and state. Shortly before his death, he became acquainted with the work of Giordano Bruno on a trip to Florence, realising that Bruno’s confrontation with (and eventual rejection of) astrological-magical imagery was similar to his own problems in dealing with astrology and magic.<sup>69</sup> Had Warburg lived longer, it may have been possible to place Bruno’s Copernican rejection of astrology in historical relationship not only with Bruno’s art of memory, but also with Fludd’s later art of memory – which renewed astrological symbols in a, so to speak, reactionary way.

As such, Warburg’s “Bilderatlas” transcends the Renaissance, in terms of content as well as method, by referring to his own time at the beginning of the twentieth century. With its concepts of scholarly magic and the hermeticism of the macrocosm and microcosm, the European Renaissance is an original point of reference for Warburg’s exploration of “Mnemosyne”, yet his fragmentary work and other works from the Warburg Institute – including the works of Yates – make it clear that the concept of *ars memoriae* can be further transformed in the present age. Indeed, the theme of *memoria* is ultimately a broad one, which connects different epochs.

### 7c. Anselm Kiefer’s works “for Robert Fludd”

In the early twentieth century, it was not only Aby Warburg who drew on the concept of *ars memoriae*. At the same time, the hermetic pictorial concepts of the Renaissance were also being taken up by surrealists, such as Max Ernst,<sup>70</sup> and ended up experiencing a boom in the twentieth century. Contemporary artists, following the *Ars povera* and Jo-

<sup>68</sup> Warburg, *Der Bilderatlas: Mnemosyne*, 44-45; cf. Warburg, *Bilderatlas Mnemosyne – The Original*, 60-61. See also The Warburg Institute, *Bilderatlas Mnemosyne, Final version*, available online at <https://warburg.sas.ac.uk/archive/bilderatlas-mnemosyne/final-version>.

<sup>69</sup> On Warburg’s “Bruno journey”, see Johnson, *Memory, Metaphor, and Aby Warburg’s Atlas of Images*, 194-229.

<sup>70</sup> On the historical context of the artistic works of Antonin Artaud, Yves Klein, Sigmar Polke, and Warburg, see Seegers, *Alchemie des Sehens*, esp. 209-224, and on Max Ernst, see Warlick, *Max Ernst and Alchemy*.

seph Beuys, among others, were particularly interested in the alchemy of the early modern period.<sup>71</sup>

What was initially conceived in the Renaissance by philosophers such as Bruno and Fludd has subsequently been transformed and further elaborated by artists and intellectuals in the modern and contemporary eras. Michel Foucault located this shift in the field of literature (poetry and fiction),<sup>72</sup> while it can also be perceived in performances, installations, and films today. As such, during the transition from the Renaissance to modernity, the entire complex of the art of memory, hermeticism, and alchemy has undergone a shift from natural history and natural philosophy to the fine arts and art history.

For instance, the work of Anselm Kiefer, the internationally renowned German sculptor, deals with collective cultural memory by citing events, myths, and symbols of National Socialism and Christianity, Judaism, and Gnosticism, among others. Through his work, then, which is dedicated to history in both its creative and destructive aspects, Kiefer is able to pursue his own art of memory, by artistically appropriating events, myths, and symbols from the past in order to transform them.<sup>73</sup> Since around 1985, Kiefer has used lead as a material for his increasingly monumental works, including “books.”<sup>74</sup> What is more, he also uses lead “books” in *oeuvres* that obviously invoke the alchemical theme of transmutation, such as his installation *Nigredo*,<sup>75</sup> from 1998, as well as his installation *Athanor*, from 2007, which he created as a permanent exhibition for the Louvre in Paris.<sup>76</sup> In the alchemical-astrological context, lead represents both the god Saturn and the constitution of melancholy, as well as the beginning of the process of transmutation (from lead to gold). Kiefer has been impressed by Fludd’s texts, especially by his kabbalistic statement that every plant on earth corresponds to a star in the sky. He has dedicated numerous works to Fludd since 1996, including books titled *Für Robert Fludd*,<sup>77</sup> and the cycle of works *The Secret Life of Plants, for Robert Fludd*.<sup>78</sup>

These works combine the materiality of lead with the motifs of the library, the starry sky, and the plant world. Kiefer often writes in and on his works by hand: for example,

<sup>71</sup> Cf. Dupré, von Kerssenbrock-Krosigk, and Wismer, *Art and Alchemy*.

<sup>72</sup> Cf. Foucault, *The Order of Things*, 48-49.

<sup>73</sup> On Kiefer’s art as an art of memory, cf. the English edition: Arasse, *Anselm Kiefer*, 64-95.

<sup>74</sup> Arasse (English edition), *Anselm Kiefer*, 156.

<sup>75</sup> Minssieux-Chamonard, *Anselm Kiefer*, 8, on Fludd see 166-167, 200-201.

<sup>76</sup> See Musée du Louvre, *Anselm Kiefer au Louvre*.

<sup>77</sup> For detailed images of Kiefer’s “Für Robert Fludd”, 1996, book, acrylic and emulsion on photographs on cardboard, 17 pages, 103.5 x 81.5 x 11 cm, see the German edition: Arasse, *Anselm Kiefer*, 254-257.

<sup>78</sup> There exist different versions. For Kiefer’s ensemble “The Secret Life of Plants, for Robert Fludd, 2001/02”, 14 panels, mixed media and lead on canvas, 198 x 340 cm, 200 x 290 cm, 195 x 570 cm, see Kunst- und Ausstellungshalle der Bundesrepublik Deutschland, *Anselm Kiefer – am Anfang*, 86-119, 182.



Fig. 18: Anselm Kiefer: “Großer Bär (Great Bear)”, 2001, panel, 193 × 338 cm. Oil, emulsion, acrylic, and chalk on lead, on canvas, with plaster-covered branch. Photo: Margrit Olsen. © Anselm Kiefer.

the title of his book *Für Robert Fludd* appears in his own handwriting. Otherwise, the multi-part cycle *The Secret Life of Plants, for Robert Fludd* combines microcosm (life on earth: plastered twigs, lead shirts, shoes, a hand, and a stuffed goose) with macrocosm (the starry sky), by presenting both in the same way, on a lead background which is covered with astronomical constellations from NASA. Here, though, a number of artistically remodelled astrological constellations stand out – such as [Wilhelm] “Raabe” (the German term for the raven is “Rabe”, thus “Raabe” seems to allude to a historical person; cf. zool. raven, astron. *Corvus*), the goose or “swan” (astron. *Cygnus*) or the Great Bear. The plaster-covered branch of the Bear appears like a part of its skeleton and thus evokes absent hunters (zool. hounds, astron. *Canes Venatici*) (Fig. 18).<sup>79</sup> Kiefer thus manages to present both the current astronomical world view alongside a more individual, mythical form of appropriation, similar to the way that Fludd managed to confront the new Copernican world view with his own magical and geocentric one. In addition to lead and books, sunflowers are also very present in Kiefer’s works. Sunflowers, by following the movement of the sun via their orientation, can demonstrate the power of heliotropism: in the early modern period, such a movement was explained as a form of similarity, or

<sup>79</sup> For the *Cygnus* and the *Corvus*, see Kunst- und Ausstellungshalle der Bundesrepublik Deutschland, *Anselm Kiefer – am Anfang*, 90-91, 114-115.





Fig. 19: Anselm Kiefer: “Jason”, part of the oeuvre “Johannis-Nacht”, 1990. Former stable, soil, lead, teeth, dresses and ashes. Installation at the Mönchehaus Museum Goslar, detail. Photo: Uwe Walter. © Anselm Kiefer.

sympathy.<sup>80</sup> In this respect, Kiefer’s work with sunflowers represents a “*demonstratio*” of hermeticism – and in the various works “for Robert Fludd”, these sunflowers can be interpreted as “*demonstrationes*” of Fludd’s philosophy, given that the sun (an analogue for God) was at the centre of Fludd’s attention.<sup>81</sup> Finally, both Kiefer and Fludd are drawn to some of the same myths, such as the myth of Medea, which Kiefer has staged in public space as his installation “Jason” (Fig. 19).<sup>82</sup>

<sup>80</sup> On the “four similitudes” – *convenientia*, *aemulatio*, analogy, and sympathy – as “episteme” of Western Renaissance thinking, see Foucault, *The Order of Things*, 19-28.

<sup>81</sup> For the interpretation of Kiefer’s works on Fludd, also see the English edition: Arasse, *Anselm Kiefer*, 256-265.

<sup>82</sup> For Kiefer’s “Jason” installation, which is a part of his oeuvre “Johannis-Nacht”, 1990, at the Mönchehaus Museum Goslar, see Bastian und Ruhrberg, *Anselm Kiefer*, 12-29.

## 8. Conclusion

The affinity of modern scholars and artists for Fludd's works testifies to a certain discomfort with the dichotomy between natural sciences and humanities or art: or, to put it positively, to an interest in approaches that preceded (or deviated from) this dichotomy. In terms of the history of knowledge, Fludd and other natural philosophers from the Renaissance remain relevant today, then, precisely because of their hermeticism. Indeed, modern and contemporary artists invoke spiritual as well as artisanal aspects of early modern hermeticism, which have been largely superseded by scientific progress from the seventeenth century onwards, but which have by no means lost their fascination. Thus, examining such aspects has an epistemological dimension, as it questions the development through which natural history and historical-philological knowledge have diverged into the so-called two cultures.<sup>83</sup> The art of memory is a suitable topic for this reflection. It is an object of visual and book art. As such, it reconciles art, spirituality, craftsmanship and entrepreneurship.<sup>84</sup>

<sup>83</sup> On the concept of the two cultures – literature and the natural sciences – see Snow, *The Two Cultures*.

<sup>84</sup> For the reflection and reenactment of early modern craftsmanship, see Smith, *From Lived Experience to the Written Word*.

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